

Community School District 16

FINAL REPORT



Contents

- Introduction 1
 - Guiding Questions 1
 - Community School District 16 1
 - Methods 5
 - Study Limitations 6

- Key Findings 7
 - Key Finding 1: Data Use 7
 - Key Finding 2: Student Supports for Transition 10
 - Key Finding 3: Instructional Practices 14
 - Key Finding 4: Instructional Practices—Adolescent Perspectives 17
 - Key Finding 5: Instructional Practices—Emotional Support 19
 - Key Finding 6: Professional Development 20
 - Key Finding 7: Instructional Leadership 24

- Recommendations 26
 - Overview of Recommendations 26
 - Recommendation 1: Systemic Academic Interventions 28
 - Recommendation 2: Student Transition Programs 34
 - Recommendation 3: Instructional Rigor 39
 - Recommendation 4: Instructional Feedback 44
 - Recommendation 5: Student Voice, Choice, Autonomy, and Leadership 48

- References 54

- Appendixes
 - Appendix A. Document List for Community School District 16 Curriculum Audit 58
 - Appendix B. References From Literature Review 59

Introduction

This final report summarizes findings and recommendations from an external district curriculum audit of Community School District 16 (CSD 16) by Learning Point Associates, an affiliate of American Institutes for Research. This audit was conducted in response to the district being identified as in corrective action under the New York State Education Department (NYSED) differentiated accountability plan, pursuant to the accountability requirements of the Elementary and Secondary Education Act, as reauthorized by the No Child Left Behind Act. The utilized audit process was developed for and carried out under the auspices of the New York City Department of Education (NYCDOE) Office of School Development, within the Division of Portfolio Planning.

CSD 16 was identified for corrective action because of its low graduation rate—which, at 44 percent, was much lower than the citywide average of 59 percent. As such, the audit process focused on high schools and middle schools in the district, and the practices, supports, and structures that might influence students' successful completion of high school. This report summarizes seven key findings that arose from the district audit and presents research-based recommendations that address those findings, which may be utilized by schools at the middle and high school levels focused on improving student graduation outcomes.

Guiding Questions

Several questions guided the data collection, analysis, and reporting for the CSD 16 audit. The questions focus specifically on factors that influence graduation rates.

1. How effectively do schools support students as they transition into high schools and middle schools?
2. To what extent do the schools prepare and inform students and their families about postsecondary opportunities?
3. How do schools identify and support students who are academically deficient?
4. To what extent do classrooms reflect research-based instructional practices?
5. Are teachers provided time and opportunities for professional growth?
6. How do school leadership and management support instruction and learning?

Community School District 16

CSD 16 is located in Brooklyn, New York. In 2010–11, when the audit was conducted, the district had 25 schools, including 15 elementary schools, six middle schools, three high schools, and one school that serves both middle and high school students (NCES, 2011). The district serves more than 10,000 students in PK–Grade 12, of whom 84 percent are African American and 14 percent are Hispanic. Many of the students are economically disadvantaged, with 76 percent qualifying for free lunch and 5 percent for reduced-price lunch.

All high schools and middle schools in CSD 16 participated in the audit, with two exceptions. Boys and Girls High School—the largest high school and the high school with a graduation rate that did not meet the standard for adequate yearly progress (AYP)—was excluded from the sample at the request of the NYCDOE because the school had recently participated in an extensive joint intervention team (JIT) review process. The Brooklyn Academy of Global Finance was also excluded from the audit sample at the request of the NYCDOE because the school had opened in 2009 and did not yet have a graduating class. The audit school sample thus included two high schools (including one school that serves both middle and high school students) and seven middle schools (including one school that serves elementary and middle school students), as shown in Table 1.

Table 1. CSD 16 High Schools and Middle Schools

Audit Sample	School Name	Grades Served	Enrollment (2009–10)
No	Boys and Girls High School	9–12	2,302
No	Brooklyn Academy of Global Finance	9	101
Yes	Frederick Douglass Academy IV Secondary School	6–12	506
Yes	Gotham Professional Arts Academy	9–11	211
Yes	J.H.S. 57 Whitelaw Reid	6–8	240
Yes	M.S. 267 Math, Science, & Technology	6–8	317
Yes	M.S. 584	6–8	269
Yes	P.S. 308 Clara Cardwell	6–8	231
Yes	P.S. 35 Stephen Decatur	K–8	705
Yes	School of Business Finance and Entrepreneurship	6–8	253
Yes	Upper School at P.S. 25	6–8	234

TEACHER CREDENTIALS AND TURNOVER

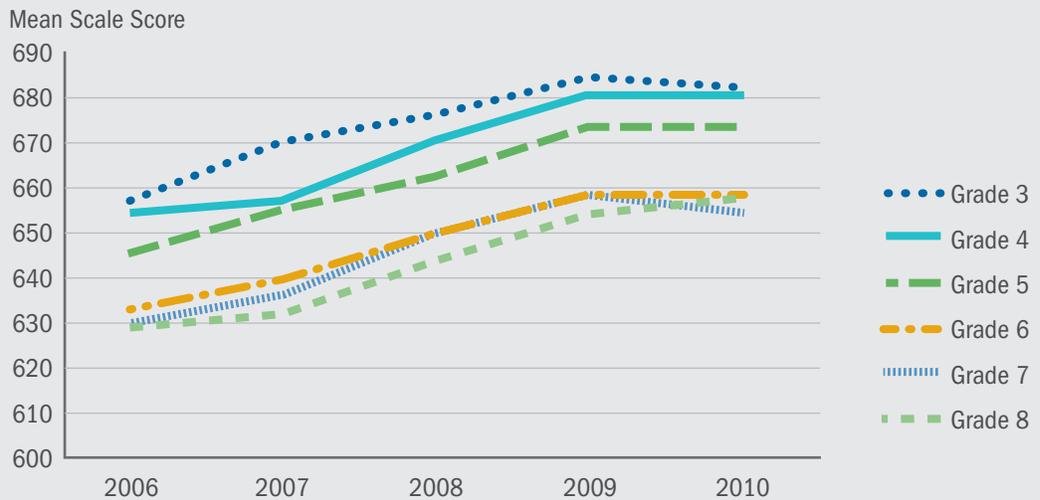
During 2005–10, the proportion of teachers in CSD 16 with high credentials increased. For example, the percentage of teachers with master’s degrees and 30 hours of additional college credits increased from 23 percent in 2005 to 34 percent in 2010. In addition, the percentage of classes taught by teachers without appropriate certification dropped from 24 percent in 2005 to 13 percent in 2010.

More teachers are remaining in the district. The teacher turnover rate declined in CSD 16, decreasing from 28 percent in 2004 to 21 percent in 2009. There was also an increase in teachers’ years of experience during this time frame. In 2005, 22 percent of teachers in the district had fewer than three years experience, but by 2010 only 9 percent of teachers had fewer than 3 years experience (NYSED, 2010).

STUDENT ACHIEVEMENT

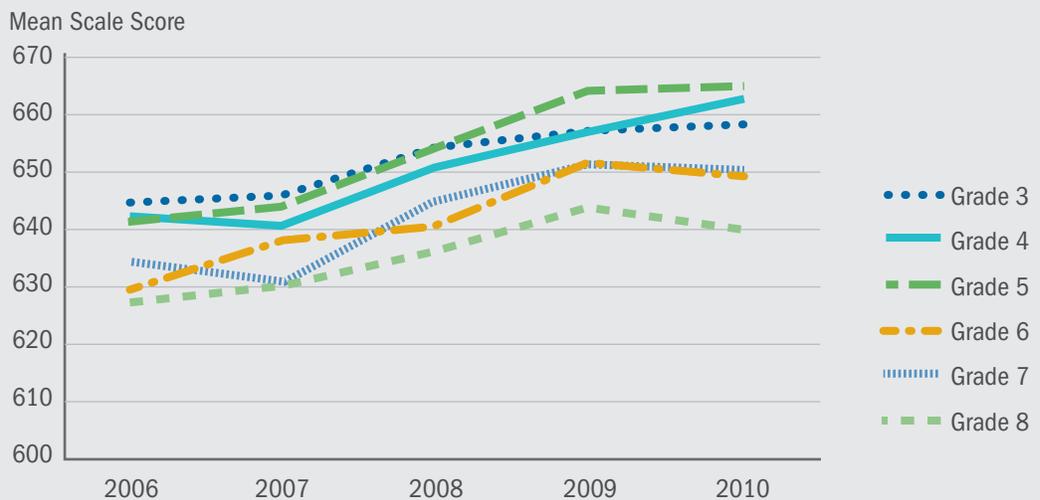
The New York State standardized test mean scale scores in Grades 3–8 increased for both mathematics and English language arts (ELA) between 2006 and 2010. For example, as shown in Figures 1 and 2, mean scale scores in eighth-grade mathematics increased by 30 points from 2006 to 2010. Additionally, as shown in Figure 2, mean scale scores in sixth-grade ELA increased by 20 points from 2006 to 2010.

Figure 1. Mean Scale Scores on State ELA Test



Source: New York City Department of Education Extant Data

Figure 2. Mean Scale Scores on State Mathematics Test



Source: New York City Department of Education Extant Data

There was also an increase in the mean scale scores in both ELA and mathematics for all subgroups with available data—including English language learners (ELLs), race and ethnicity groups, and gender groups. Despite increases in mean scale scores in mathematics and ELA, middle school students tended to score lower than students in elementary grades across most years (NYCDOE Extant Data: District-16_ELAResults_2006–2010, District-16_MathResults_2006–2010).

Despite overall increases, the percentage of students proficient in mathematics and ELA for Grades 3–8 increased from 2006 to 2009 and then declined substantially in 2010. The sharp drop in proficiency between 2009 and 2010 may have been a result of changes in proficiency-level cutoff scores statewide. Cutoff scores were lowered in 2009 (i.e., lower scale scores qualified as Level 3) and were raised in 2010 (i.e., higher scale scores qualified as Level 3). Due to these changes in the cutoff scores, trends in the percentage of students who test proficient do not necessarily accurately reflect changes in student academic achievement.

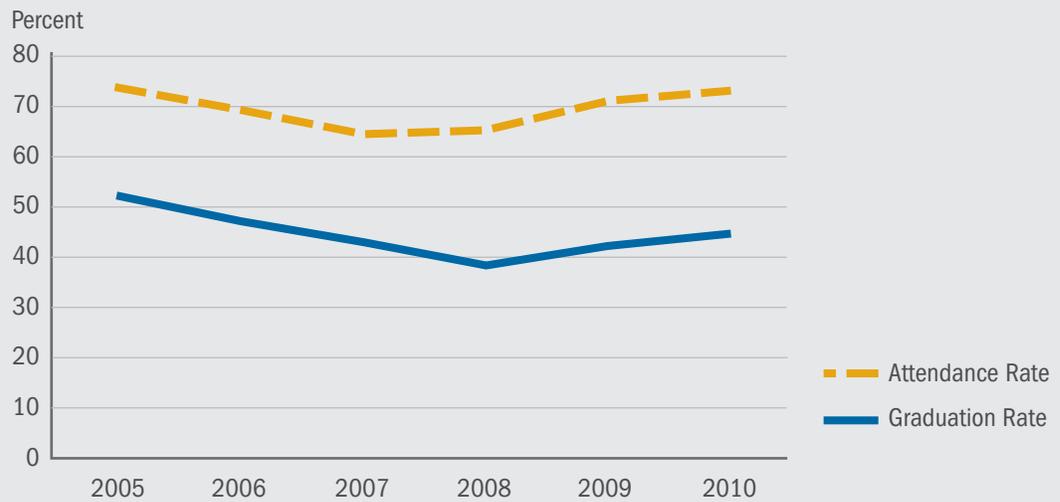
GRADUATION RATES

The CSD 16 graduation rate for 2009–10 was 44 percent, 15 percentage points lower than the citywide graduation rate of 59 percent. Most of the divergence in graduation rates occurred in the last five years, as the citywide graduation rate increased 12 percentage points, and the CSD 16 graduation rate fluctuated but did not substantially improve (NYSED, 2010).

In 2009–10, Boys and Girls High Schools was the only CSD 16 high school with a low graduation rate (43 percent). Frederick Douglass Academy IV Secondary School had a graduation rate of 93 percent, and the other two high schools were new and did not yet have a graduating class. The NYCDOE provided extant data on student subgroup differences for Boys and Girls High School, where graduation rates varied based on gender and race/ethnicity. The graduation rate for black students in Boys and Girls High School was 46 percent in 2009–10, although the rate for Hispanic or Latino students was only 30 percent. A similar disparity existed between males and females—the graduation rate for females was 51 percent and only 40 percent for males.

Boy and Girls High School data supplied by the NYCDOE provides preliminary evidence that graduation rates are correlated with attendance rates. As shown in Figure 3, the graduation rate and attendance rate fluctuated in a similar pattern from 2005 to 2010. This relationship is consistent with research that indicates that missing too many days of school and having trouble catching up is the second most reported reason for dropping out of school in a survey of dropouts around the United States (Bridgeland et al., 2006).

Figure 3. Attendance Rate and Graduation Rate at Boys and Girls High School



Source: New York City Department of Education Extant Data

Methods

Because the focus of the audit is on graduation rates, more comprehensive data were collected in the high schools than the middle schools. In the high schools, the audit team collected data from interviews, teacher surveys, classrooms observations, and documents. In the middle schools, the team collected data from interviews and documents. Table 2 summarizes the data sources by school levels.

Table 2. CSD 16 Audit Data Sources by School Level

Data Source	High School	Middle School
Building administrator interviews	X	X
Network leader interviews	X	X
Teacher survey	X	
Classroom observations	X	
Document review	X	X

Interviews. Table 3 shows the number of interviews conducted with each respondent group.

