

New York State Education Department Audit of the Written, Taught, and Tested Curriculum

Community School District 7 Final Report

July 2007

**Submitted to
District 7**

**Submitted by
Learning Point Associates**



1120 East Diehl Road, Suite 200
Naperville, IL 60563-1486
800-356-2735 • 630-649-6500
www.learningpt.org

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Introduction

This final report is the result of an audit of the written, taught, and tested curriculum of Community School District 7 by Learning Point Associates. In 2006, 10 school districts and the New York State Education Department (NYSED) commissioned this audit to fulfill an accountability requirement of the No Child Left Behind (NCLB) Act for local education agencies (LEAs) identified as districts in need of corrective action. These LEAs agreed, with the consent of NYSED, to collaborate on the implementation of this audit, which was intended to identify areas of concern and make recommendations to assist districts in their improvement efforts.

The focus of the audit was on the English Language Arts (ELA) and mathematics curricula for all students, including Students with Disabilities (SWDs) and English Language Learners (ELLs). The audit examined the alignment of curriculum, instruction, and assessment as well as other key areas—such as professional development and school and district supports—through multiple lenses of data collection and analysis. These findings acted as a starting point to facilitate conversations in the district in order to identify areas for improvement, probable causes, and ways to generate plans for improvement.

This report contains an outline of the process, data, and methods used as well as the key findings from the data collection. Finally, the Recommendations for Action Planning section provides suggestions as well as more specific advice to consider in the action planning process. Districts are required to incorporate recommendations from the audit in their District Comprehensive Education Plan.

District Background

Overview

Geographic Background

Community School District 7¹ serves the areas of Mott Haven, Port Morris, and Melrose generally known as the South Bronx of New York. The Bronx is one of the five boroughs of New York City. District 7 is in Region 9.

Student Population

Data from 2005 indicate that District 7 served a total 20,136 of students, with 572 prekindergarten students, 18,089 K–12 students, and 1475 ungraded students. Of those students enrolled less than 1 percent was white, 29 percent were black, 69 percent were Hispanic, and a little over 1 percent were Asian or another ethnicity.

Demographics

The 2004–05 Annual District Report for District 7 is based on 35 schools: 16 elementary schools, one elementary through middle school, one elementary through high school, eight middle schools, and nine high schools. Data from the 2002–03, 2003–04, and 2004–05 school years indicate that the vast majority of students are eligible for free or reduced-price lunch (90 percent, 91 percent, and 92 percent, respectively). District data also indicate a consistent percentage of limited-English-proficient students (16 percent, 17 percent, and 17 percent, respectively). The percentage of SWDs enrolled these years was 18 percent, 17 percent, and 16 percent, respectively.²

According to the 2004–05 Annual District Report for District 7, in 2002–03, the district’s average spending per student (direct services only) was \$11,838, while in 2003–04, this amount per student rose to \$12,629.

Student Academic Performance

As of 2005–06, District 7 has been designated as a district “In Need of Improvement—Year 3.” The state accountability status in elementary, middle, and secondary-level ELA has been designated as “Requiring Academic Progress—Year 4.” In 2004–05, there were no student accountability groups that made adequate yearly progress (AYP) in elementary-level and middle-

¹ This is “[o]ne of the subdivisions of the New York Public school system. There are 32 community school districts, which are defined by their geographic boundaries. Each community school district resides within one of the ten different regions, which have taken over many of the functions that these districts used to perform.” This information was retrieved on April 19, 2007, from the glossary contained in *Parent Guides to the Annual School Reports* at <http://schools.nyc.gov/daa/SchoolReports/>.

² The data in this section are from the *New York City Public Schools 2004–2005 Annual District Report, District 7*, retrieved April 11, 2007, from <http://schools.nyc.gov/daa/SchoolReports/>.

level ELA. The only group that did not make AYP in secondary-level English language arts was SWDs. All other groups made AYP.

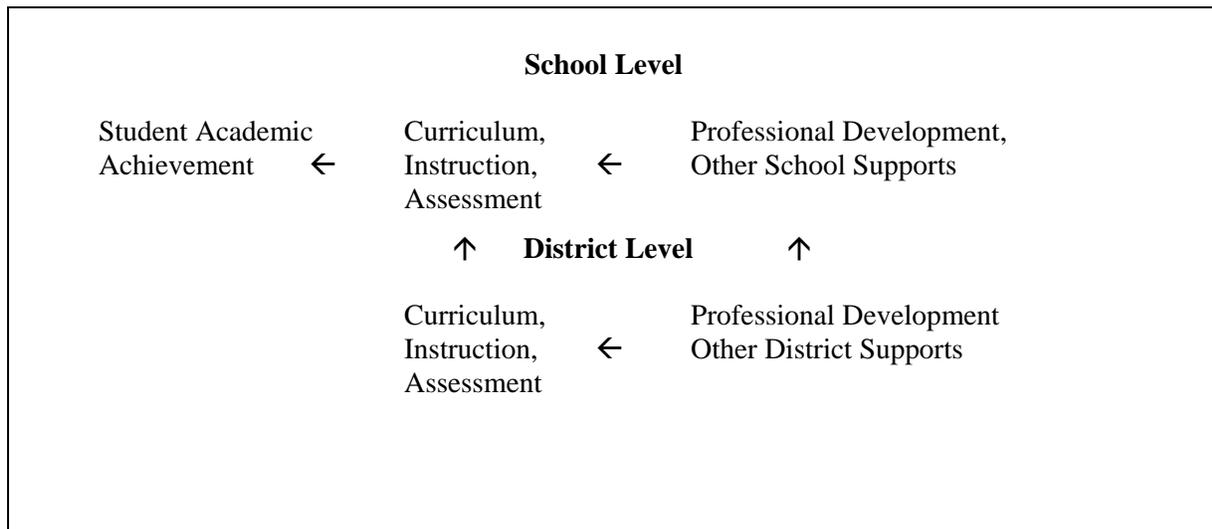
The state accountability status for District 7 in all levels of mathematics has been designated as “Requiring Academic Progress—Year 4.” In 2004–05, the only student accountability group that did not make AYP in both elementary-level and secondary-level mathematics was SWDs. The following groups did not make AYP in middle-level mathematics: SWDs, black, ELLs, and low income. The Hispanic student accountability group was the only group (for which there are data) that made AYP in middle-level mathematics.

Theory of Action

The theory of action starts from student academic achievement in relation to the New York State Learning Standards of the audited districts and their schools. Specifically, student academic achievement outcomes are related directly to curriculum, instruction, and assessment activities within the classroom. Curriculum, instruction, and assessment at the school level are supported and influenced by professional development and other supports at the school level and by curriculum, instruction, and assessment at the district level. Finally, school-level professional development and other supports are supported and influenced by their district-level counterparts.

The theory of action reviewed in the co-interpretationSM meeting indicates that change (i.e., actions needed to improve student achievement) occurs at both the school and the district levels. Therefore, the audit gathered information at both levels. A graphic representation of the theory of action dynamic is shown in Figure 1.

Figure 1. Theory of Action



Guiding Questions for the Audit

To address both the needs of individual districts and the requirements of the audit, Learning Point Associates identified the following 16 essential questions for the focus of the audit:

1. Where is the district struggling most in terms of content areas and demographic groups over time?
2. Are teachers teaching the written curriculum in their classrooms?
3. Does the district provide materials that support the implementation of the written curriculum, and are the materials used?
4. Are the teachers teaching to the state standards?
5. Is the taught curriculum aligned with the state assessments?
6. Is the written curriculum aligned with the state standards?
7. Do all students have access to a rigorous and challenging curriculum?
8. What does the district/school do for students who are not scoring at proficient levels according to NCLB (within and outside the school day)?
9. Does classroom instruction maximize the use of best practices and research-based practices?
10. Do teachers identify and provide appropriate additional instruction for students who are not proficient?
11. Do teachers use assessment data to inform instruction (monitoring, diagnosis, reteaching)? Are data accessible?
12. Is there a process in place within the district to monitor the effectiveness of instructional programs?
13. Is the professional development (regional, district, school) of high quality and focused on the content/pedagogical areas of need?
14. Are teachers translating professional development into effective classroom practice?
15. Are there sufficient supports in place for new teachers?
16. Do district and school plans prioritize the needs identified by NCLB?

Audit Process Overview

The audit process follows four phases, as outlined in the Learning Point Associates proposal application: planning, data collection and analysis, co-interpretation of findings, and action planning. This report comes at or near the end of the co-interpretation phase. A description of each phase follows.

Phase 1: Planning

The purpose of planning was to develop a shared understanding of the theory of action and guiding questions for the audit. This phase also included reviewing the project plan, timeline, and expectations, and planning and delivering communications about the audit to the district's key stakeholders.

Phase 2: Data Collection and Analysis

To conduct this audit, Learning Point Associates examined district issues from multiple angles, gathering a wide range of data and using the guiding questions to focus on factors that affect curriculum, instruction, assessment, and other school supports. All of these data sources work together to bring focus and clarity to the main factors contributing to the districts' corrective-action status. Broadly categorized, information sources include student achievement data, the *Surveys of Enacted Curriculum*, observations of instruction, interviews, review of key district documents, and curriculum alignment. Parent and community focus groups also were included in the Special Education and ELL audits.

Student Achievement Data

Current student achievement data was not available to Learning Point Associates at the time of co-interpretation. As such, we compiled NCLB accountability data for the most recent three years available to provide the district with an overview of student achievement trends.

Surveys of Enacted Curriculum

To examine whether instruction was aligned to the New York state standards and assessments, teachers in the district completed the *Surveys of Enacted Curriculum* (SEC). Based on two decades of research funded by the National Science Foundation, the SEC are designed to facilitate the comparison of enacted (taught) curriculum to standards (intended) and assessed curriculum (state tests), using teachers' self-assessments. The data for each teacher consist of more than 500 responses. The disciplinary topic by cognitive-level matrix is presented in graphic form, which creates a common language for comparison and a common metric to maintain comparison objectivity.

Observations of Instruction

To examine instruction in the classrooms, the School Observation Measure (SOM) was used to capture classroom observation data for the district audit. The SOM was developed by the Center

for Research in Educational Policy at the University of Memphis. It groups 24 classroom strategies into six categories: instructional orientation, classroom organization, instructional strategies, student activities, technology use, and assessment.

The observations were collected from a representative sample of schools in the district in order to get a “snapshot” of the instructional practices being used. These observations were not individually prescheduled but instead involved observing multiple classes, primarily in the identified subject areas (ELA, mathematics, or both), during a three-hour block of time for each subject. The observations were conducted on three different days for each school during the 2006–07 school year. While in schools, observers visited eight to 12 classrooms within this block of time, spending 15 minutes observing each classroom. This approach resulted in conducting approximately 300 classroom observations across the district.

Interviews

To garner additional data concerning the alignment of the written, taught, and tested curriculum, Learning Point Associates engaged school and district personnel in semistructured interviews. These interviews were based on predeveloped protocols that were designed to be approximately 60 minutes in length. The protocols were developed to specifically address the guiding questions and to be comparable across the different types of interviews. As a result, the protocols covered the same topics; when appropriate, the same questions were asked on teacher, principal, content coach, and district personnel protocols.

The teacher interviews were tightly structured, primarily to elicit short responses that could be readily compared within schools and between schools. Principal and coach interviews had more questions designed to elicit longer, more elaborate responses. District personnel interviews were even more open-ended. When agreed to by the interviewee, interviews were taped and transcribed. Interview records, both notes and transcriptions, were imported into NVivo software, which supports the coding and analysis of interview data.

District Document Review

A district’s formal documents (e.g., district improvement plan, professional development plan) demonstrate its official goals and priorities. To identify the priorities and strategies to which the district has committed, a structured analysis of key district documents was completed.

A document review scoring rubric was developed and used to synthesize document information against a subset of the audit’s guiding questions. The rubric was designed to measure whether each submitted group of documents contained sufficient evidence of district plans and/or policies, implementation of those plans/policies, and evaluation of the implementation in support of each identified question. The degree to which each respective document addressed the relevant question was evaluated by four Learning Point Associates analysts to ensure multiple perspectives during the process. The district was given a 0–3 rating on each question, based on the depth of coverage within the documents provided. After ratings were completed, a consensus meeting was held and a report was generated by all reviewers.

Curriculum Alignment

A district's written curriculum demonstrates its program of ELA and/or mathematics studies for students. The curriculum alignment process was used to examine both the vertical and horizontal alignment of the written curriculum to the New York state standards. *Vertical alignment* examines the match of curriculum and standards between grade levels. *Horizontal alignment* is defined as the breadth and depth of the curriculum. In addition, it is important to examine the depth of understanding for the topics addressed in each subject. Cognitive demand categories provide a structure to measure the depth of understanding for each topic.

The ELA curriculum alignment process was developed using the literacy competencies from the New York state standards. All written curriculum materials submitted at Grades 2, 4, 6, 8, and 10 were scored by looking for a match to the content topic and cognitive demand level.

The mathematics curriculum alignment process was developed using the mathematics performance indicators that the New York state standards expect students to master (e.g., the content topics and cognitive demands). All written curriculum materials submitted by the district were examined at Grades 2, 4, 6, 8 and the high school level for their alignment against both process and content strands.