Table 3. Number of Interviews Conducted with Each Respondent Group

Respondent Group	Completed Interviews
Middle school principal	7
Middle school transitional/student support program staff	6
High school principal	2
High school transitional/student support program staff	2
Network leader	3

Teacher Survey. The *Teacher Survey for the New York District 16 Audit* was adapted from the 2007 *Consortium on Chicago School Research Teacher Survey*. Survey items were modified to gather information on specific practices for supporting high graduation rates, as well as support structures for the transition from middle to high school. In the two high schools, 55 out of a total of 56 teachers completed the survey, for a response rate of 98 percent.

Classroom Observations. Observations were conducted in the high schools using the CLASS-S Observation Protocol developed by the Center for Advanced Study of Teaching and Learning (CASTL) at the University of Virginia. The CLASS-S protocol includes 11 classroom dimensions organized under four domains: Emotional Support, Classroom Organization, Instructional Support, and Student Engagement. Trained and certified observers rated classrooms using a 1–7 rating scale for each dimension. In the two high schools, 12 classrooms were observed. Classrooms were randomly selected and included four ELA classes, three mathematics classes, one science class, two social studies classes, and two noncore classes.

Documents. Learning Point Associates developed a list of the documents (shown in Appendix A) that were expected to have information addressing the guiding questions and asked the audited schools to send the documents to the audit team for review. Seven of the nine schools submitted documents. In addition, Learning Point Associates reviewed the Boys and Girls High School *NYSED/NYCDOE Joint Intervention Team Report and Recommendations* from 2011 to compare findings from the audit with findings from the JIT review.

Study Limitations

Findings from the CSD 16 audit may be useful for identifying challenges and effective practices that can have an impact on improving graduation rates within the sample schools and elsewhere. However, the identified challenges may not fully explain why the district has a low graduation rate because the one high school whose graduation rate did not meet the AYP standard was excluded from the audit. This school was also the largest high school in the district, accounting for more than 70 percent of high school students enrolled in the district. Furthermore, middle school students in CSD 16 may choose to attend high school outside of the district, and middle school students from outside the district may attend high school in CSD 16. Therefore, the practices of CSD 16 middle schools do not uniformly influence future CSD 16 high school students and, in turn, the district graduation rate.

Key Findings

This section presents the key findings from the CSD 16 audit. Findings are presented at the district level. Although some findings point to differences among schools within the district, individual schools are not identified in order to maintain the confidentiality of the audit participants. Data from multiple sources (i.e., interviews, surveys, observations, and key documents) are presented to support each finding. In addition, because Boys and Girls High School—the one high school in CSD 16 with a graduate rate that did not meet the AYP standard—was excluded from the data collection sample, findings from this schools' *NYSED/NYCDOE Joint Intervention Team (JIT) Report and Recommendations* are cited as they relate to findings from the CSD 16 audit.

Key Finding 1: Data Use

CSD 16 schools use a number of data sources to identify students who need academic support. However, the use of these sources is neither systemic nor consistent, implying that struggling students may not be receiving the supports they need.

CSD 16 sample schools use a variety of data sources for identifying students who are academically deficient. According to building administrator interview respondents, staff in the majority of middle schools identify students for academic interventions using standardized test scores and classroom grades. Building administrators at the high schools also reported that staff utilize standardized test scores, student grades, and attendance records to identify when a student may require an academic intervention.

However, several schools do not have a coherent system for identifying students who are struggling academically, and teachers do not have access to student data that might be useful for planning instruction. Most teachers indicate that they do not have sufficient information about new students with disabilities entering their classrooms. Few teachers use formal assessment data for making instructional decisions. When teachers do identify a student who is struggling academically, they are more likely to share their concerns with another teacher than with a building administrator.

ACCESS TO DATA

According to building administrator interview respondents, teachers in most of the sample schools have access to data that may help identify students who are at risk of failure or dropping out, such as attendance data, number of course failures, credits completed, and discipline referrals. Survey responses also show that most teachers have access to student data, but many teachers reported that they do not have great access. For example, 43 percent of these respondents indicated that they have *minimal to no access* to student discipline referrals, and 19 percent indicated that they do not have access to data on credits completed and number of course failures, as shown in Table 4.

Table 4. High School Teacher Access to Data

To what extent do you have access to the following information about your students?	N	No Access	Minimal Access	Moderate Access	Great Access
Student attendance	53	1.9%	11.3%	15.1%	71.7%
Number of course failures	53	7.5%	11.3%	26.4%	54.7%
Number of credits completed	52	3.8%	15.4%	32.7%	48.1%
Grade point average	54	9.3%	16.7%	27.8%	46.3%
Tardiness	54	14.8%	18.5%	27.8%	38.9%
Student discipline referrals	54	16.7%	25.9%	29.6%	27.8%

Note: Rows may not sum to 100.0% due to rounding.

Interview data suggested that in both sample high schools, data on incoming students are available electronically as well as stored physically in the school’s main office. However, according to one building administrator, only the guidance counselor and the principal access the information. When asked about the accessibility of data on incoming students, another administrator said, “It’s not accessible. The principal is really the only one that has that information. I’m sure if we asked, if there were particular students we wanted to get some information on once we have them.... But before they come, we don’t have any information. We don’t use any information in order to select kids.” At the other high school, the only people involved in examining data on incoming students are the special education coordinator and members of the special education team. This finding is also supported by teacher survey responses. As shown in Table 5, only 33 percent of teachers reported that they have sufficient information about new students entering their classrooms. Even fewer teachers (15 percent) said that they have sufficient information about new students with disabilities entering their classrooms.

Table 5. High School Teacher Access to Information about New Students

	N	Not Sure/ Not Applicable	Strongly Disagree	Disagree	Agree	Strongly Agree
I receive sufficient information from administrative staff about any new students who will be entering my classrooms.	54	9.3%	35.2%	22.2%	31.5%	1.9%
I receive sufficient information from administrative staff about any new students with disabilities who will be entering my classroom.	53	15.1%	30.2%	39.6%	13.2%	1.9%

Note: Rows may not sum to 100.0% due to rounding.

Only 33 percent of teachers reported that they have sufficient information about new students entering their classrooms.

USING DATA FOR INSTRUCTIONAL DECISIONS

Teachers in most CSD 16 high schools reported that they use data for planning and delivering instruction; however, most teachers only use informal assessment data. High school teacher survey respondents indicated that they rely on classroom or teacher-created assessments most frequently when planning and delivering instruction, with the majority (74 percent) indicating that they refer to these data 1–2 times a week or daily/almost daily.

In general, teachers reported using data from formative assessments, standardized exams, or specialists less frequently. Nearly half (43 percent) of teacher survey respondents said that they *never* or *almost never* use formative assessment data. This finding about the audit sample schools is consistent with the Boys and Girls High School *Joint Intervention Team* finding that “administrators and teachers do not analyze test results and effectively use quality formative and interim assessments to develop, refine or monitor instructional strategies to meet the needs of the students.”

COHERENT SYSTEMS FOR USING DATA TO IDENTIFY STRUGGLING STUDENTS

Teacher survey responses also suggest that CSD 16 high schools do not systematically identify the kinds of academic support a student may need, or that teachers are not aware of this process. Only 15 percent of teachers reported that the school is *very likely* to systematically identify struggling students, and the majority (69 percent) reported that it is *moderately* to *minimally likely* to systematically identify struggling students. In addition, CSD 16 high schools do not appear to have a systematic process for sharing concerns about struggling students with administrators. Nearly half (47 percent) of high school teacher survey respondents reported that they are *not at all likely* or *minimally likely* to share concerns about a student with the administrators in their school.

Only 15 percent of teachers reported that the school is very likely to systematically identify struggling students.... Nearly half of teachers reported that they are not at all or minimally likely to share concerns about a student with the administrators in their school.

Key Finding 2: Student Supports for Transition

Many CSD 16 schools support student transition into middle school, high school, and postsecondary opportunities. However, these transition supports are informal in nature and are often deemed insufficient. In particular, most teachers do not believe that their school provides a sufficient orientation for students with disabilities.

TRANSITION TO MIDDLE SCHOOL

Student and parent orientation is the primary method for introducing students and parents to the middle grades in CSD 16. Building administrator interview respondents at six of seven middle schools reported conducting student orientation sessions, either during the summer or the first week of school. The orientations introduce the students and their parents to the school policies, expectations, curriculum, the counselor, and the teachers. Administrators at five of seven schools also reported having their staff visit elementary schools or district middle school fairs to introduce the school to elementary school students and their parents. Although less common, building administrator interview respondents also reported a variety of other practices, such as sending a parent information packet prior to school opening (1 school), administering a preassessment in the first week (1 school), reviewing course syllabi with students (1 school), and giving students a reading list during the summer (1 school). However, no schools reported using structured transition support programs *after* the beginning of the school year.

TRANSITION TO HIGH SCHOOL

CSD 16 middle schools use a variety of methods for preparing students for the transition to high school. Most frequently, building administrator interview respondents reported that their schools:

- Offer parent workshops (six schools).
- Have high school staff visit to present information about their schools (five schools).
- Organize trips for middle school students to visit high schools (four schools).
- Provide guidance counselors to meet individually with students to help them with applications to the high schools that are most suited to the students' needs and desires (four schools).

Building administrators from two middle schools also reported encouraging students to attend high school fairs, with one school chartering a bus to take students and parents to the fair.

Although these transition supports are available, their organization is mostly informal in nature. The coordination usually happens through the individual networking of the guidance counselors (as reported at five schools) and through personal relationships between the middle school counselors and the high school counselors. As one interview respondent explained, "There's no real facilitation. Because I have a personal relationship with [a high school guidance counselor, he or she] calls me and lets me know what's going on."

The two sample high schools have very different approaches for transitioning students from middle school to high school. At one school, administrators said that they have a traditional orientation during the summer and a parent conference in the first week of school to discuss rules, requirements, and expectations. The guidance counselor at this school also holds group meetings monthly with the ninth-grade students to discuss expectations and test preparation.

The other high school has a summer orientation for students and families, as well as “small group advisory” where students met for ice-breaker activities and to tour the school and community. However, the primary transition support for incoming ninth-grade students (as well as 10th-grade students) is a six- or seven-day intensive “opening project” at the start of the school year. One building administrator respondent stated, “We identify...large, unanswerable essential questions...we create some activities that are school-wide and are designed intentionally to mix students in new groups, mixed age groups, so that part of the experience during the orientation project is an introduction to a lot of the different people in our community, both students and teachers.”

Despite the orientation programs in place, as described by building administrator interview respondents, high school teacher survey respondents reported dissatisfaction with their school’s support for both regular education students and students with disabilities during the transition to high school. More than 60 percent of teacher survey respondents *disagreed* or *strongly disagreed* that there was sufficient orientation. Surveyed teachers also reported a lack of information about new students; 57 percent *disagreed* or *strongly disagreed* that they received sufficient information about incoming regular education students, and 70 percent *disagreed* or *strongly disagreed* that they received sufficient information about students with disabilities entering their classrooms.

TRANSITION TO POSTSECONDARY OPPORTUNITIES

CSD 16 sample schools implement a variety of supports to promote college readiness. However, many of these practices are informal and are not considered sufficient by some school staff. Building administrator interview respondents from two middle schools and both high schools described practices such as arranging trips to colleges. One middle school administrator said that the school encourages eighth-grade students to complete college applications. Additional strategies described by administrators included the guidance counselor discussing college with students during monthly meetings, displaying the names of the colleges that teachers attended on their classroom doors, and naming hallways after famous colleges.

One middle school building administrator mentioned that although the school has provided trips to colleges in the past, it has not done so recently due to budget constraints. At the high schools, there was a more organized effort to prepare students for college. For example, one high school required all 11th- and 12th-grade students to attend a daily, 45-minute, college preparatory class in which students research and apply for colleges, study for the SATs, and make presentations on different colleges.

However, high school teachers had widely varied opinions about the preparation of CSD 16 students for postsecondary opportunities. Almost half of teacher survey respondents (46 percent) *disagreed* or *strongly disagreed* that their school provided sufficient opportunities for students and parents to learn about college and/or careers, as shown in Table 6.

More than 60 percent of teacher survey respondents *disagreed* or *strongly disagreed* that there was sufficient orientation for students during the transition to high school.

Furthermore, when asked whether their school provided sufficient opportunities for parents to learn about career opportunities, 69 percent of teachers surveyed *disagreed* or *strongly disagreed*. This finding was consistent with the Boys and Girls High School *NYSED/NYCDOE Joint Intervention Team Report and Recommendations* that said, “Students receive little guidance in career and college planning. Guidance for college is primarily for grade 12 students, while the needs of other students are not addressed.”

Table 6. Student Supports for Postsecondary Opportunities

	<i>N</i>	Not Sure/ Not Applicable	Strongly Disagree	Disagree	Agree	Strongly Agree
This school provides sufficient opportunities for students to learn about college opportunities .	55	9.1%	7.3%	38.2%	38.2%	7.3%
This school provides opportunities for parents/guardians to learn about college opportunities for their students.	55	14.5%	10.9%	32.7%	34.5%	7.3%
This school provides sufficient opportunities for students to learn about career opportunities .	55	7.3%	7.3%	40.0%	38.2%	7.3%
This school provides opportunities for parents/guardians to learn about career opportunities for their students.	55	12.7%	14.5%	54.5%	16.4%	1.8%

Note: Rows may not sum to 100.0% due to rounding.

Nearly half of teacher survey respondents (46 percent) also disagreed or strongly disagreed that their school provided sufficient supports for postsecondary planning for students with disabilities (see Table 7). When asked whether students with disabilities at their school *felt* prepared for postsecondary education or employment upon graduation, 60 percent of surveyed teachers *disagreed* or *strongly disagreed*.

Table 7. Student Supports for Postsecondary Opportunities for Students with Disabilities

To what extent do you agree that the students with disabilities whom you teach...	N	Not Sure/ Not Applicable	Strongly Disagree	Disagree	Agree	Strongly Agree
have effective transition plans on their IEPs?	53	28.3%	5.7%	22.6%	43.4%	0.0%
are provided appropriate educational opportunities and supports by this school to enter postsecondary education?	52	15.4%	13.5%	32.7%	36.5%	1.9%
are provided appropriate educational opportunities and vocational training by this school to enter postsecondary employment?	52	19.2%	17.3%	30.8%	32.7%	0.0%
feel prepared for postsecondary education or employment upon graduation?	53	18.9%	15.1%	45.3%	20.8%	0.0%

Note: Rows may not sum to 100.0% due to rounding.

Key Finding 3: Instructional Practices

In contrast to teachers’ self-reports on encouraging students to use critical thinking skills (i.e., evaluating, analyzing, and applying), classroom observations found no examples of teachers supporting critical thinking skills at a high level.

Classroom activities and instructional strategies can differ across the content areas; however, successful teachers more regularly utilize activities and strategies designed to engage students and elicit higher-order thinking. In 100 percent of observed classrooms, students seldom or never received opportunities to engage in analysis and problem solving (a dimension encompassing higher-ordering thinking on the observation protocol). Related to this finding, observations also found that few teachers addressed content in depth, and few provided the type of feedback that expands and extends learning.

Although most CSD 16 teachers are *sometimes* able to convey and help students understand content and provide quality feedback, opportunities for nurturing students’ higher-order thinking skills are even less common. As shown in Table 8, not one of the observed teachers scored at a high level on *Analysis and Problem Solving*. Most teachers sometimes provided opportunities for students to use higher-level thinking skills, but at other times these opportunities are absent, brief, or are not extended. For example, a teacher may not provide sufficient time for students to engage in higher-level thinking. Teachers’ questions of students often emphasize the right answer and involve significant teacher guidance. This finding was consistent with the Boys and Girls High School *NYSED/NYCDOE Joint Intervention Team Report and Recommendations* that said, “Poor questioning techniques used in many classrooms did not enable students to develop conceptual understanding... As a result, there was little opportunity for students to develop skills in problem solving, reflection and evaluation.”

Most observed teachers sometimes provided opportunities for students to use higher-level thinking skills, but at other times these opportunities are absent, brief, or are not extended.

Table 8. CLASS-S Dimension Scores: Instructional Supports, N = 12

<i>CLASS Dimension</i>	Low	Middle	High	Mean	Standard Deviation
Content Understanding	25.0%	58.3%	16.7%	4.00	1.85
Analysis and Problem Solving	33.3%	66.7%	0.0%	2.88	1.35
Quality of Feedback	16.7%	58.3%	25.0%	4.42	1.84

In addition, most classroom interactions among the teachers and students did not consistently lead to an integrated understanding of facts, skills, concepts, and principles. Therefore, most classrooms did not receive high ratings on *Content Understanding*.

Classrooms in the middle range are characterized by occasional meaningful discussions and relevant procedural practice, although at other times the focus is on discrete bits of topically related information. In these classrooms, new information is not always connected to student background knowledge.

Classrooms received slightly higher scores on the *Quality of Feedback* dimension, which refers to teacher feedback that expands and extends learning and understanding and encourages student participation. However, only 25 percent of classrooms demonstrated high levels of quality feedback during the observations. In most classrooms, there were occasional feedback loops between the teacher and students. These back-and-forth exchanges did not often lead students to deeper levels of understanding. Typically, students were prompted occasionally to explain their thinking and rationale for responses and actions. In addition, teachers sometimes used students' incorrect or nonresponses as opportunities to scaffold learning by providing assistance or hints but missed other opportunities to do so.

Teacher survey data provide additional, sometimes contradictory, information about the provision of instructional supports to students. For example, all surveyed teachers reported that they know how to effectively scaffold instruction to help students understand concepts. Teacher survey data suggest that teachers *do* frequently provide opportunities for students to use higher-level thinking skills. As Table 9 illustrates, the majority of teacher survey respondents indicated that their classroom activities reflect understanding, evaluating, and analyzing at least weekly; however, a high percentage of teachers indicated that such activities are not provided on a daily or almost daily basis.

Surveyed teachers reported that creating, such as generating hypotheses or making something new, happens slightly less frequently, with 19 percent of respondents indicating that it happens only a few times a semester. In terms of the kinds of work in which their students most frequently participate, survey respondents reported that their students most often write reflections in notebooks, journals, or blogs; record, represent, and/or analyze data; or answer textbook or worksheet questions. At the other extreme, 43 percent of teachers indicated that their students *never* or *almost never* participate in field work.

Only 25 percent of classrooms demonstrated high levels of quality feedback during the observations.

Table 9. Classroom Activities as Characterized by Types of Learning

	<i>N</i>	Never or Almost Never	A Few Times a Semester	1-2 Times a Month	1-2 Times a Week	Daily/ Almost Daily
Understanding (summarizing, explaining, giving examples of)	53	0.0%	1.9%	7.5%	35.8%	54.7%
Evaluating (making judgments about stated conclusions or methods used)	54	1.9%	3.7%	13.0%	33.3%	48.1%
Analyzing (comparing/contrasting, organizing different concepts, taking different viewpoints)	54	1.9%	1.9%	13.0%	37.0%	46.3%
Applying (using a procedure, using knowledge to solve a real world problem)	54	1.9%	3.7%	13.0%	35.2%	46.3%
Remembering (recognizing a correct answer, recalling facts)	54	5.6%	7.4%	14.8%	40.7%	31.5%
Creating (generating hypotheses, planning a study, making something new)	54	5.6%	13.0%	18.5%	35.2%	27.8%

Key Finding 4: Instructional Practices— Adolescent Perspectives

In contrast to teachers’ self-reports of providing opportunities for students to demonstrate autonomy and leadership in the classroom, classroom observations found few examples of teachers providing opportunities for autonomy and leadership at a high level. Teachers seldom provided opportunities for student choice, responsibility, decision making, and leadership, and they rarely made connections between instructional content and the current experiences of adolescents.

Autonomy-supportive instructional strategies have been shown to improve student engagement, conceptual understanding, academic achievement, and persistence in the classroom (Young, 2005). Creating an autonomy-supportive classroom environment requires teachers to incorporate students’ preference, choices, curiosity, and challenges into lessons (Reeve et al., 2004). Examples include allocating time in ways that allows students to work independently, asking students for input on classroom activities, enabling students to choose classroom activities and tasks that are consistent with their interests and goals, and assigning tasks to students that have public or personal value, such as oral history projects or writing editorials for the local newspaper (Newmann, 1995).

Few observed classrooms received high ratings on the *Regard for Adolescent Perspectives* dimension, as shown in Table 10. This dimension focuses on the extent to which opportunities for student autonomy and leadership are provided. Most observed teachers did not fully foster student autonomy, although students had some choices of or within assignments. Students may have had brief opportunities to assume some degree of leadership, such as when students work in groups. Extended or embedded leadership opportunities, such as allowing students to plan special events or assist with classroom procedures, were less prevalent.

Most observed teachers made some efforts to connect the current experiences of adolescents with instructional content; however, the analogies were not always well developed. Or, the teacher’s choice of examples to show how the content is relevant to students’ lives did not always engage the interests of the students.

Table 10. CLASS-S Dimension Scores: Emotional Support, N = 12

CLASS Dimension	Low	Middle	High	Mean	Standard Deviation
Regard for Adolescent Perspectives	8.3%	75.0%	16.7%	4.38	1.26

Note: Rows may not sum to 100.0% due to rounding.

In contrast, when asked if they give their students opportunities to demonstrate autonomy and leadership, the majority of teacher survey respondents (94 percent) reported that they do, as shown in Table 11. All suggested that they frequently build on students’ prior knowledge when introducing a new concept.

Most observed teachers did not fully foster student autonomy, although students had some choices of or within assignments. Most observed teachers made some effort to connect the current experiences of adolescents with instructional content; however, the analogies were not always well developed.

Table 11. Instructional Practices That Support Adolescent Perspectives, N = 53

	Not Sure/ Not Applicable	Strongly Disagree	Disagree	Agree	Strongly Agree
I frequently build on students' prior knowledge when introducing a new concept.	0.0%	0.0%	0.0%	56.6%	43.4%
I know how to effectively scaffold instruction to help students understand a concept.	0.0%	0.0%	0.0%	60.4%	39.6%
I frequently give students in my classes opportunities to demonstrate autonomy and leadership.	3.8%	0.0%	1.9%	56.6%	37.7%
I frequently conduct classroom activities that connect learning to real world situations.	1.9%	0.0%	3.8%	56.6%	37.7%

Note: Rows may not sum to 100.0% due to rounding.

Key Finding 5: Instructional Practices—Emotional Support

A characteristic of most of the observed classes was the positive climate in the classroom, with teachers and students showing they have positive relationships. There were no instances of classrooms having a negative climate.

In general, CSD 16 teachers provide at least adequate emotional and developmental support. As Table 12 shows, observed classrooms scored particularly well on the CLASS-S dimension of *Positive Climate*, which reflects the emotional connection and relationships among teachers and students. Three quarters of observed classrooms were assigned ratings in the high range. Furthermore, all classrooms received low ratings on *Negative Climate*—meaning that no displays of negative affect were observed. More than half of the classrooms received high ratings for *Teacher Sensitivity*, which refers to the teacher’s responsiveness to the academic and social/emotional needs and developmental levels of students.

Table 12. CLASS-S Dimension Scores: Emotional Support, N = 12

CLASS Dimension	Low	Middle	High	Mean	Standard Deviation
Positive Climate	0.0%	25.0%	75.0%	6.25	1.42
Negative Climate ¹	100.0%	0.0%	0.0%	1.08	0.29
Teacher Sensitivity	8.3%	33.3%	58.3%	5.54	1.59

¹ *Negative Climate* is scaled in the opposite direction of the other CLASS scales. Higher scores for this dimension represent lower quality. Note: Due to rounding, percentages may not equal 100.

Teacher survey data largely corroborate the level of emotional support for students observed in classrooms. All high school teacher survey respondents expressed an awareness of their students’ academic needs, and most (88 percent) indicated that they are aware of the nonacademic needs of their students as well.

Key Finding 6: Professional Development

High school teacher survey respondents had mixed opinions about the utility and quality of professional development at their school. Although many teachers reported that the available trainings were helpful, a substantial number of teachers indicated that the trainings were not helpful or were only minimally helpful.

PROFESSIONAL DEVELOPMENT TOPICS

CSD 16 schools provide professional development to teachers on a variety of topics, and the focus of professional development varied across schools. Building administrator interview respondents from six of seven middle schools and from one of two high schools reported that the school has mandatory professional development sessions and that their professional development during the 2010–11 school year focused on one or more specific areas. Table 13 presents the most common professional development topics emphasized for the 2010–11 school year, as identified by interview respondents. Five middle schools and two high schools also submitted documentary evidence of professional development programs on a wide variety of topics.

Table 13. Professional Development Emphasis for the 2010–11 School Year

Area of Professional Development Emphasis	Number of Schools
Differentiated instruction	3
Data use	2
ELA	2
Quality of feedback teachers provide to students	2

Building administrator interview respondents from five schools said that the professional development emphasis was selected primarily based on a schoolwide assessment of staff needs, such as teacher surveys. For example, one administrator said, “The emphasis is always on what we’re doing in the classroom: How can we do it better? We do look at things like the Common Core [standards], the new state’s college readiness expectations. So we’ve been looking at those things, staffwide, and making sure we understand them and feel we’re moving in that direction.” Schools also used feedback from individual teachers to determine the professional development focus, according to interview respondents from five schools.

Building administrator interview respondents from one middle school and one high school reported that their professional development during the 2010–11 school year did not have a particular emphasis. The middle school principal explained that the school had not been able to provide focused professional development during the 2010–11 school year because of budget cuts. The principal also said, “Professional development really did not play a big part in this school year, on site.” In the high school, the administrator said that there was not a particular professional development emphasis because much of their professional development came through the consortium of which the school is a member.

Results from the interviews with network leaders indicate that at least some of the schools provided targeted and/or differentiated professional development based on teachers' needs.

Results from the interviews with network leaders indicate that at least some of the schools provided targeted and/or differentiated professional development based on teachers' needs. In addition, the network leaders mentioned that their network also offered professional development sessions to which schools in the network can send teachers, depending on the needs.

CONTENT-AREA COACHES

Five of seven middle schools support instruction through content-area coaches. Three middle schools have both ELA and math coaches. One middle school has only ELA coaches, and another school has only math coaches. Content-area coaches support instruction in these schools by modeling instruction and/or observing and providing feedback to teachers. Building administrator interview respondents from the remaining two middle schools indicated that their schools used to have content-area coaches. An administrator from one of these schools said that in the 2010–11 school year, the school had to cut the positions and send the coaches back to classroom teaching because of budget cuts.

According to a building administrator, one high school had a literary coach during the 2009–10 school year, but the school no longer had a coach during the 2010–11 school year. Instead, there are “course leaders” in each department. As the principal described:

The course leaders meet with the principal on a weekly basis to discuss programming concerns, curriculum, assessments, and so forth. The course leader is responsible for developing the midterm examinations in their subject and ensuring that they are consistent with the final examinations. They also talk about students' progress in different content areas and identify any weaknesses.

There are no content-area coaches at the other high school. Instead, many teachers in the school have relationships with coaches from their graduate school programs, according to a building administrator.