Special Education Review

The purpose of the special education review was to provide information to districts regarding the curriculum, instruction, assessment and improvement planning practices related to their special education program. Data collection activities that informed the special education review included: district/regional staff interviews; teacher interviews—including self-contained, Collaborative Team Teaching (CTT), Special Education Teacher Support Services (SETSS), and general education teachers who serve SWDs; school administrator interviews—including principals, assistant principals, and/or individualized education program (IEP) teachers; classroom observations utilizing the Total School Environment Protocol; focus groups with parents of SWDs; a review of approximately 50 redacted IEPs; and a review of formal district documents to provide insight into the policies, plans and procedures the district has developed to ensure services to SWDs, as identified under the 16 guiding questions developed for the audit.

The sample of schools for this portion of the audit was drawn by Learning Point Associates using a stratified random sampling procedure. This sample was drawn to include district schools with low, moderate and high levels of student achievement, and to assure the inclusion of at least one intermediate and one high school.

English Language Learner Review

The purpose of the ELL review was to provide a districtwide synthesis of data from multiple perspectives on the district's curriculum, instruction, assessment and student supports as they impact ELLs. Data collection activities that informed the ELL review included: district/regional staff interviews; teacher interviews—including ELL teachers (English as a Second Language, Transitional Bilingual Education, and/or dual language) and monolingual general education

teachers who serve ELLs; classroom observations; focus groups with parents of ELLs and members of community-based organizations serving ELLs; and a review of formal district documents to provide insight into the policies, plans and procedures the district has developed to ensure services to ELLs, as identified under the 16 guiding questions developed for the audit.

The sample of schools for this portion of the audit was drawn by Learning Point Associates using a stratified random selection procedure. This sample was drawn to include district schools with low, moderate, and high proportions of ELL enrollments as well as low, moderate, and high levels of student achievement, and to ensure the inclusion of at least one intermediate school and one high school.

Table 1 lists the key data sources and how they were used to review the district during the co-interpretation process.

Table 1. Alignment of Data Sources With Guiding Questions

Guiding Questions	Student Achievement Data	Surveys of Enacted Curriculum	Observations	Interviews	Document Review	Curriculum Alignment	Special Education Review	ELL Review
1. Where is the district struggling most in terms of content areas and demographic groups over time?	X							
2. Are teachers teaching the written curriculum in their classrooms?		X		X	X		X	X
3. Does the district provide materials that support the implementation of the written curriculum, and are they used?				X	X	X	X	X
4. Are the teachers teaching to the state standards?		X				X		
5. Is the taught curriculum aligned with the state assessments?		X						
6. Is the written curriculum aligned with the state standards?					X	X	X	X
7. Do all students have access to a rigorous and challenging curriculum?			X	X		X	X	X
8. What does the district or school do for students who are not scoring at proficient levels according to NCLB (within and outside the school day)?				X	X	X	X	X
9. Does classroom instruction maximize the use of best practices and research-based practices?		X	X	X	X		X	X

Guiding Questions	Student Achievement Data	Surveys of Enacted Curriculum	Observations	Interviews	Document Review	Curriculum Alignment	Special Education Review	ELL Review
10. Do teachers identify and provide appropriate additional instruction for students who are not proficient?			X	X			X	X
11. Do teachers use assessment data to inform instruction (monitoring, diagnosis, reteaching)? Are data accessible?				X	X		X	X
12. Is there a process in place within the district to monitor the effectiveness of instructional programs?				X	X			
13. Is the professional development (regional, district, school) of high quality and focused on the content or pedagogical areas of need?		X		X	X		X	X
14. Are teachers translating professional development into effective classroom practice?		X		X				
15. Are there sufficient supports in place for new teachers?				X				
16. Do district and school plans prioritize the needs identified by NCLB?				X	X		X	X

Phase 3: Co-Interpretation of Findings

The purpose of co-interpretation is to interpret the data collected, which were grouped into four priority areas: standards and curriculum, instruction and assessment, planning and accountability, and professional development.

The co-interpretation process has several steps, starting with the interpretation of the data, followed by the identification of key findings, and concluding with the identification of hypotheses specific to each key finding. These steps occurred in a two-day meeting with key school and district staff. Because this process was critical in identifying the priority areas for district improvement, the detailed approach is outlined here.

Interpretation of the Data

The co-interpretation process began with the study of the individual data reports (i.e., student achievement, document review, curriculum alignment, interview data, SEC data, classroom observation, and special populations) to do the following:

- Select findings.
- Categorize or cluster and agree upon the critical findings.
- Group findings across reports according to guiding question or focus area.
- Present and defend key findings.
- Respond to clarifying questions.
- Refine and reach consensus on key findings.

Identification of Key Findings

As the investigative groups presented their findings to the whole group during the co-interpretation meeting for District 7, some natural combining and winnowing of results occurred. From various data sources, the participants used the method of triangulation to provide support for combining and subsuming some of the findings. The group then used a rating process to prioritize the findings. Participants were instructed to rate the findings based on the following criteria:

- Is the key finding identified one of the most critical problems faced by the district and addressed by the audit?
- If resolved, would student achievement improve sufficiently to move the district out of corrective action?
- If resolved, will there be a measurable, positive impact systemwide?

From this process, which required considerable thought and discussion, key findings emerged. These findings are discussed in the Key Findings section of this report.

Identification of Hypotheses

Identification of hypotheses occurred next. In this stage, participants performed the following steps:

- Identify a set of hypotheses supported by evidence for each high-priority finding.
- Reach consensus on a set of hypotheses for each high-priority finding.

Phase 4: Action Planning

The last step in the audit process is action planning. This year, given the reorganization of the New York City Department of Education (NYCDOE), Learning Point Associates will work with NYCDOE on a central-level action planning process during the months of July and August. District-level action planning will not take place until November or December and will integrate action planning steps generated by district schools during the months of September and October. School-level actions will be integrated into each school's Comprehensive Education Plan, and the district-level action plan will be integrated into the District Comprehensive Education Plan addendum. The action planning process entails initial goal and strategy setting by a core district team, followed by planning meetings with groups or departments in the district to determine action steps and associated financial implications and timelines for implementation.

Key Findings

As illustrated in the Phase 3 process description, each key finding statement was generated through the co-interpretation process. In a facilitated sequence of steps, participants (consisting of region/district administrators and staff, as well as school personnel) identified findings that were supported by data presented in multiple reports. Initial findings were identified in small-group sessions, and then presented to all co-interpretation participants. Participants individually prioritized findings, based on their opinions that the findings—if acted upon—would improve district outcomes related to instruction and learning. In a group process, participants also described their hypotheses about the causes and conditions contributing to the key findings.

The prioritized findings, or key findings, are presented below. For each finding, the presentation includes supporting data and hypotheses. The supporting data are summarized on a data map in the Appendix.

Key Finding 1

At the district level, there is a lack of a monitoring system that results in districtwide compilation, analysis, and evaluation of the effectiveness of curricula, their implementation and next steps for improvements.

This finding emerged from a discussion of findings presented across the major topical areas. Participants noted that the district had not collected data that allowed the district to assess which programs produced greater achievement gains for ELL students. Discussions indicated that this was the case across the district: for ELA programs, Special Education approaches, and so forth. Participants agreed to develop a key finding related to monitoring that would inform their evaluation of and decisions related to curricula in general. Evidence was offered from the Interview Report, the ELA Document Review, the ELL Report, and the Special Education Report. The reports indicated that there are a variety of supplemental programs, but that there is little accountability regarding these programs. There is no written documentation noting implementation, monitoring, and program effectiveness, and no clear expectations for data analysis. For both ELL and Special Education programs, interview respondents were not aware of any comparative data for students in general education classes or specialized classes.

Participants offered a number of hypotheses related to low monitoring. One contributing factor is that the standards and curricula are not explicit and clear, even at the district and regional level. In particular, the district policy regarding Special Education and ESL programs and interventions should be made more explicit. The curricula need to be established in order for programs to be fully implemented and then evaluated. Another factor is that there are many different initiatives and program across the district, and some of these programs do not remain long enough to be monitored. Curricula and practices are too varied across the district, making it difficult to build a data base that can be used for monitoring and evaluation. Participants also indicated that effective monitoring requires building school capacity.

Key Finding 2

Schools are not consistently held accountable for monitoring their professional development, and there is little evidence to support the relationship between professional development and instructional impact.

The finding, which emerged from discussions related to professional development, is supported by information from the Interview Report, Document Review, ELL Report, and ELA SEC Report. The co-interpretation discussions generated the finding that schools are not monitoring professional development. In the Interview Reports, findings indicated that the schools were not consistently providing professional development that is aligned to instructional objectives, that schools are not successful in getting all teachers to participate in professional development, and that the professional development impact on instruction is uneven and inconsistent. There were indications from interview respondents that teacher receptivity to professional development varies. The ELL Report indicated that professional development for teachers, which is not provided by the district, varies from principal to principal. There are indications that expectations regarding attendance at professional development sessions are not conveyed to teachers (from the Document Review and ELL Report). Although there are policies and plans for teacher training, evidence as to whether those policies are implemented and monitored is limited.

The hypotheses identified several issues concerning professional development. The first hypothesis is that the content of professional development sessions is not consistently based on school needs or school data; the content is of low interest to teachers and not linked to a long-term plan related to school improvement. A second hypothesis concerned the design of professional development in three ways: Participants suggested that some professional development models are not embedded in the school community, that sessions do not encourage a continuous cycle of examining practice at the school level, and that the connections between professional learning and instruction are not evident. A third hypothesis presented is that administrators lack pedagogical and content knowledge to support the development of teachers.

Key Finding 3

Attracting and retaining high-quality school-based personnel at all levels is a critical issue for the district. High turnover adversely affects school capacity and student achievement.

The school and district interviews, summarized in the Interview Report, conveyed that high turnover results in low instructional capacity throughout the district. The district schools are among the most challenging in the city, and, as a result, District 7 finds it particularly difficult to attract high-quality personnel and retain personnel once hired. Teacher hiring and retention is a major concern. Many teachers hired by the district move to other schools or districts within one or two years of their placement in District 7. (The Interview Report stated that of the 110 teachers interviewed, 38 had less than two years of experience). Time and resources by both the district and individual schools are directed toward supporting new teachers; however, because of high turnover, new teacher support does not necessarily improve instructional capacity in the long run. Throughout the Interview Report, comments conveyed that capacity to meet learning objectives is compromised because of high teacher turnover. Comments associated poor classroom management with teacher inexperience. Differentiation of instruction and working

with small groups is challenging for new teachers. It is possible that new teachers do not know how to use instructional materials effectively, particularly for lower level students.

Participants also were concerned with hiring and retaining experienced and high-quality coaches and administrators. A number of findings in the Interview Report referred to ineffective coaches and administrators. Relatively low pay scales for coaches were cited as an obstacle to hiring and retention. A number of coaches are stretched too thin, serving large numbers of teachers, sometimes in multiple schools. In some schools, the Interview Report noted, coaches are “right out of the classroom,” and have no experience with peer staff development. The district has recently experienced a wave of principal retirements. New principals, those coming out of the Leadership Academy, have little experience supervising, according to some interview respondents.

Several hypotheses contributing to retention of teachers, were presented by participants. One was that many new teachers who come up through alternative certification programs have no intention or commitment to stay with the school for more than the required two years. Participants said new teachers are placed in difficult conditions – that class sizes are large, and classrooms small. New teachers may perceive a lack of support within the school, particularly with respect to behavior issues, instructional materials, and professional development. Participants said that schools need to build more effective professional communities of teachers that are centered on deep discovery around teaching and learning.

Key Finding 4

There are unclear district-level guidelines and expectations for the ELA K–12 curriculum. There are many programs, but they are not clearly aligned to standards and leave gaps in content and cognitive expectations (i.e., speaking and listening, vocabulary and word knowledge, background knowledge, handwriting, and mechanics).

The primary source for this key finding is the Curriculum Alignment Report, although a number of other reports, including the Document Review and Interview Report support the finding. As this finding indicates, the ELA curriculum is not consistently or clearly aligned to the state standards. The Interview Report revealed that across the district, there is not a shared understanding of what constitutes a curriculum. Both district and school interview respondents indicated this confusion in one of two ways: (1) by pointing out that lack of agreement exists across the district, or (2) through the varied responses to interview questions within the same educational setting concerning the curriculum and curriculum alignment. Teachers who followed the Teachers College program indicated they follow an established curriculum, usually because they identify the Teachers College programs with the curriculum and are confident about its alignment to state standards. In secondary schools, interview respondents provided little evidence that an established curriculum guided ELA instruction. The Document Review report concluded that the district has established ELA curricula, but expectations regarding the implementation of the curricula are not clearly communicated to the schools. This finding was also evident in the Interview Report, with district respondents stating that the region/district does not require standardization of implementation, such as curriculum maps and scope and sequence calendars.

Interviews revealed that the Balanced Literacy approach has been an important resource for teachers, because it helps them structure their literacy classes. On the other hand, the Curriculum Alignment study identified areas associated with this approach where the ELA curriculum is not aligned to the state standards, or where there are evident gaps, including Grade 2 competencies associated with listening, speaking, reading, and writing; Grade 4 competencies associated with speaking and vocabulary; Grades 6 and 8 competencies associated with listening and speaking; and Grade 10 competencies associated with composition.