PROFESSIONAL DEVELOPMENT FOR NEW TEACHERS

Building administrator interview respondents from six middle schools reported pairing new teachers with a mentor (e.g., lead teacher, senior teacher, or school-based instructional coaches). In one of these schools, new teachers also meet with the principal once every two weeks to discuss successes and challenges. The remaining middle school did not have new teachers in 2010–11, but the principal said that new teachers would have been assigned a mentor.

High school building administrators did not mention mentors as an available support for new teachers. The principal at one high school stated that the principal would send new teachers to professional development on an as-needed basis. New teachers in the other high school attend the annual consortium meeting for teachers who are new to the consortium. At this school, new teacher orientation also occurs through the school's “opening project” at the start of every school year. The principal from this high school said, “A new teacher is paired with a returning teacher, and they kind of do an open-handed planning, co-development of the curriculum, but in doing so share with the new teachers how we do things. We know now that we have to do a little more to make certain things [are] a little clearer to our new staff.”

PERCEIVED UTILITY OF PROFESSIONAL DEVELOPMENT

Many teacher survey respondents, although not all, reported that professional development sessions were helpful. The topics perceived as the most helpful—as defined by the percentage of respondent who rated them *very helpful* or *moderately helpful*—included:

- Teaching students how to comprehend subject area content
- Collaborative learning for students
- Using technology for instruction and learning
- Teaching students reading skills

Other topics were less often perceived as helpful. More than 40 percent of teachers rated as *not helpful* or *minimally helpful* the following sessions:

- Developing standards-based lessons
- Teaching students with disabilities
- Teaching students who are several years below grade level
- Managing student behavior
- Teaching English language learners

This finding was consistent with the Boys and Girls High School *NYSED/NYCDOE Joint Intervention Team Report and Recommendations* that said, “There is no evidence of PD tailored to meet the needs of all at-risk students, especially students with disabilities.”

Many teacher survey respondents were positive about the quality of professional development available to them at their schools; however, others were not. As shown in Table 14, 66 percent of respondents *agreed* or *strongly agreed* that their professional development experiences have addressed the needs of students in their classroom(s). In addition, 65 percent *agreed* or *strongly agreed* that the professional development experiences have been closely connected to the school’s goals.

More than 40 percent of teachers rated as not helpful or minimally helpful the following sessions: developing standards-based lessons; teaching students with disabilities; teaching students who are several years below grade level; managing student behavior; teaching ELLs.

Many teacher survey respondents were positive about the quality of professional development available to them at their schools; however, others were not.... Sixty-six percent of respondents agreed or strongly agreed that their professional development experiences have addressed the needs of students in their classroom(s).

Table 14. Teacher Perceptions of the Quality of Professional Development

Overall, during and since the 2009–10 school year, my professional development experiences have ...	N	Not Sure/ Not Applicable	Strongly Disagree	Disagree	Agree	Strongly Agree
Been closely connected to my school's goals.	54	14.8%	3.7%	16.7%	50.0%	14.8%
Addressed the needs of students in my classroom(s).	53	13.2%	5.7%	15.1%	52.8%	13.2%
Been sustained and coherently focused, rather than short term and unrelated.	54	11.1%	11.1%	24.1%	40.7%	13.0%
Included opportunities to work productively with colleagues in my school.	53	9.4%	5.7%	28.3%	45.3%	11.3%
Included enough time to think carefully about, try, and evaluate new ideas.	54	9.3%	13.0%	20.4%	48.1%	9.3%
Included opportunities to work productively with teachers from other schools.	54	13.0%	11.1%	27.8%	40.7%	7.4%

Note: Rows may not sum to 100.0% due to rounding.

Key Finding 7: Instructional Leadership

Evidence from building administrator interviews and the teacher survey suggest that there are various degrees of instructional leadership, or administrator support for teachers, across the CSD 16 sample schools. Principals and/or assistant principals in all of the sampled schools conduct teacher observations and provide teachers with feedback. However, the frequency of observations and feedback provided by building administrators varies within and across schools, and it may not be sufficient.

According to interview respondents, principals and/or assistant principals in all of the sampled schools conduct teacher observations and provide teachers with feedback. The frequency of observations by building administrators varies among schools. In one of the middle schools, the interview respondent indicated that the school administration tries to conduct as many informal observations as possible; in another middle school, the principal said that the principal visits classrooms, provides comments, and talks with teachers all the time. One network leader said: “[The principal] is in classrooms all the time when [he/she is] not teaching himself. There are always opportunities through written observations or just verbal feedback for teachers.... There’s just that loop of the principal giving feedback to the teachers.”

However, observations from administrators are less frequent in other schools. For example, in one middle school, the interviewed principal suggested that observation has not been frequent enough. In addition, the principal from one of the high schools indicated that focusing on instruction was currently difficult for building administrators, due to the small size of the administration and their numerous responsibilities.

TEACHER PERCEPTIONS OF ORGANIZATION SUPPORTS

High school teacher survey respondents reported how often they receive feedback on instruction from an administrator or colleague (such as a coach, department chair, lead teacher, or mentor). Few teachers indicated that they receive feedback frequently. As shown in Table 15, most teachers reported receiving feedback two to three times per year or less. Twenty-five percent of respondents indicated that they do not receive feedback at all.

Table 15. Teacher Perceptions of the Frequency of Feedback to Teachers, N = 53

Frequency	Percentage
Not at all	24.5%
Once per year	13.2%
2 to 3 times per year	47.2%
4 to 5 times per year	7.5%
More than 5 times per year	7.5%

The principal from one of the high schools indicated that focusing on instruction was currently difficult for building administrators, due to the small size of the administration and their numerous responsibilities.

Most teachers reported receiving feedback two to three times a year or fewer. Twenty-five percent of respondents indicated that they do not receive feedback at all.

Teacher survey respondents also reported on the extent of principal support for instruction. As shown in Table 16, although the majority of teachers *agreed* or *strongly agreed* (71 percent) that their principal sets high standards for teaching, fewer than half (46 percent) *agreed* or *strongly agreed* that their principal actively monitors the quality of teaching in the school. In addition, 44 percent of teacher survey respondents *disagreed* or *strongly disagreed* that the principal presses teachers to implement what they learned in professional development.

Table 16. Teacher Perceptions of Principal Support for Instruction

The principal at this school ...	N	Not Sure/ Not Applicable	Strongly Disagree	Disagree	Agree	Strongly Agree
Sets high standards for teaching.	55	1.8%	10.9%	16.4%	52.7%	18.2%
Communicates a clear vision for our school.	55	1.8%	14.5%	29.1%	40.0%	14.5%
Makes clear to the staff his or her expectations for meeting instructional goals.	55	1.8%	14.5%	25.5%	47.3%	10.9%
Presses teachers to implement what they have learned in professional development.	55	5.5%	12.7%	30.9%	41.8%	9.1%
Actively monitors the quality of teaching in this school.	54	9.3%	16.7%	27.8%	37.0%	9.3%

Note: Rows may not sum to 100.0% due to rounding.

Recommendations

Overview of Recommendations

Learning Point Associates has developed five recommendations in response to the key findings identified from the CSD 16 audit; all but three key findings have a directly related recommendation

The finding about positive classroom climate/emotional support provided by teachers to students was positive; therefore, a recommendation was not developed in response. Schools may consider drawing on this area of strength as they seek to implement recommendations designed to help improve other areas of classroom practice.

The evidence supporting the key finding about professional development was not deemed targeted enough for a stand-alone recommendation on that topic, however, the auditors agree that it is troubling that the sampled schools—as well as Boys and Girls High School—seem to lack professional development tailored to meet the needs of at-risk students. With this observation in mind, the auditors encourage schools seeking to improve their graduation rates to focus their professional development efforts on helping teachers to implement the topics and strategies outlined in the recommendations that follow.

Similarly, the evidence supporting the key finding about instructional leadership, although noteworthy, does not have the depth to warrant a recommendation. The auditors did not comprehensively examine this issue across the schools in the district to be able to provide more specific feedback. Evidence is available only from teacher surveys and would need to be triangulated with other sources. However, given the preliminary evidence and the importance of instructional leadership to school improvement, the auditors encourage schools to consider the role of the principal and other instructional leaders—including teachers in a distributed leadership model—in the implementation of the recommendations that follow.

THE FIVE RECOMMENDATIONS

The five recommendations are as follows:

1. Develop and implement a schoolwide system to identify at-risk students using assessment data, provide multitiered academic interventions, and employ ongoing progress monitoring to address student needs.
2. Implement an ongoing student orientation system that emphasizes community and academic support for the transition into high school.
3. Implement instructional strategies that increase opportunities for higher-order thinking, analysis and problem solving, and deeper content understanding.
4. Implement instructional strategies that encourage high-quality instructional feedback between the teacher and students or among students.
5. Develop and implement specific strategies for incorporating appropriate student voice, choice, and opportunities for autonomy and leadership in the classroom.

The five recommendations are discussed on the following pages. Each recommendation provides a review of research, online resources for additional information, specific actions that CSD 16 schools may want to take during the implementation process, and examples of real-life schools that have successfully implemented strategies.

As a reminder, the audit sample of schools did not include all high schools in CSD 16. In particular, Boys and Girls High School—the high school with a low graduation rate—was excluded from the sample at the request of the NYCDOE because it had recently participated in an extensive joint intervention team (JIT) review process. Boys and Girls High School also enrolls more than 70 percent of the high school students in CSD 16. Therefore, recommendations are presented to identify areas for improvement within the audit sample of schools but may be applied to other schools in the district.

Please note that the order in which these recommendations are presented does not reflect a ranking or prioritization of the recommendations.

Recommendation 1: Systemic Academic Interventions

Develop and implement a schoolwide system to identify at-risk students using assessment data, provide multitiered academic interventions, and employ ongoing progress monitoring to address student needs.

LINK TO RESEARCH

Academic intervention services is defined by the New York State Education Department (2008) as “additional instruction which supplements the instruction provided in the general curriculum” for “students who are at risk of not achieving the state learning standards in English language arts, mathematics, social studies and/or science, or who are at risk of not gaining the knowledge and skills needed to meet or exceed designated performance levels on state assessments.” Across the state of New York, school leaders are searching for ways to enhance the current academic intervention services (AIS) programs in their schools to be able to identify students earlier, provide services to all students who require them, and measure student outcomes (Killeen & Sipple, 2004). Many schools begin to implement RTI after determining that their current structures and processes were not meeting their students’ academic needs.

The incorporation of a response to intervention (RTI) model into established interventions has been found to improve student academic progress; specifically, it has been found to increase the number of children who demonstrate proficiency on state accountability tests (Heartland Area Education Agency 11, 2004).

According to the National Center on Response to Intervention (Prewett & Mellard, 2010), RTI is a model of academic supports that “integrates assessment and intervention within a multi-level prevention system to maximize student achievement and to reduce behavioral problems.” These goals are accomplished through the identification of students at risk for poor learning outcomes, provision of evidence-based interventions, regular monitoring of student progress, and regularly adjusting the intensity and nature of those interventions depending on a student’s responsiveness.

In a national study conducted by the National Center on Response to Intervention (Prewett & Mellard, 2010), middle schools across 28 states, including New York, participated in a study to identify current RTI practices, identify key factors of successful implementation, and identify RTI practices linked to positive student learning outcomes. Schools involved in the study chose RTI to (1) close the student achievement gaps, (2) meet AYP every year with every subgroup, or (3) address undesirable and disruptive student behaviors.

According to Prewett and Mellard (2010), models of a responsive academic intervention program include a data-driven decision-making model that includes:

- The use of a schoolwide (universal) screening assessment to identify students at risk for poor learning outcomes;
- Multitiered intervention programs and strategies that increase in levels of intensity;
- Frequent and ongoing progress monitoring to determine student progress and determine program efficacy;

QUICK LINKS:

Online Sources for More Information

Doing What Works: Providing Research-Based Education Practices Online (Website)

<http://dww.ed.gov/>

National Center on Response to Intervention: *What Is RTI?* (Webpage)

<http://www.rti4success.org/whatisrti/>

National Research Center on Learning Disabilities: Tiered Service-Delivery Model (Webpage)

http://www.nrclid.org/rti_practices/tiers.html

New York State Response To Intervention Technical Assistance Center (Website)

<http://www.nysrti.org>

- A team structure to organize and analyze student performance using progress monitoring data.

Although research indicates minimum components for successful implementation of responsive intervention programs, no specific model of RTI, intervention program or strategy, or progress monitoring tool is endorsed by Learning Point Associates. Instead, schools are encouraged to consider these research-based recommendations to make specific decisions regarding the structure and design of intervention programs that will best meet the needs of their situation.

IMPLEMENTATION CONSIDERATIONS

Schools face a number of challenges when selecting a strategy for implementing academic interventions. Local regulations, contracts, and resources such as time, funding, and personnel all play major roles. Schools must make the determination, based on individualized circumstances, of what will ultimately work best. The most effective programs are those that are launched with clear leadership, built from careful planning, and supported with schoolwide awareness and professional development prior to full implementation.

1. Identify a team of school staff members who will lead the “rollout” of the intervention.

This leadership team may vary according to the school’s demographics. Some schools choose to include teachers who work with subpopulations (e.g., ELLs and students with disabilities), and other schools include teachers who teach in the content areas in which RTI is being implemented (e.g., ELA teachers from each grade, literacy coach, and reading specialist). Network resources and coaches also should be considered.

2. Conduct careful planning to ensure the success of the rollout.

School leadership defines the intervention infrastructure, scheduling, resources, funding, staffing, screening and progress monitoring assessments, intervention programs, tools, and strategies. This process includes developing explicit plans, processes, and procedures prior to implementation. Following is a checklist of topics to cover:

Data-Based Decision Making

- Establish a team structure, routines, and procedures for making decisions.
- Set explicit decision rules to decide when students will move in, out, or within interventions.
- Develop record-keeping systems that communicate student progress to stakeholders (e.g., student, parent, teachers, AIS coordinator).