The co-interpretation participants acknowledged that citywide, districtwide, and schoolwide curricular needs to be developed, and that a deep study of the standards and alignment is needed. Different participants offered several hypotheses for the findings related to the ELA curriculum and alignment. One explanation (possibly related to the curriculum's lack of specificity) is that the region/district assumes that teachers know what to teach and can and will fill in the gaps in the curriculum. At the same time, at all levels, participants said there is low agreement as to what really constitutes best practices in literacy and a lack of clear expectations regarding what and how students learn in the area of ELA. Participants indicated there was lack of understanding related to defining learning objectives. As such, specific student outcomes across grades, schools, and the district need to be defined as do clear exit and entry expectations for each grade.

Key Finding 5

The middle school mathematics curriculum is not well-aligned with the state standards in the measurement, geometry, and number sense and operations strands at the eighth-grade level.

The city-issued mathematics pacing calendars do not address most of the mathematics process strands (from the state standards) in an explicit way, although they do address the content standards. The curricula have the process standards embedded, but teachers can teach the content devoid of process.

The Mathematics Curriculum Alignment study was the primary source of information for this finding. There was supportive information from the *Surveys of the Enacted Curriculum*. Also, the Interview Report indicates that in only one of the five secondary schools did respondents express a high degree of confidence that the mathematics curriculum is aligned to the state standards. The Curriculum Alignment Report indicated weak alignment to standards, primarily in the middle school grades. In Grade 8, there was low alignment in the areas of number sense and operations as well as measurement. And in Grade 6, low alignment was evident in the measurement and geometry strands.

Two data sources prompted concern about whether teachers are following the mathematics process standards. First, according to the Curriculum Alignment study, the city pacing guides are not explicit about the mathematics process strands for any grade level. Second, the SEC report indicated that kindergarten teachers are not incorporating the process standards into their instruction.

The hypotheses suggested by participants mainly addressed the process strands. Participants thought that in the district, mathematic processes are not deemed as important as content. In addition, teachers may need more professional development on the process standards. Participants suggested that teachers lack content knowledge for developing mathematical thinking in children. A number of teachers are comfortable teaching they way they learned to teach mathematics and are reluctant to change that approach.

Key Finding 6

Multiple data sources indicate that direct instruction and individual seatwork are the predominant instructional strategies used by teachers. There is indication of very limited use of best practices and research-based practices.

Classroom observations were the primary sources of information for this finding. Three sets of observations provided evidence: the ELA Classroom Observation Report; the Mathematics Classroom Observation Report; and the English Language Learners Report, which also had a classroom observation component. Document reviews, interviews, and the SECs also supported this finding.

The reports indicated there is high presence of direct instruction and independent seatwork. The ELA Observation Reports indicated that for ELA instruction in Grades K–8, direct instruction and independent seatwork are common characteristics of the classrooms. In Grades 9–12, independent seatwork and direct instruction were observed less than in the earlier grades but were still the most frequently observed classroom features. The Mathematics Observation Reports and the Mathematics Document Review revealed that direct instruction and independent seatwork are common in both K–8 and 9–12 classrooms and also that much of the class time is not academically focused, particularly in Grades 9–12.

In general, the Observation Reports noted a lack of other instructional features. For example, there was little hands-on learning and almost no independent inquiry in K–8 classes. In ELA classes, there was little evidence of discussion, student inquiry, or project-based learning in the 9–12 classrooms. In ELA classrooms, fairly low levels of class time had high academic focus; a general finding from the observation data was that it is difficult to meet high expectations for student learning when instructional time is not optimized.

The ELL observations indicated differences in instructional approaches between the general education classes and ELL classes. The general education classes showed little or no evidence of differentiation of instruction or clarity of purpose and content for all students. The general education mathematics classes with ELL students were weak in classroom management and/or weak in instructional content. In general education classes, students were more engaged in whole-class sessions and independent seatwork, while the ELL classes had more varied instructional approaches. The ELL Report also noted that compared to the general education classes, the ELL program classes were challenging with respect to classroom management.

The co-interpretation participants provided three hypotheses for the prevalence of direct instruction and independent seatwork. One was that teachers do not have the requisite pedagogical skills and require more professional development that focuses on data use,

differentiation, and effective application of different instructional strategies. Concerns were expressed about school coaches—with some coaches, who are critical providers of in-school professional development, having limited experience and/or excessive workloads. Some teachers, participants said, teach in the same way they were taught, and find it difficult to change course. Teachers also may lack exposure to innovative teaching methods.

Another hypothesis addressed administration. Participants said that in some schools, administrators do not communicate clear expectations to teachers and do not adequately monitor instruction. A third hypothesis addressed teacher classroom management technique, and participants indicated that teachers find it preferable to keep student behavior under control rather than risk classroom situations (such as small groups and approaches that are not teacher-centered) that can not be adequately managed.

Key Finding 7

Special education and ELL teachers believe they have the knowledge, support, and materials to provide additional instruction to students, whereas general education teachers do not feel confident in working with identified ELL and SWDs.

General education teachers have stated that they have limited opportunities to participate in professional development that will enable them to meet the academic needs of ELLs and SWDs.

The finding was supported by several reports: the Interview Report, the ELL Report's interviews and observations, and the Special Education Report. The Interview Report indicates that the needs of special populations are not consistently met. None of the sample schools indicated that the needs of special populations were met at a high level. The ELL Report indicated that ESL teachers have received professional development and instructional materials, and have learned facilitative teaching strategies. However, general education teachers of ELL students described having fewer appropriate materials and not enough professional development on strategies for teaching ELL students. On the other hand, there were also indications that teachers do adjust instruction for ELLs in a number of ways.

There were several challenges with respect to Special Education instruction that emerged from the Special Education Report and the Interview Report. The general education teachers have little or no familiarity with their students' individualized education plans (IEPs). There was no evidence that teachers understand accommodations and modifications for SWDs or how to implement accommodations and modifications. Information from the Interview Report indicated that in the district, many Special Education teachers have not received proper professional training; there is more training for ELL teachers than Special Education teachers.

Hypotheses related to Key Finding 4 were that, in general, teachers lack understanding about the needs of ELL and SWDs. Also, professional development is not offered in the specialized areas—particularly in Special Education.

Key Finding 8

Adequate professional development has not been provided on how to use assessment data to improve student achievement.

This key finding was added after the prioritization process, with sufficient consensus (75 percent) given by participants. The finding was mainly based on interviews conducted for the ELL study, with some additional evidence from the Interview Report. The ELL Report indicated that teachers are not prepared to use test data for instructional purposes, though they are aware that this is emphasized. A number of ELL and general education teachers said they have not learned how to use assessments to improve student learning. The Interview Report indicated that teachers reported using data to make instructional decisions, but the range of decisions is limited in most of the sample schools.

The hypotheses suggest that the co-interpretation participants do not think teachers are effectively using data to inform instruction. Hypotheses focused on the need for more professional development. Participants said the initiative to encourage data use by teachers is “too new” and that data use is “too infrequent.” Some teachers do not have sufficient access to data, and some teachers may not be convinced that data use will improve instruction. Teachers need training and support in a variety of areas. One area in which teachers need training and support is in understanding differentiation, because currently teachers do not know the potential for using data to guide instruction. Participants hypothesized that teachers are unclear about how to adapt instruction and group students based on data. Teachers, as well as principals and coaches, do not always know how to interpret data in relation to standards, skills, and processes, and do not know how to prioritize instruction. There are many types of data, and teachers need more training on what data to look at and how to use that data. A second area is use of alternative assessment. Particularly in secondary schools, teachers need training on how to develop and use alternate forms of assessments rather than relying only on state and citywide assessments. In some schools, administrators are not holding teachers responsible for using data; and in middle schools and high schools, pressure to get through the scope and sequence of the courses discourages data use.

Additional Findings

Other findings were developed by the co-interpretation participants but were not given top priority during the voting process. A number of these findings are related to those discussed above.

- ELLs are following the same curricula and are held to the same standards as general education students. (*Positive Finding*) (Curriculum Alignment Report, SEC Report)
- There is not a range of cognitive expectations articulated in the ELA and Mathematics curricula. (Curriculum Alignment Report, SEC Report)
- Supplemental instruction is available to students, but evaluation to determine whether programs are working does not exist. Furthermore, the communication of effectiveness of

implementation, monitoring, and program effectiveness is lacking (for parents, schools, and others). (Interview Report, ELL Report, ELA Document Review)

- Teachers say they are not prepared to use test data for instructional purposes, though they are aware that this is emphasized. (ELL Report, Interview Report)
- There is no data that allow the district to assess and compare the effectiveness of the different programs and approaches within ELL. This appears to be the case also for Special Education because evaluated instructional models are not driving a cohesive approach. (ELL Report)
- Within schools, there is a lack of communication from administrators to teachers about ELL and Special Education policies, academic expectations, and assessment. Also, there is a lack of lateral communication between general education and special-needs teachers. (Special Education Report, ELL Report, Interview Report)

Recommendations for Action Planning

In this section, the key findings—along with research and best practice in the appropriate areas—are used to make recommendations for the district’s efforts during the next three years.

The key findings that arose out of co-interpretation with District 7 led Learning Point Associates to make five recommendations.

It is important to note that a one-to-one connection between key findings and recommendations does not exist. Rather, Learning Point Associates has identified the areas that are believed to be the most critical for the district. Further, the order of listing does not reflect a ranking or prioritization of the recommendations. For each recommendation, additional information is provided on specific actions that the district may consider during the action planning process. The diversity and complexity of each recommendation places limits on the extent to which Learning Point Associates can discern its relative impact on the district’s improvement process. For this reason, recommendations are firm but the associated actions or strategies to implement the recommendations should be considered points of reference for consideration.

Recommendation 1

Revise the written K–12 ELA curriculum so that it reflects the depth and breadth of the New York State ELA standards and is clearly articulated and explicit enough for teachers to implement consistently. Once revised, establish clear guidelines and expectations for implementing the district’s ELA curriculum.

Link to Findings

Learning Point Associates conducted an alignment of the ELA curriculum with materials supplied by District 7. This process inspected the alignment of the K–12 ELA curriculum to the K–8 Literacy Competencies and 9–12 Performance Descriptors identified in the New York ELA Core Curriculum Document, as well as the levels of cognitive demand sought, for Grades 2, 4, 6, 8, and 10. It is important to note that the state standards do not have consistent coverage of reading areas across all grade levels; however, the District 7 curriculum does have missing components and competencies in addition to those not addressed in the state standards. Curriculum alignment grade-level reports detail the following as areas where gaps exist in coverage:

Reading

- Second Grade: Print Awareness
- Sixth Grade: Word Recognition, Vocabulary and Background Knowledge
- Eighth Grade: Word Recognition, Vocabulary and Background Knowledge
- Tenth Grade: Vocabulary and Background Knowledge, Fluency

Writing

- Second Grade: Handwriting
- Fourth Grade: Handwriting

- Sixth Grade: Handwriting and Motivation to Write
- Eighth Grade; Text Production and Motivation to Write
- Tenth Grade: Text Production

Furthermore, each ELA state standard has its respective literacy competencies that a student is expected to meet at a particular grade level. While the district’s written curriculum (for Grades 2, 4, 6, 8, and 10) addresses several of the state’s literacy competencies, below is the number of literacy competencies not addressed in the materials submitted by the district. *(See the grade-level summaries from the Curriculum Alignment Report to see specifically which competencies or performance indicators are not addressed.)*

Reading

- Second grade: 4 literacy competencies (out of 31)
- Fourth grade: 10 literacy competencies (out of 28)
- Sixth grade: 18 literacy competencies (out of 27)
- Eighth grade: 11 literacy competencies (out of 21)
- Tenth grade: 8 performance indicators (out of 10)

Writing

- Second Grade; 3 literacy competency (out of 16)
- Fourth Grade: 10 literacy competencies (out of 18)
- Sixth Grade: 14 literacy competencies (out of 20)
- Eighth Grade: 6 literacy competencies (out of 11)
- Tenth Grade: 7 performance indicators (out of 11)

Listening and Speaking

- Second Grade:
 - Listening: 1 literacy competency (out of 4)
 - Speaking: 5 literacy competencies (out of 18)
- Fourth Grade:
 - Listening: 3 literacy competency (out of 4)
 - Speaking: 5 literacy competency (out of 10)
- Sixth Grade:
 - Listening: 3 literacy competencies (out of 5)
 - Speaking: 5 literacy competencies (out of 10)
- Eighth Grade:
 - Listening: 3 literacy competencies (out of 5)
 - Speaking: 2 literacy competencies (out of 9)
- Tenth Grade:
 - Listening: 4 performance indicators (out of 5)
 - Speaking: 4 performance indicators (out of 9)

The *Surveys of Enacted Curriculum* reports also provide perceptual data for consideration in curriculum construction. These two reports (provided at co-interpretation) can serve as an invaluable resource for the district in determining where coverage is needed.