Assessments and Screenings

- Establish a yearly, schoolwide schedule for assessments and screening procedures (e.g., three times each year).
- Identify screening instrument(s) that will be used to identify students for interventions. Screening instruments should be valid and reliable and aligned with grade-level curriculum based on learning standards (e.g., state assessments, Acuity predictive assessments, or instructionally targeted assessments) or subject-specific

and researched-based assessments (e.g., Woodcock-Johnson III Diagnostic Reading Battery, Qualitative Reading Inventory, Dynamic Indicators of Basic Early Literacy Skills).

- Establish participation criteria, select benchmarks or cutpoints at which risk is determined, and identify students who fail to meet benchmarks or fall below specified cutpoints.
- Create multitiered “entry points,” and establish multiple benchmarks to “slice the pie,” allowing students to receive targeted interventions that vary in levels of intensity (e.g., students 0 percent to 40 percent and 41 percent to 65 percent, or Level 1 and Level 2 on state assessments).

Tiered Intervention Programs

- Select evidence-based intervention programs and/or strategies to use with students who fall in various ranges based on the screening tool used.
- Determine the method for delivery of service (e.g., pullout small-group instruction, afterschool instruction, Saturday program) and duration and frequency of service.
- Ensure that services and programs are “tiered” and increase in levels of intensity, which match the increasing needs of students.

Progress Monitoring

- Determine assessments to be used. Assessments can be both formal (e.g., AIMSweb, Acuity predictive assessments, or instructionally targeted assessments) and informal (e.g., checklist, running records).
- Establish benchmarks for performance (e.g., >40 percent and >65 percent). These benchmarks determine when students will move within, through, and out of tiers of interventions.
- Establish a timeline for progress monitoring. Monitoring may occur as frequently as every two weeks.

3. Create an awareness of the intervention, and provide adequate professional development to ensure that everyone is on board.

Many schools follow a “train the trainers” model in which selected staff members attend training and turnkey that training to other staff. Depending on which teachers and staff will be providing interventions, training also may be schoolwide. A critical component of the RTI implementation process is to ensure that stakeholders are clear about what is being implemented and why it is being implemented. School leaders must establish and communicate the goals and expected outcomes of adopting an RTI model during the time they provide ongoing training and sufficient time for staff to fully understand the components and structures of a new intervention model. Successful implementation relies heavily on the ability of teachers and school leaders to implement RTI with fidelity.

Opportunities for AIS-related professional development should be embedded into the school’s annual professional development plan. Careful planning is essential when rolling out professional learning opportunities in the area of AIS.

4. Put the intervention plan into action.

Recommendations for implementation include “starting small.” (See “Starting Small.”) This approach might include starting in one grade, one content area, or one classroom; or it could begin by focusing on one or two components of RTI. This decision should be what makes the most sense for the school based on existing resources, tools, and structures. At this phase, adjustments and adaptations are an ongoing part of the process.

Starting Small

Two approaches for “starting small” with an academic intervention program are to start with one essential component or to start with one small group.

Starting With One Essential Component

Build a model with a focus on one component at a time (e.g., screening, then data-based decision making, then progress monitoring, then intervention levels). Create a timeline for the implementation of each component, and align training for school staff with each phase of implementation.

Example

A middle school in the Midwest began the implementation of its RTI program by first focusing on reading programs and strategies for students identified as at risk. A second tier of interventions and progress monitoring were “rolled out” later in the year.

Starting With One Small Group

Implement the intervention program with a small pilot group. With this approach, it is best to investigate which components worked well and which need to be refined before scaling up to other classes, grades, or content areas.

Example

A Pennsylvania school implemented RTI in a small number of classrooms during the first year to determine what worked and what did not work. The school's interventions team focused on creating a balance between moving too slowly (which they felt would minimize the impact of RTI and decrease staff buy-in) and moving too quickly (which might overwhelm teachers and students).

Adapted from *Response to Intervention Practices in Middle Schools*, a 2011 presentation by Daryl F. Mellard and Sarah L. Prewett, available online at http://www.rti4success.org/ppt/WBNR_April2011.ppt. This document was produced by the National Center on Response to Intervention and is in the public domain.

School A's Intervention Program

School A is a middle school serving a total of 870 students in Grades 6–8. Approximately 50 percent of the students are eligible for free or reduced-price lunch, 22 percent are English language learners, and 11 percent are students with disabilities. In the 2005–06 school year, only 50 percent of the students at each grade level were proficient on state examinations and approximately 16 percent of the students at each grade level were “far below” grade level.

In response to comprehensive school improvement efforts, the school implemented a three-tiered RTI model in reading. At the end of the 2006–07 school year, more than 80 percent of students in all grades passed the state ELA test. Following is an outline of the intervention program developed by School A in response to student performance and learning initiatives.

TIER I

Intervention Program or Strategy

- Holt Rinehart and daily fluency instruction; general education classroom

Length of Instruction/Intensity

- 5 days per week for 72 minutes per day

Screening Tools

- Grade-level fluency passages, district writing prompts, Scholastic Reading Inventory, curriculum-based assessments administered three times each year

Data-Based Decision-Making Process

- RTI team (principal, related service provider, grade-level teachers) reviews scores in monthly grade-level meetings.
- Students who are two grade levels behind are placed into the next tier of interventions; students who are three grade levels behind are placed into the third tier of interventions.

TIER II

Intervention Program or Strategy

- *REWARDS, Read Naturally, Soar to Success*

Length of Instruction/Intensity

- 3 days per week for 72 minutes each day

Screening Tools

- Curriculum-based assessments administered three times each year

Data-Based Decision-Making Process

- Students are assigned to the programs based on identified skill deficit (comprehension, decoding, fluency).
- Students move between tiers based on progress monitoring scores.

TIER III

Intervention Program or Strategy

- *Language!, Read 180, High Point*

Length of Instruction/Intensity

- Daily for 144 minutes

Screening Tools

- Same as Tier II

Data-Based Decision-Making Process

- Students exit this tier after progressing within two grade levels of expectations (into Tier II).

Adapted from pages 58–59 of *Implementing Response to Intervention: Practices and Perspectives From Five Schools—Frequently Asked Questions*, by Kathryn Klinger Tackett, Greg Roberts, Scott Baker, and Nancy Scammacca, available online at <http://www.centeroninstruction.org/files/Implementing%20RTI%20Practices%20%26%20Perspectives%20of%205%20Schools.pdf>. This report was published in 2009 by the Center on Instruction and is in the public domain.

Long Beach Unified School District

Long Beach Unified School District in California provides an example of tiered intervention.

In California, schools are not permitted to use IQ-Achievement testing as a criterion for determining eligibility for special education services. The Long Beach Unified School District in California employs regular assessments and tiered interventions as part of both the prereferral process and as best practice for serving the needs of all students. The district has responded to their high school students' literacy needs using a multitiered approach that incorporates a battery of eighth-grade assessments that are used to determine the needs of incoming ninth graders. In the spring, all eighth-grade students participate in a screening series, which is an examination of multiple measures of student achievement that includes the CA standards test, course grades, and an assessment that is part of the *Language!* curriculum the district has adopted.

All incoming ninth-grade students receive core literacy instruction. Based on a review of assessment data, students entering high school half a year to two years behind receive the core literacy instructional program as well as an additional literacy workshop course that provides them with support materials that scaffold the core literacy program. Entering high school students who are more than two years below grade level are enrolled in a double block of language arts that consists of an intensive English language arts program or an afterschool reading program. For their language arts curriculum, Long Beach has adopted the *Language!* and Lindamood-Bell curricula for intensive instructional programs in literacy. Lindamood-Bell focuses on developing phonemic skills for students having serious difficulties with text. Typically, students spend a semester in that intensive intervention and then transition into *Language!* Student progress is monitored throughout the school year using "cluster tests" taken primarily from the Lindamood-Bell and *Language!* curricula.

In addition to the systematic supports for students, the Long Beach model provides professional learning opportunities for teachers through monthly support meetings, summer institutes, and coaches. While the Long Beach approach to instruction and tiered intervention shares its key characteristics with RTI, they do not call this practice RTI but simply "best practice for all students." They ask, "What do the data say about how students are performing and what instructional programs are necessary to support student growth?" Another important aspect of the Long Beach system, according to Office of Special Education Assistant Superintendent Judy Elliott, is that they do not base their decisions on a single data point. Multiple sources of data are examined to determine student needs. Long Beach views its practice as a systems approach to good instruction for all students rather than just a process to diagnose students with learning disabilities. They had such success with the practice at the high school level that they have recently applied it to their middle schools. Roughly 7 percent of students in Long Beach have IEPs as opposed to an average of 12-14 percent nationally (Elliott, 2006).

From Duffy, H. (2007). *Meeting the Needs of Significantly Struggling Learners in High School: A Look at Approaches to Tiered Intervention*. Available online at http://www.betterhighschools.org/docs/NHSC_RTIBrief_08-02-07.pdf

Recommendation 2: Student Transition Programs

Implement an ongoing student orientation system that emphasizes community and academic support for the transition into high school.

LINK TO RESEARCH

Many students struggle during the transition into high school. These early struggles can and do lead to disengagement and, potentially, dropping out of school (Dynarski et al., 2008). In a report prepared by the National High School Center, a factsheet created by researchers from the American Institutes for Research noted that “students’ experiences in their first year of high school often determine their success throughout high school and beyond. However, more students fail ninth grade than any other grade” (Williams & Richman, n.d., p. 2). In other words, the first year is critical for long-term school success, but it is also one of the most difficult years students face.

In a survey of 320 ninth-grade students, researchers Akos and Galassi (2004) shared that students seemed “to identify three primary categories of school transition concerns—academic, procedural, and social” (p. 218). In a later report focusing on the transition for African-American students, Holcomb-McCoy (2007) divided struggling students into three categories—those who had academic problems, those who had social problems, and those who were disconnected. Then, in 2009, Oakes and Waite drew from a 2006 research summary by the National Middle School Association (NMSA) and wrote that for “many students, ... social matters and peer relationships overshadow academic concerns in ninth grade.” Although the survey used by Akos and Galassi may have been limited to a small number (76.3 percent) of primarily white students in the South, the “three primary categories” they listed receive attention in other studies and analyses of different populations, although the emphases may vary. These three areas, then, are a useful way to consider the transition process, and a successful transition system will address all three categories.

In a research brief from the Council of Great City Schools, Horowitz and Snipes (2008) cautioned that “structural reforms,” such as those that create ninth-grade academies, “are insufficient to improve student outcomes.” The structural reforms address some of the social and procedural concerns (i.e., anything that involves “navigating around and dealing with the complexities of a larger school environment including multiple classes taught by different teachers” (Akos & Galassi, 2004, p. 218) that students have by providing them with a home base, stable group of classmates, and teachers who can answer questions about the school, but the reforms do not necessarily address academic problems that students may be facing. In a book on high school transitions, Queen (2002) wrote that although advisory periods are an option, often “many of the activities that occur during these periods are mechanical tasks, such as taking attendance or distributing notices” (p. 58). Herlihy (2007) noted that structural reforms might help, but that the reforms gave students a stronger chance for high school success when they were combined with “specific instructional and curricular reforms” (p. 25). Repeatedly, research shows that a single approach to the high school transition is not enough; schools must approach the transition process through multiple channels.

QUICK LINKS: Online Sources for More Information

Student Transitions from Middle to High School: Improving Achievement and Creating a Safer Environment (Publication)

<http://books.google.com/books?id=FWqgM3dKKGAC&printsec=frontcover>

Easing the Transition to High School: Research and Best Practices Designed to Support High School Learning (Publication)

http://www.betterhighschools.org/docs/NHSC_TransitionsReport.pdf

Middle-to-High School Transition: Practical Strategies to Consider (Publication)

<http://www.eric.ed.gov/PDFS/ED506363.pdf>

Characteristics of Effective Transition Programs

- **The transition should be *ongoing*.**

The transition should not end with an orientation at the start of the year but should continue during the full first year. Using this strategy, the school can ensure that students are fully adjusted and that their needs are met.

- **The transition should be a *system*.**

The transition should not rest on a single program but rather be a series of programs that work together. This part is an “ecological perspective,” in which change in one area of the transition will cause change in another (Holcomb-McCoy, 2007, p. 1). The problem is not confined to a single source, so the solution should not be confined to a single program. Just as important, however, the multiple programs should work synergistically.

- **The emphasis should be on *community*.**

Community, which can be cultivated in a myriad of ways, ensures that students do not feel alone and adrift within the high school. Students need relationships with their teachers. In a review of studies on the ninth-grade transition, Neild (2009) noted a study in which researchers had “found that ninth graders averaged 0.78 fewer course failures at schools with high levels of trust between teachers and students than at schools with low levels of teacher-student trust” (p. 63). Also, a community can also allay social anxieties by easing the process of making friends.

- **The transition system should also provide *academic support*.**

In their research brief, Horwitz and Snipes (2008) included that a study in one large city district suggested that the majority of ninth-grade students entered high school below grade level on reading and mathematics, as determined by test scores (p. 2). If students fall behind in ninth grade, they may remain behind for all four years of high school. Additionally, students may not know how to study for high school classes or how to organize their time well. In such cases, courses on study skills, such as the classes and curricula offered by several schools in Maryland, may be helpful (Letgers & Kerr, 2001, p. 6).

IMPLEMENTATION CONSIDERATIONS

1. Designate a transition team.

The first step to creating a successful transition system is designating a transition team (Queen, 2002, p. 46). The transition team should include administrators, teachers, counselors, and possibly even students. Students are “informed experts” on the matter of transition (p. 53). They know what did and did not work for them when they first entered the school. Their involvement could also create student leaders toward whom incoming students could look for aid and answers. If the school did not wish to involve students in the transition team, they could opt to offer a student survey instead.