Link to Research

Research shows that the curriculum is one of the major factors contributing to student achievement. Marzano's (2003) review of research in this area found that having a guaranteed and viable curriculum is one of the strongest indicators of improving student performance. Marzano contends that the curriculum is guaranteed and viable when it: (1) provides students with the opportunity to study and learn the specified content by providing teachers with clear guidelines on what is to be taught, and (2) establishes realistic expectations for what content can be covered within the amount of time available for instruction. Aligning a curriculum to a state's content standards is an important initial step in establishing a guaranteed and viable curriculum. Academic standards are intended to create more intellectually demanding content and pedagogy, thereby improving the quality of education for all students. By establishing a standards aligned curriculum that is guaranteed and viable, districts are one step closer to producing greater equality in students' academic achievement (Sandholtz, Ogawa, & Scribner, 2004).

When aligning the curriculum, more than curricular topics should correspond to the state standards. If both the content of the standards and the content of the curriculum align, student performance will still lag if the level of cognitive demand required by the standards differs from the cognitive demands reflected in classroom instruction and/or assessment (Corallo & McDonald, 2002). Therefore, it is vital to align the ELA curriculum to the state standards both in terms of content topics addressed in the curriculum (the breadth) and the level of cognitive demand required to meet expectations (the depth).

A fully articulated and aligned curriculum with specific objectives, performance indicators, assessments and strategies provides teachers with a common set of expectations. Furthermore, when curriculum materials, programs, and assessments are aligned, student progress can be monitored throughout the year (Porter, 2002). Curriculum alignment therefore, must extend beyond the written curriculum to be most effective. The research literature has identified a link between assessments and the curriculum. Curriculum must be clearly aligned to state standards, but also to state assessments, local assessments, instructional strategies, and professional development (Burger, 2002, Holcomb, 1999). Standards alignment uses local content standards to foster the use of multiple assessment sources, describes how classroom instruction and assessment relate to each other, and aligns assessment with learner outcomes (Burger, 2002). If used wisely, curriculum alignment that coordinates the written, taught, and tested curricula can effectively help teachers develop units and lessons that will interest students and enable them to perform well on high-stakes tests (Glatthorn, 1999).

Implementation Considerations

In order to revise the ELA curriculum so that it meets the breadth and depth of the New York state standards mapped at all grade levels and is articulated and explicit enough for teachers to implement consistently, we recommend the following:

District 7 should review the district's current ELA curricula to examine the alignment gaps between the written curriculum and the state standards, specifically the state literacy competencies and performance descriptors as identified in the New York State English Language Arts Core Curriculum. We recommend focusing on alignment to the state literacy competencies as they specify expectations for student learning at each grade level whereas the state standards are written in general terms. The review at the level of literacy competencies, performance descriptors, and instructional assessments will allow greater clarity in identifying the cognitive demands of instruction.

One possible way that district could approach this is to convene a team of teachers, coaches, and other district personnel across Grades K–8 to conduct an in-depth gap analysis and develop curricular materials to address the missing components and competencies for K–8 in Reading, Writing and Listening and Speaking as outlined in the New York State ELA Learning Standards. The revised curriculum can then be piloted in selected schools or classrooms. After gathering information from the pilot through the strong coaching team, the district team could rework the materials and fully put them in place for Year 2. We feel that this approach would work well for Grades K–8.

In interviews and in the co-interpretation, District 7 noted that there is a plethora of ELA programs operating in the district and there is no agreement about what constitutes the district's curriculum. It is important to note that programs should be considered as supportive materials for the actual curriculum; programs are vehicles that help students reach mastery of the intended (written) curriculum. Programs also need to be aligned to a written curriculum that includes specific benchmarks.

The curriculum should include a concise compilation of components that clearly specify the following: (1) the prioritized ELA content to be taught, (2) the sequence or order in which the content is to be taught, (3) the time frame for covering the content, (4) expectations for what students are to know, understand, and be able to do, (5) detailed linkages of the content to instructional materials such as the page numbers, names, or sections of trade books, textbooks, and other materials, (6) ideas for classroom procedures or approaches for successful teaching such as sample lessons, and (7) connections to assessments to be used (English, 2000). Compiling this information in one central curricular document ensures that the work of teachers is focused and connected, allowing for horizontal (within grade levels) and vertical (from one grade level to the next) articulation of the curriculum and greater equity in students' opportunities to learn.

We recommend that District 7 look into creating a quarterly (or more frequent) standards benchmarking. This approach would help teachers to ensure that students are progressing and that the curriculum is working. The various programs can then be aligned to benchmarks to ensure that all programs are complementary and comprehensive so that all students have access to the full written curriculum (Webb, 1997).

The Grades 9–12 curriculum poses a greater problem because currently there are no state-identified literacy competencies available for Grade 10. Because this grade is lacking

competencies, it is very difficult for teachers to understand what they are expected to teach. New York state does, however, specify ELA Core Curriculum Performance Descriptors at Grade 10. Aligning the curriculum to the state performance descriptors might be more feasible because the descriptors may be written in a manner that is more aligned to teachers' classroom-based assessments and other outcome measures. The district can address this issue by forming a committee of Grades 9–12 teachers to examine the Grades 9–12 state learning standards and establishing literacy competencies for each of the focal areas (reading, writing, speaking and listening) to inform revisions to the curriculum. Another option would be to use the performance descriptors as a way to assess curriculum alignment. Once completed, the benchmarking process outlined above can be instituted.

Finally, although the district currently has some policies, plans, and monitoring and accountability measures in place, the review of key documents indicates that the district and schools would also benefit from establishing and implementing more formal monitoring policies and processes. (Recommendation 3 addresses the issue of monitoring in greater detail.)

References

- Burger, D. (2002). *Using standards-led policy to align assessment and accountability systems* (PREL Briefing Paper). Honolulu, HI: Regional Educational Laboratory at Pacific Resources for Education and Learning. Retrieved July 1, 2007, from http://www.prel.org/products/re_/standards-led.pdf
- Corallo, C., & McDonald, D. (2002). *What works with low-performing schools: A review of research*. Charleston, WV: AEL.
- English, F. (2000). *Deciding what to teach and test: Developing, aligning, and auditing the curriculum*. Thousand Oaks, CA: Corwin Press
- Glatthorn, A. (1999). Curriculum alignment revisited. *Journal of Curriculum and Supervision*, 15(1), 26–34.
- Holcomb, E. L. (1999). *Getting excited about data: Combining people, passion and proof*. Thousand Oaks, CA: Corwin Press.
- Marzano, R. (2003). *What works in schools: Translating research into action*. Alexandria, VA: Association for Supervision and Curriculum Development.
- Porter, A. (2002). Measuring the content of instruction: Uses in research and practice. *Educational Researcher*, 31(7), 3–14
- Sandholtz, J., Ogawa, R., & Scribner, S. (2004). Standards gaps: Unintended consequences of local standards-based reform. *Teachers College Record*, 106(6), 1177–1202.
- Webb, N. L. (1997). *Criteria for alignment of expectations and assessments in mathematics and science education* (Research Monograph No. 6). Washington, DC: Council of Chief State School Officers.