The transition team would have two initial tasks. First, the team would evaluate its current transition program(s). The transition team would ask questions such as, but not limited to, the following:

1. Is the current transition/orientation program continuous?

2. Does the current transition/orientation program address academic, social, and procedural concerns?
 - a. Do students receive multiple opportunities to learn their way around the school?
 - b. Do students receive guidance about the people to ask various questions?
 - c. Do students and parents receive rich and high-quality information about the school, its policies, safety precautions, and other topics important to the school?
 - d. Do students receive a chance to meet and interact with their peers and upperclassmen? Do they receive multiple chances?
3. If the school does have multiple programs for dealing with the transition in place, do these programs work in concert or isolation? If the former, how smoothly and well do they work together?
4. Do students have an adult they can identify with and turn to for help?
5. Do parents have a school contact with whom they can meet and ask questions?

The team would use this self-evaluation or improve the program(s) already in place and select additional or new programs for the school.

The second task the transition team would face would be evaluating the probable needs of the incoming class. The team could base this evaluation on information about the incoming class gathered from computer data systems and previous schools directly, as well as on data of past freshman classes and their needs. Using this strategy, the school knows which academic supports to develop and implement.

2. Review the current programs.

The next step for creating a better transition and orientation system is redesigning, creating, and augmenting the school's present program(s). Depending on the school's needs, which would have been determined by the transition team, the options vary. Broadly, however, the school may choose among structural or programmatic reforms, or some combination thereof. Structural reforms, which would be difficult to implement for the 2011–12 school year, would include the development of ninth-grade academies, advisory classes, interdisciplinary teams, and student cohorts. In other words, a structural reform is any change that alters how the school works in order to better accommodate incoming students. Programmatic reforms would include options such as a summer walkthrough of the school, student mentors, peer mediation, smaller orientations and reorientations throughout the school year, year or cohort-level events, teacher mentors, and facilitating contact between incoming students (Ashton, 2008, p. 9). The school should focus on ensuring that students have all the information they need (Cooper & Liou, 2007; Oakes & Waite, 2009), involving parents, and enhancing the student-teacher/counselor relationship (Cooper & Liou, 2007; Holcomb-McCoy, 2007; Oakes & Waite, 2009; Queen, 2002). The best system would be one that combined structural and programmatic reforms. They work best when reinforcing one another (Horowitz & Snipes, 2008; Letgers & Kerr, 2001).

After the programs have been chosen, each person involved in the school should be given an explicit description of his or her role within the system. Each staff member should know his or her responsibilities, what they entail, and how the person will be held accountable (Queen, 2002, p. 56).

3. Ensure a continuous cycle of improvement.

Finally, the school should monitor its transition system to ensure that it is working smoothly and optimally. The school may draw on student scores and attendance data, student and parent surveys, or staff observations for this evaluation process. The school should also use these data to ensure that teachers are fulfilling their roles and that each student is treated fairly. Cultural sensitivity on the part of the staff can greatly affect a student's transition into a new school (Holcomb-McCoy, 2007). Perception data in particular can reveal underlying prejudices and stereotypes that may cause some students to feel isolated from the school. Professional development to address these issues and outreach to regain the students' interest should be implemented in such cases. The process should be ongoing, recurring each year, so that the school is able to constantly improve and refine its transition system.

Sleepy Hollow High School

Sleepy Hollow High School provides an example of an effective transition program.

Sleepy Hollow High School, in suburban Sleepy Hollow, New York, serves an ethnically and economically diverse population, including students with low socioeconomic status and English language learners. The school operates a broad range of programs to support its diverse population and help them reach the high academic and graduation standards of neighboring schools. Approximately 780 students are enrolled in the school.

Sleepy Hollow has identified groups of students with unique needs and developed targeted programs to help each group succeed in high school and beyond. For example, an adult advocate works with pregnant and parenting students. A ninth- and 10th-grade Humanities Team works with students struggling to make a successful academic transition to high school. Another program focuses on helping teachers and coaches work together to improve student athletes' academic performance. A series of staged classes—organized to provide greater initial content and language support and gradually becoming more demanding—help non-English speakers master content required to pass the New York State (NYS) Regents exams. There is no single program across the school to prevent dropping out; rather, there is a patchwork of targeted programs that, together, address the needs of all students.

Research shows that ninth grade is a critical year for students at risk of dropping out. Several years ago, Sleepy Hollow staff noticed that approximately 30 students failed ninth grade every year, and staff discovered that it was possible to predict which students would fail. The students generally had low English skills, poor attendance, and similar indicators. Sleepy Hollow identifies the most at-risk students from reviewing middle school records and talking with middle school teachers.

At-risk students are enrolled in a two-year Humanities Team program, characterized by very small classes, strong student-teacher relationships, active and engaging instruction, explicit instruction in behavior, and close monitoring of the students. The Humanities Team is composed of an English and social studies teacher and an assistant, who work with the same students for ninth and 10th grades. The team works with two cohorts of approximately 15 students per year. The assistant talks with the students' non-humanities teachers and their guidance counselors and other school staff about strategies that work for each student across classes and settings. The Humanities Team provides explicit instruction in behavior, including how to study, listening skills, and interpersonal interactions, among other topics. The class celebrates successes (e.g., movies and pizza, medals) and has a dress-up in-school "restaurant" event at the end of the year in which they dine in to celebrate their accomplishments and practice their manners.

When the principal first came to Sleepy Hollow, she noticed that many students were spending the day in in-school suspension. Recognizing the importance of addressing student behavior early on to increase students' chances for success in school, she abolished the in-school suspension and worked with the vice-principal and counselors to develop a more positive way of addressing student behavior. Staff were trained to identify challenging behaviors and explicitly teach and reinforce positive behavior. Over time, fewer students needed intensive administrative responses, and severe behavior problems occurred less frequently. For example, before this program was instituted, there were daily fights in the school. Now fights rarely occur. The principal and vice-principal attribute this positive behavior to catching and addressing potentially problematic behavior early.

Description excerpted from the *Doing What Works* website at http://www.dww.ed.gov/media/HSR/DP/TopicLevel/sleepy_hollow_site_further_details.pdf. This information is in the public domain.

Recommendation 3: Instructional Rigor

Implement instructional strategies that increase opportunities for higher-order thinking, analysis and problem solving, and deeper content understanding.

LINK TO RESEARCH

Instruction that pushes students to engage in higher-level thinking leads to deeper learning for students (Marzano, Pickering, & Pollock, 2001; Newmann, Bryk, & Nagaoka, 2001; Pashler et al., 2007). Too often, particularly in schools where students are struggling, instruction focuses on lower-level thinking skills, basic content, and test preparation. Teachers of struggling student groups or tracks usually offer students “less exciting instruction, less emphasis on meaning and conceptualization, and more rote drill and practice activities” than do teachers of high-performing or heterogeneous groups and classes (Cotton, 1989, p. 8). Yet this focus on basic skills does not necessarily improve student achievement.

Several research studies were completed from 1990 to 2003 “which demonstrated that students who experienced higher levels of authentic instruction and assessment showed higher achievement than students who experienced lower levels of authentic instruction and assessment” (Newmann, King, & Carmichael, 2007, p. vii). These results included higher achievement on standardized tests (Newmann et al., 2001). It is also important to note that these results “were consistent for Grades 3–12, across different subject areas (mathematics, social studies, language arts, science), and for different students regardless of race, gender, or socioeconomic status” (Newmann et al., 2007, p. vii).

Teachers need to provide structured opportunities and time for students to take on higher-level cognitive work (Tomlinson, 2003). In discussing the *gradual release of responsibility model*, Fisher and Frey (2008) state that “the cognitive load should shift slowly and purposefully from teacher-as-model, to joint responsibility, to independent practice and application by the learner” (p. 2). This process allows students to become what Graves and Fitzgerald (2003) call “competent, independent learners” (p. 98).

There are several steps to ensure that students are being asked to complete this type of intellectually challenging work, which increases test scores and improves performance on authentic assessment measures as well. Newmann et al. (2001) define *authentically challenging intellectual work* as the “construction of knowledge, through the use of disciplined inquiry, to produce discourse, products, or performances that have value beyond school” (p. 14).

Daggett (2005) agrees, stating that all students should be pushed “to achieve academic excellence, which ultimately boils down to applying rigorous knowledge to unpredictable, real-world situations, such as those that drive our rapidly changing world” (p. 5). Disciplined inquiry, which occurs in the classroom, requires that students “(1) use a prior knowledge base; (2) strive for in-depth understanding rather than superficial awareness; and (3) express their ideas and findings with elaborated communication” (Newmann et al., 2001, p. 15).

QUICK LINKS: Online Sources for More Information

Doing What Works: Providing Research-Based Education Practices Online (Website)

<http://dww.ed.gov/>

Organizing Instruction and Study to Improve Learning (Publication)

<http://ies.ed.gov/ncee/wwc/pdf/practiceguides/20072004.pdf>

IMPLEMENTATION CONSIDERATIONS

1. Cultivate schoolwide high expectations for students.

- Align instruction with the New York State PK–12 Common Core Learning Standards. According to NYCDOE (2011), schools in New York City are set to have fully adopted the P–12 Common Core Learning Standards for students to take aligned assessments during the 2014–15 school year. These standards are internationally benchmarked and rigorous; they clearly explain what students at each grade level are expected to know and be able to do. Some schools were involved in pilot programs in 2010–11.
- Develop a shared understanding of instructional rigor through collaborative curriculum planning, design, and/or redesign. When developing or revising curriculum maps, identify opportunities for formative assessment tasks that encourage higher-level thinking for each unit of study.
- Through teacher collaboration, develop common student assignments that ask students to perform rigorous and authentic tasks.
- Through teacher collaboration, develop common student assessments that include rigorous and authentic summative assessment tasks.
- Monitor implementation of expectations through classroom observations, lesson plan review, and student achievement results on common formative assessments.

2. Provide professional development for teachers on instructional strategies that push students to engage in higher-order thinking.

- Provide for teachers ongoing professional development that describes the importance of pushing students to do higher-level thinking and provides strategies for how to do so. This training might be provided through ongoing professional development sessions and/or support of an instructional coach.
- Create clear expectations regarding how teachers should implement this professional development in the classroom (e.g., one strategy utilized each day as reflected in lesson plans and authentic assessments at the end of each unit).
- Identify how this professional development can be incorporated into scheduled teacher collaboration sessions.
- Monitor implementation of professional development through classroom observations, lesson plan review, and student achievement results on common formative assessments.

3. Develop examples of authentic intellectual work.

The following example can be used to help school leaders and teachers understand what authentic intellectual work might look like.

Examples of High-Scoring and Low-Scoring Measures of Authentic Intellectual Work

The research report *Improving Chicago's Schools: Authentic Intellectual Work and Standardized Tests: Conflict or Coexistence?* by Newmann, Bryk, and Nagaoka (2001) provides examples of two sixth-grade writing assignments: one that scored high and one that scored low on measures of authentic intellectual work. The authors conclude each example with a commentary of why the assignment received the score that it did.

High Scoring Writing Assignment

Write a paper persuading someone to do something. Pick any topic that you feel strongly about, convince the reader to agree with your belief, and convince the reader to take a specific action on this belief.

Commentary

In this high scoring assignment, demands for construction of knowledge are evident because students have to select information and organize it into convincing arguments. By asking students to convince others to believe and act in a certain way, the task entails strong demands that the students support their views with reasons or other evidence, which calls for elaborated written communication. Finally, the intellectual challenge is connected to students' lives because they are to write on something they consider to be personally important.

Low Scoring Writing Assignment

Identify the parts of speech of each underlined word below. All eight parts of speech—nouns, pronouns, verbs, adjectives, adverbs, prepositions, conjunctions, and interjections—are included in this exercise.

1. My room is arranged for comfort and efficiency.
2. As you enter, you will find a wooden table on the left.
3. I write and type.
4. There is a book shelf near the table.
5. On this book shelf, I keep both my pencils and paper supplies.
6. I spend many hours in this room.
7. I often read or write there during the evening...

Commentary

This assignment requires no construction of knowledge or elaborated communication, and does not pose a question or problem clearly connected to students' lives. Instead it asks students to recall one-word responses, based on memorization or definitions of parts of speech.

Reprinted from page 24 of *Improving Chicago's Schools: Authentic Intellectual Work and Standardized Tests: Conflict or Coexistence?* by Fred M. Newmann, Anthony S. Bryk, and Jenny K. Nagaoka, available online at <http://ccsr.uchicago.edu/publications/p0a02.pdf>. Copyright © 2001 Consortium on Chicago School Research. Reprinted with permission.

Plainwell Middle School

Plainwell Middle School in Plainwell, Michigan, serves students in Grades 6–8. The school has had success in improving instructional rigor.

In 2005, Plainwell Community Schools implemented districtwide curriculum restructuring with professional development focused on using the research-based instructional strategies outlined in Robert Marzano's *Classroom Instruction That Works* (2003)... Some of the instructional delivery techniques that were adopted as part of this professional development include the use of nonlinguistic representations of abstract concepts and the use of higher-order questions to elicit student explanations. Teachers find Marzano's strategies to be compelling, noting the evidence of a significant correlation between increased student achievement and the use of research-proven instructional techniques. This approach lays the groundwork for a shift in staff culture, moving away from the use of personal intuition to the use of empirical, quantitative data to inform decisions around teaching and learning.

In 2005, social studies teachers at Plainwell Middle School decided to adopt a new curriculum aligned with Marzano's strategies.... Interactive slideshows are used as a way to actively engage students in new content learning, letting them participate in lectures by touching, interpreting, and acting out historical images and events projected onto a screen. The curriculum also supports vocabulary instruction with graphic organizers that connect definitions with visuals to help students understand and retain key terms. Some teachers...have modified the workbook graphic organizers to create their own "visual dictionaries:"...

Higher-order questions are also used as an instructional technique through the new curriculum. Response groups are a structure that teachers use to facilitate small group discussion on controversial topics in history. Through a series of probing questions that require critical thinking and the use of evidence, teachers elicit student explanations that require analysis and application of historical information. Finally, students match up their decisions and viewpoints with actual decisions made in history.

In addition to these strategies, social studies teachers at Plainwell Middle School intentionally build review into daily lessons and assessments. Each day begins with a warm-up activity that quizzes students on a previous lesson.... When introducing a lesson, teachers also make sure to begin with a preview activity that they can refer back to when reviewing the material....

Curriculum restructuring at the middle school is carefully implemented to ensure success.... First, a less-is-more approach is taken, allowing ample time for teachers to learn and practice a single strategy before moving on to another one. Also, teacher training is conducted by lead teachers...who model classroom techniques, lead guided discussions, and set periodic objectives for teams. Instead of a passive "sit-and-get" approach, teachers actively practice the strategies and report to their teams about their progress. Finally, administrators support the efforts by aligning observational classroom walk-through forms to match the professional development focus, keeping the strategies at the center of conversation about teaching.

Description excerpted from the from the *Doing What Works* website at http://dww.ed.gov/media/CL/OIS/TopicLevel/case_plainwell_71508.pdf. This information is in the public domain.

Perrysburg High School

Perrysburg High School in Perrysburg, Ohio, serves students in Grades 9–12. Perrysburg is a suburb of Toledo.

Perrysburg is the sole high school in the Perrysburg Exempted Village District in Wood County. Nate Ash teaches physics to eleventh and twelfth graders. Ash has taught professional development programs at the Northwest Ohio Center of Excellence in Science and Mathematics Education, and at Bowling Green State University in Ohio. He acts as a mentor to new science teachers.

Ash teaches physics using an inquiry approach. Students do lab activities and solve problems together to understand key concepts in physics. In each lesson he poses higher-order questions to help his students build explanations: How do you know that? What would happen if we changed this variable? How is this similar or different? Ash uses whiteboards in a number of ways: for group problem solving, representing a phenomenon with pictures, and student presentations.

Each new unit/topic is introduced with a hands-on activity. Ash presents a physical situation to students, has them manipulate the variables, and then narrows down their list of variables to design an experiment. Every experiment is introduced with an open-ended question (What would happen if...? What happens when...?). Students work in small groups to describe what happens with graphs, pictures, mathematical equations, and written expression. When they are finished, students present their work to the class in “whiteboard sessions.”

Ash explains how the whiteboard sessions give important insights into student thinking: “We can really see if the students understand on every different level how that problem works or how that situation works. And if there is a disjoint between any of those representations, that gives us someplace to go, that gives us something to talk about, something to work through.”

Students appreciate being in charge of their own learning, having the opportunity to challenge their peers, and develop critical thinking skills as they explain their ideas in front of a group. As Ash says, “Students really like this approach because, instead of just giving them the answer, it gives them a chance to explain to each other what’s going on. And I like it because all the times that I have done physics problems on the board and gone through the answers, I got pretty good at doing physics problems but my students never got any better at all.”

Ash has found that with this approach his students are no longer trying to find equations that fit the problems, but working to develop a deep understanding of the underlying concepts.

Excerpted from the *Doing What Works* website at http://dww.ed.gov/media/CL/OIS/TopicLevel/case_perrysburg_52708rev.pdf

Recommendation 4: Instructional Feedback

Implement instructional strategies that encourage high-quality instructional feedback between the teacher and students or among students.

LINK TO RESEARCH

A meta-analysis of research conducted on instructional feedback (Hattie et al., 2007) found feedback to be one of the most powerful influences on learning and achievement. In *The Power of Feedback*, authors note that “feedback can be conceptualized as information provided by an agent (e.g., teacher, peer, book, parent, self, experience) regarding aspects of one’s performance or understanding.”

Many teachers spend a considerable proportion of their instructional time in whole-class discussions or question-and-answer sessions, but these sessions tend to rehearse existing knowledge rather than create new knowledge for students. Furthermore, teachers generally listen for the “correct” answers instead of listening for what they can learn about the students’ thinking (Davis, 1997).

Research indicates that (a) telling students that answers are right or wrong has a negative effect on achievement, (b) providing students with correct answers has a moderate effect, and (c) explaining what is correct and what is not correct has a greater effect (Marzano et al., 2001).

According to the *Classroom Assessment Scoring System—Secondary Manual*, when properly implemented, instructional feedback “expands and extends learning and understanding and encourages student participation” (Pianta et al., 2007, p. 49). Feedback needs to provide information specifically relating to the task or process of learning that fills a gap between what is understood and what is aimed to be understood (Sadler, 1989). Feedback itself can “take on the form of new instruction, rather than informing the students solely about correctness” (Kulhavy, 1977, p.212). Through feedback, teachers provide students with opportunities to obtain a deeper understanding of material and concepts through back-and-forth exchanges called “feedback loops” and by providing additional information, opportunities to explain their thinking and rationale for response and actions, opportunities to perform at higher levels than they would be able to perform independently through scaffolding, and increases in student involvement and persistence through encouragement and affirmation (Pianta et al., 2007, p. 49).

IMPLEMENTATION CONSIDERATIONS

There are many ways in which teachers can deliver feedback to students and for students to receive feedback from teachers, peers, and other sources. For students, it means gaining information about how and what they understand and misunderstand, finding directions and strategies that they must take to improve, and seeking assistance to understand the goals of the learning (Bangert-Drowns, Kulik & Kulik, 1991).

1. Provide teachers with ongoing professional development opportunities.

The professional development should focus on helping teachers respond effectively during whole-class discussions and when providing feedback to individual students and small groups.

QUICK LINKS: Online Sources for More Information

IES Practice Guide on Organizing Instruction and Study to Improve Student Learning (Publication)

<http://ies.ed.gov/ncee/wwc/pdf/practiceguides/20072004.pdf>

Northwest Regional Educational Laboratory: Focus on Effectiveness (Webpage)

<http://www.netc.org/focus/strategies/>

Doing What Works: Using Higher-Order Questions to Encourage Explanations (Webpage)

http://dww.ed.gov/How-to-Organize-Your-Teaching/Higher-Order-Questions/see/?T_ID=19&P_ID=43

Doing What Works: Essential Questions (Webpage)

http://dww.ed.gov/launcher.cfm?media/CL/OIS/HQ/See/584_hq_mats_essential_questions.pdf

(Continued)

QUICK LINKS:

Doing What Works: Student Work: Explanation of Math Answer (Webpage)

http://dww.ed.gov/launcher.cfm?media/CL/OIS/HQ/See/585_hq_mats_student_explanation-1.pdf

Doing What Works, Socratic Seminar Planning Form (Webpage)

http://dww.ed.gov/launcher.cfm?media/CL/OIS/HQ/See/583_hq_mats_seminars.pdf

2. Identify the workshops so that teachers can learn the value of feedback.

Identify workshops and other professional learning opportunities for teachers to learn the value of feedback. Focus professional development on building opportunities for student explanations in the classroom.

3. Support teacher collaboration with peer observations.

Support teacher collaboration by giving them tools designed to help them reflect on a peer's practice. Observations should focus on the use of questioning and feedback in classroom discussions and giving each other feedback on the questions they ask and the kinds of student responses generated.

4. Discuss classroom examples.

Provide examples for teachers to discuss how teachers help students to make their thinking visible and get feedback on their explanations. Discuss the strengths and weaknesses of instructional approaches used to encourage explanations.

5. Provide opportunities for teachers to incorporate instructional strategies that facilitate high-quality feedback into curriculum documents and lesson plans.

Follow these recommendations from The Teaching Center (2009):

- **Include notes of when they will pause to ask and answer questions.**

Asking questions throughout the class will not only make the class more interactive but also help teachers measure and improve student learning.

- **Ask a mix of different types of questions.**

Use “closed” questions, or questions that have a limited number of correct answers, to test students’ comprehension and retention of important information. Also ask *managerial questions* to ensure, for example, that your students understand an assignment or have access to necessary materials. “Open” questions, which prompt multiple and sometimes conflicting answers, are often the most effective in encouraging discussion and active learning in the classroom.

- **Wait for students to think and formulate responses.**

Waiting 5–10 seconds will increase the number of students who volunteer to answer and will lead to longer, more complex answers. Teachers should refrain from answering their own questions, which will only communicate to students that if they do not answer, teachers will do their thinking for them. If the students are unable to answer after sufficient time for thinking has passed, rephrase the question.

- **Do not interrupt students’ answers.**

Often, teachers find themselves wanting to interrupt because they think they know what students are going to say or because teachers are passionate about the material. Teachers should resist this temptation. Hearing the students’ full responses will allow teachers to give them credit for their ideas and to determine when they have not yet understood the material.

- **Show interest in students' answers, whether right or wrong.**

Teachers should encourage students when they are offering answers by nodding, looking at them, and using facial expressions that show they are listening and engaged.

- **Develop responses that keep students thinking.**

For example, ask the rest of the class to respond to an idea that one student has just presented, or ask the student who answered to explain the thinking that led to his or her answer.

- **If a student gives an incorrect or weak answer, point out what is incorrect or weak about the answer, but ask the student a follow-up question that will lead that student, and the class, to the correct or stronger answer.**

For example, note that the student's answer overlooks the most important conclusion of the topic being discussed. Teachers should then ask that same student to try to recall what that conclusion is. If he or she does not recall the conclusion, open this question up to the class.

- **Follow a "yes-or- no" question with an additional question.**

For example, follow up by asking students to explain why they answered the way they did, to provide evidence or an example, or to respond to a yes-or-no answer given by another student. It's insufficient and shortsighted to rely on quick, right answers as indications of students' knowledge of subject matter. Probe children's thinking when they respond. Ask: Why do you think that? Why does that make sense? Convince us. Prove it. Does anyone have a different way to think about the problem? Does anyone have another explanation?

Good Feedback

- Clear and unambiguous
- Specific
- Supportive, formative, and developmental
- Timely
- Understood

High-Quality Instruction That Promotes Learning

In February 2010, The Bill & Melinda Gates Foundation issued a report titled *Small High School at Work: A Case Study of Six Gates-Funded Schools in New York City*, which was a case study of six public high schools. Guided by the research literature on effective school (and instructional) practices, the report documents evidence and examples of high-quality instruction that promotes student learning and engages students in a deep understanding of material such as metacognitive skill-building, frequent assessment and feedback, and quality questioning techniques. Danielson's (2007) framework for teaching identifies the quality of teacher questions as one component of rigorous instruction. Students must be encouraged to both ask and answer challenging questions. These questions should require students to justify their arguments and responses, pressing for clarification and explanations when needed (Fancsali et al., 2010).

QUALITY QUESTIONING TECHNIQUES AND FEEDBACK LOOPS

An 11th-grade social studies class at School 6 was studying the progressive era. Following an introduction to relevant vocabulary, students analyzed a political cartoon in which the "lion tamer" represented President Theodore Roosevelt. The teacher posed several questions about the cartoon to the whole class. In the example that follows, the teacher frequently probed students and asked students to elaborate on their answers by providing specific examples. The responses elicited debate the conclusion that the president would be able to control the trusts.

"What might President Roosevelt's personality be like based on what you see in the cartoon?"

"Does the cartoonist seem to believe that President Roosevelt will be able to control the trusts?"

"Why do you think this?"

MODELING COMPLEX THINKING AND PROCESSING

Teachers model complex thinking by demonstrating the process and steps they use to analyze and synthesize information and to solve problems.

A 10th-grade English teacher at School 3 verbalized her thought process on a reading-response assignment she had given: Ask a question of your text and explain your thought process. The question the teacher asked about *Catcher in the Rye* was, "Will Holden ever be happy?" She explained, "I am wondering this because he seems totally depressed and has no goals or hope." Later in the period, the teacher modeled inference making. As she read aloud from the text, she stopped to point out when she was making an inference: "I'm going to model what inference is because we are working on finding quotes to support our statements. I'm going to infer that Holden is sweaty because he is nervous.... I'm going to infer that Holden is good at heart; he gives the benefit of the doubt. You can point to these lines [in the book] as evidence."

ENCOURAGING METACOGNITION

Metacognitive skills include noticing when one doesn't understand something and taking steps to remedy the situation, and formulating questions.

In a 11th-12th-grade mathematics class at School 3, the teacher encouraged students to make internal thought processes overt:

"How did you solve this equation?"

"Does anyone else have another way to solve the equation?"

Adapted from pages 50-57 of *Small High Schools at Work: A Case Study of Six Gates-Funded Schools in New York City* by Cheri Fancsali, Reva Jaffe-Walter, Vernay Mitchell-McKnight, Nancy Nevarez, Eliana Orellana, and Lea Williams Rose, available online at <http://www.aed.org/Publications/loader.cfm?url=/commonspot/security/getfile.cfm&pageid=35987>. This report was published in 2010 by The Academy for Educational Development.

Recommendation 5: Student Voice, Choice, Autonomy, and Leadership

Develop and implement specific strategies for incorporating appropriate student voice, choice, and opportunities for autonomy and leadership in the classroom.

LINK TO RESEARCH

Empirical research has demonstrated that supporting student choice, autonomy, and leadership in the classroom can train students to regulate their own learning and deepen their cognitive process to improve academic achievement. Efforts to foster supportive autonomy consist of establishing a link between a student's classroom behavior and the resources that motivate them to succeed, such as personal interests, goals, and values (Reeve, 2010). This approach inherently involves students in their own learning process by creating a direct link between their personal motivations and classroom activities.

Autonomy-supportive instructional strategies have been shown to improve student engagement, conceptual understanding, academic achievement, and persistence in the classroom (Young, 2005). The goal of these strategies is to encourage students to engage in self-regulated learning, which involves students interpreting learning tasks, determining goals, and implementing strategies to meet goals (Young, 2005). Creating an autonomy-supportive classroom environment requires teachers to incorporate students' preference, choices, curiosity, and challenges into lessons (Reeve et al., 2004). Additional approaches include allocating time in a way that allows students to work in their own way, scaffolding student learning, engaging in feedback loops with students, and offering praise and encouragement to students (Young, 2005).

Enhancing student autonomy through autonomy-supportive strategies and lesson content that has relevance to adolescent lives allows students to align their inner motivational resources, classroom behavior, and academic achievement (Assor, Kaplan & Roth, 2002; Stefanou et al., 2004; Young, 2005). This strategy encourages students to understand schoolwork in the context of their own interests and goals, which has the potential to help students to develop self-regulation skills and learning strategies to facilitate their academic and professional success.

IMPLEMENTATION CONSIDERATIONS

Adolescence represents a critical period during which youth struggle to take on new responsibilities and learn decision-making skills during the time they concurrently establish a sense of self and identity. This period also marks a stage where adolescents are learning to regulate their behavior and cognitive abilities, which can be facilitated by incorporating autonomy-supportive strategies in the classroom (Zimmer-Gembeck & Collins, 2003).

The key to developing and implementing an autonomy-supportive classroom is to become familiar with the strategies that both encourage and inhibit student voice, choice, autonomy, and leadership. Table 17 provides an overview of the features and aspects that characterize an autonomy-supportive motivating instructional style rather than a controlling motivating style.

QUICK LINKS: Online Sources for More Information

Collaborative for Academic,
Social and Emotional
Learning (Website)

<http://casel.org/>

Self Determination Theory
(Website)

<http://www.sustainengagement.com/>

Classroom Observation:
Student Autonomy (Online
Video)

http://www1.teachertube.com/viewVideo.php?title=Classroom_Observation__Student_Autonomy&video_id=185325

Table 17. Defining Features of Two Types of Motivating Styles: Autonomy Supportive and Controlling

Autonomy-Supportive Motivating Style	Controlling Motivating Style
<p>Definition:</p> <p><i>A teaching style that involves understanding and valuing the student’s perspective during instruction</i></p>	<p>Definition:</p> <p><i>A teaching style that involves a teacher-centered approach to developing a class agenda and encouraging student compliance with the agenda</i></p>
<p>Key Features:</p> <ul style="list-style-type: none"> ■ Encourages a student’s personal motivational resources ■ Incorporates noncontrolling instructional language ■ Promotes worth ■ Acknowledges and accepts negative expressions and attitude 	<p>Key Features:</p> <ul style="list-style-type: none"> ■ Dependent on external motivational sources ■ Utilizes language that is more controlling and pressuring ■ Assertive
<p><small>Adapted from <i>Anatomy Support</i> by Johnmarshall Reeve (n.d.), available online at http://www.education.com/reference/article/autonomy-support/</small></p>	

Specifically, teachers can take the following actions to promote student autonomy in the classroom:

1. Foster relevance.

Teachers should make an overt effort to incorporate their students’ interests, values, and goals into the learning process by learning about student concerns through informal and classroom dialogue (Learning Point Associates, 2005). Examples include communicating with the students regarding their feedback about classroom tasks and trying to help students understand how a task contributes to their personal objectives (Assor et al., 2002). Research has indicated that students are more likely to be cognitively engaged and use higher-order thinking skills when they find the subject matter interesting (Young, 2005).

2. Make learning authentic.

Instructional practice should build upon students’ foundational knowledge (i.e., background, ideas, skills, and attitudes), challenge students, and also connect content to value beyond the classroom (Donovan & Bransford, 2005; Newmann, Marks, & Gamoran, 1995). Teachers should give assignments that have public or personal value to students (such as oral history projects, or writing editorials for the local newspaper) and also are academically rigorous (Newmann et al., 1995).

3. Provide choice.

Teacher behavior should enable students to choose classroom activities and tasks that are consistent with their interests and goals. Providing students with the opportunity to understand how schoolwork can contribute to their personal goals increases their ability to work more autonomously (Assor et al., 2002). In addition, asking students for input on classroom activities allows teachers to become more aware of students' psychological needs and to incorporate those needs into the lesson (Reeve, 2010).

4. Promote independent thinking and permit student criticism.

Encouraging students to engage in independent thinking and criticizing lessons that they do not find interesting can provide teachers with opportunities to foster more in-depth conversations about classroom activities. These discussions may allow the teacher to make adjustments to lessons to increase student interest or engage in a dialogue with students about the importance of the task to make them value the assignment (Young, 2005). The overall goal of this strategy would be to increase the opportunities for student voice in the classroom and promote mutual communication between teachers and students regarding lesson content.

5. Be aware of how teacher behaviors can *inhibit* student voice, choice, leadership, and autonomy. Work to eliminate the following behaviors:

- **Micromanaging student work and behavior.** Teachers should avoid unnecessary intrusions related to how students approach their work. Such intrusions inhibit student expression. Students should have the opportunity to discover their natural working patterns in the context of classroom activities (Young, 2005).
- **Assigning tasks that lack relevance and interest to adolescents.** Students are less likely to be responsive to tasks that they do not find interesting or important. Thus, teachers should make an effort to communicate the importance of tasks that they assign and incorporate elements that are relevant to adolescent lives (Reeve, 2009; Young, 2005).
- **Forbidding student criticism and stifling independent thinking.** Teacher behavior that undermines student voice has the potential to inhibit students' ability to conduct self-regulated learning and self-expression. Inhibiting students' ability to express their opinions can be frustrating and interferes with their ability to make connections between classroom activities and their personal interests and goals.

Autonomy-Inducing and Autonomy-Suppressing Teacher Behaviors

Young (2005) describes the following teacher behaviors, which can either induce or suppress student autonomy.

Autonomy-Inducing Teacher Behaviors:

- Listening
- Integrating independent work sessions
- Facilitating peer-to-peer conversations
- Praising and encouraging evidence of improvement or mastery
- Scaffolding
- Creating a responsive environment that supports student questions and comments
- Incorporating student perspective and experiences

Autonomy-Suppressing Teacher Behaviors:

- Dominating learning materials
- Solving problems or answering questions before students have had a chance to work on them independently
- Directive rather than reciprocal feedback
- Interrupting student comments

Student-Generated Classroom Rules

One strategy for promoting student voice, choice, autonomy, and leadership in the classroom is to enable students to generate the rules of the classroom. Following are examples of two school districts that use student-generated classroom rules.

LINN BENTON LINCOLN EDUCATION SERVICE DISTRICT, EUGENE, OREGON

In 2007, the National Center for School Engagement held a contest titled “21 Ways to Engage Students in School,” which included a sampling of best practices designed to foster student leadership in schools, community-based groups, and public agencies. Linn Benton Lincoln Education Service District in Eugene, Oregon, had a winning strategy for creating student-generated classroom rules:

In Eugene, Oregon, students create a list of classroom rules to be followed. Each student signs off on the rules and is held accountable by fellow students. In addition, they developed their own “honor role,” in which students are recognized for doing their best, following directions, and not talking out more than 3 times a day. (National Center for School Engagement, 2007, p. 4)

MT. PLEASANT PUBLIC SCHOOLS, MT. PLEASANT, MICHIGAN

A teacher at Mt. Pleasant High School (see Ling, n.d.) developed a unit on creating student-generated classroom rules. The unit involves multiple examples of real-world relevance, including problem solving, democratic self-government, common good, collective rights, and public discourse.

Classroom Activities:

- Identifying students’ rights that have been recognized by the U.S. Supreme Court.
- Articulating the concept of jurisdiction in the context of classroom rules in a public school setting.
- Writing and prioritizing the most critical student rights and student behaviors that may threaten those rights.
- Developing strategies for protecting these student rights.
- Voting on a single set of rules that are appropriate for a variety of classroom settings.
- Monitoring the implementation of the rules with regard to protecting student rights and making adjustment based on majority decisions.

Proposed Unit Assessments:

- **Classroom discussion:** The ability of students to articulate key concepts orally.
- **Group work:** Determining how well students are working in groups to develop a list of rights, identify problem behaviors and create classroom conduct rules.
- **Essay:** Topics could include the relationship between rights and rules in a society, identify the most (or least) important rules that protect individual rights, propose changes to the process for developing class rules.

Teaching Tips:

Teachers should expect to play a role in developing rules with students and may need to generate additional “Teacher rules” to maintain a supportive and productive working environment. However, note that any teacher-generated rules should be kept at a minimum to maintain student ownership over the lesson content.

Additional details about the specific lessons at Mt. Pleasant Public Schools are available through the *Learning to Give* website at <http://learningtogive.org/lessons/unit18/>.

Seacrest High School

Seacrest High teachers and administrators decided that a critical step in understanding why students were not successful was to ask the failing students themselves. Students who had received failing grades in three or more subjects were invited to participate in a focus group, led by a senior teacher of the school. The students were encouraged to speak openly and honestly about how teachers could make schools a better place to learn. In addition to working with students, the students' teachers were asked to complete a survey about why they believed the students were failing. Following the initial focus group, Seacrest High continued to supply opportunities for students to have a voice by holding eight more focus groups during the year of the project.

OUTCOMES

The major outcome of the Seacrest High School project was the clarity it provided for teachers with regard to what was affecting student success. Students taking part in the focus groups spoke about different learning styles, the need for additional counseling and tutoring, and having a sense of mutual respect between teachers and students. Teachers talked about the students' lack of motivation (30 percent) and attendance (16.5 percent).

Students of all backgrounds and academic abilities were able to point to aspects of school structure and teaching that they believed contributed to their, or their classmates', failure, while teachers indicated that the students were to blame for their own failure. Looking at the problem from different perspectives shifted the focus from teachers and students blaming each other to teachers and students working together to improve teaching and learning. At the conclusion of the project, students reported an increased sense of engagement with their school and teachers were provided with specific issues to target in the upcoming year.

From "Student Voice: A Historical Perspective and New Directions." Available online at http://ed-web3.educ.msu.edu/outreach/k12out/pdf/2010/Student_Voice_report.pdf

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Suggestions for Further Reading

SYSTEMIC ACADEMIC INTERVENTIONS

National Center on Response to Intervention: *Rti in Middle Schools* <http://www.rti4success.org/webinar/rti-middle-schools-5839>

Center on Instruction: *Implementing Response to Intervention: Practices and Perspectives from Five Schools; Frequently Asked Questions* <http://www.centeroninstruction.org/implementing-response-to-intervention-practices-and-perspectives-from-five-schools--frequently-asked-questions>

National Center on Student Progress Monitoring; <http://studentprogress.org/>

INSTRUCTIONAL RIGOR

Herman, R., Dawson, P, Dee, T., Greene, J., Maynard, R., Redding, S., & Darwin, M. (2008). *Turning around chronically low-performing schools: A practice guide* (NCEE #2008-4020). Washington, DC: U.S. Department of Education. Retrieved August 6, 2011, from http://ies.ed.gov/ncee/wwc/pdf/practiceguides/Turnaround_pg_04181.pdf

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Appendix A. Document List for Community School District 16 Curriculum Audit

Document Description

Assessment names and schedule of administration

Follow-up information on graduates

School literacy plan

School numeracy plan (if audited for mathematics)

School discipline/behavior plan

RTI plan (if school has RTI)

Graduation requirements

Pathways (college, career)

List of educational encouragement/advisement programs (e.g., Academic Plus, ASPIRA, College Access, AVID, LASER)

Course offerings and descriptions

Master and bell schedules

ELA curriculum

Math curriculum (if audited in math)

Samples of end-of-course exams for ELA and/or math courses

List of interventions for struggling students

List of feeder middle schools/high schools

Ninth-grade transition programs

Ninth-grade course settings (e.g., academies, blocks)

List of extracurricular activities

Student participation lists in extracurricular activities

List of parent/community engagement activities

Professional development plan

Professional development participation lists

Professional development agendas

Schedule of teacher planning time/collaboration time

List of teacher coaching/mentoring support opportunities

Appendix B. References From Literature Review

A literature review was undertaken at the initial stage of the audit to inform the development of data collection protocols and instruments. The review centered on factors identified by education researchers as supporting or thwarting high school completion. The following paragraphs report on key findings from the literature review. Researchers have consistently identified two factors as predictors of successful high school completion:

- Academic success in Grade 9 is highly predictive of eventual graduation—more so than demographic characteristics or prior academic achievement.
- A lack of student engagement is predictive of dropping out even after controlling for academic achievement and student background.

Research studies by Allensworth and Easton (2005, 2007) concluded that students' performance in Grade 9 classes—particularly whether they did or did not pass courses and accumulate enough credits to move onto Grade 10—were highly predictive of their graduating from high school. In the 2007 article, Allensworth and Easton concluded, “Students' freshman-year course performance is much more important for graduation than their background characteristics and prior achievement.” The article also states that although students' likelihood of graduating from high school is affected by prior educational experiences, as well as economic and demographic factors, these factors together explain only 12 percent of the variation in graduation rates in the cohort of students entering the Chicago Public Schools high schools in 2000–01.

Interrelated with school performance is the level of a student's engagement with school. Whether it begins before, after, or occurs simultaneously with poor performance, students who are alienated and disengaged from school are much more likely to drop out (Alexander, Entwisle, & Horsey, 1997; Rumberger, 2001). Researchers have found that disengagement manifests itself in both behavior and attitudes; researchers have identified several categories of engagement: academic, behavioral, psychological, and social.

Our literature review resulted in the following list of citations used to focus the audit questions.

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