Recommendation 2

Create structures and processes to improve the knowledge and practice of instruction in mathematics for all teachers through the following ways:

- **Ensure that all teachers are provided with planning guides in mathematics that illustrate alignment with the Content Strands and the Process Strands of the 2005 New York State Mathematics Core Curriculum.**
- **Ensure that all teachers receive training on incorporating into their instruction the Process Strands of the New York State Mathematics Core Curriculum and research-based instructional strategies to help meet the needs of a diverse student population.**

Link to Findings

A review of key district documents shows substantial evidence that required mathematics instructional materials (*Everyday Mathematics* [K–5], *Impact Mathematics* [6–8], and New York City Math A and B [8–12]) are aligned with the New York State Content Strands except for some gaps that appear at the middle school level in the areas of measurement, geometry, and number sense and operations. Furthermore, these documents show that there is a very weak alignment to the New York State Process Strands for mathematics at all grade levels.

A lack of precise reference to the indicators in the curriculum guides for the Process Strands relinquishes explicit alignment of the curriculum to the process strands to the interpretation of the teacher and the level of fidelity to program implementation. The critical nature of the process strands in the teaching and learning of mathematics have been identified in the New York State Learning Standards for Mathematics (New York State Department of Education, 2005):

The process strands (Problem Solving, Reasoning and Proof, Communication, Connections, and Representation) highlight ways of acquiring and using content knowledge. These process strands help to give meaning to mathematics and help students to see mathematics as a discipline rather than a set of isolated skills. Student engagement in mathematical content is accomplished through these process strands. Students will gain a better understanding of mathematics and have longer retention of mathematical knowledge as they solve problems, reason mathematically, prove mathematical relationships, participate in mathematical discourse, make mathematical connections, and model and represent mathematical ideas in a variety of ways. (p. 2)

New York State assessments will measure conceptual understanding, procedural fluency, and problem solving. In the New York State Learning Standards for Mathematics, these are represented as *process strands* and *content strands*. These strands help to define what students should know and be able to do as a result of their engagement in the study of mathematics.

Link to Research

The standards-based mathematics programs currently in use in the district reflect the six central characteristics of “standards-based” mathematics materials (Trafton, Reys, & Wasman, 2001). Standards-based materials (1) are comprehensive, (2) are coherent, (3) develop ideas in depth, (4) promote sense-making, (5) engage students, and (6) motivate learning. Implied in the program designs of these curriculum materials is alignment to the state process strands. However, observation data examined during the audit process and discussed at the co-interpretation indicate that the process strands are not being adequately taught and learned in District 7 classrooms. Specifically, teachers at all levels rely heavily on direct instruction as the primary instructional strategy.

Because of the weak alignment to the process strands, it is possible that there is a disconnect between what is expected of teachers from the curriculum materials and what teachers know and are comfortable teaching (Stigler & Hiebert, 1999). The National Council of Teachers of Mathematics (NCTM) (2000) acknowledges this difference in its *Professional Standards for Teaching Mathematics*:

The kind of teaching envisioned in these standards is significantly different from what many teachers themselves have experienced as students in mathematics classes. Because teachers need time to learn and develop this kind of teaching practice, appropriate and ongoing professional development is crucial.... For teachers to be able to change their role and the nature of their classroom environment, administrators, supervisors, and parents must expect, encourage, support, and reward the kind of teaching described in this set of standards (NCTM, 2000, pp. 2–3).

For all grade levels, instruction that expects students to use a variety of cognitive demands—such as student discussion, project-based learning, individualized instruction, cooperative learning, hands-on learning, and use of technology—were observed infrequently in classrooms. If both the content of the standards and the content of the curriculum match, student performance will still lag if the level of cognitive demand required by the standards differs from the cognitive demands reflected in classroom instruction and/or assessment (Corallo & McDonald, 2002). Standards-based mathematics curriculums rely on the use of a variety of instructional strategies when implemented effectively (NCTM, 2000).

The provided district documentation indicates that when gaps have been shown to exist between the curriculum materials and the state standards, supplementary materials are purchased or developed to fill these gaps. The gaps that currently exist at the middle school level in the areas of measurement, geometry, and number sense and operations need to be addressed by providing teachers with additional material aligned to those areas.

The high school mathematics curriculum is in a state of transition from alignment to the 1999 state mathematics standards to alignment with the 2005 state mathematics standards. New York City Math A and B curriculum materials were aligned with the 1999 mathematics standards but not to the 2005 standards. District personnel indicated during co-interpretation that new curriculum materials are to be introduced this next school year to align with the 2005 state

standards. It is important for the district to provide high school teachers with curriculum guides that illustrate alignment with the content strands and the process strands of these new mathematics standards. Additionally, there will be a need to provide sustained professional development for the high school teachers to ensure that the new curriculum materials are used correctly to meet the performance indicators of the 2005 standards.

A fully articulated and aligned curriculum with specific performance indicators, assessments, and strategies provides teachers with a common set of expectations. When the curriculum materials, programs, and assessments are aligned, student progress can be monitored throughout the year (Porter, 2002).

The academic success of students in District 7 depends on a high degree of alignment between classroom instruction and state standards in mathematics. In District 7, one way that alignment can be achieved is through the informed and consistent use of a variety of instructional strategies involved in the process strands as well as the instructional materials selected. The instructional materials currently used in mathematics instruction make heavy use of higher level instructional strategies, and teachers self-report using them. However, without specific alignment to the process strands, sufficient monitoring, and high teacher comfort (through training, coaching, adaptation of the strategy in their classroom, and critical feedback), these strategies will continue to go unused.

Staff development focused on incorporating the process strands and research-based instructional strategies will need to be provided for teachers and administrators. Teachers need support as they begin to make changes in their instruction. Professional development that is tied to student learning allows all stakeholders to have a clear understanding of the instructional goals (Guskey, 2000). School leadership plays a large part in reinforcing best practices in schools. School administrators who consistently emphasize, provide training for, and reinforce best instructional practices are able to increase their teachers' confidence in supporting and embracing state assessments as being the driving force behind each student's success (Kaplan & Owings, 2001).

Implementation Considerations

We suggest that District 7 consider implementing this recommendation by taking the following steps:

- Update the mathematics curriculum guides for each grade level K–8 to provide explicit alignment to the process strands of the 2005 New York State Learning Standards for Mathematics.
- Provide high school mathematics teachers with curriculum guides that illustrate alignment to the content strands and the process strands of the 2005 New York State Learning Standards for Mathematics for the new mathematics curriculum materials to be implemented this next school year.
- Focus professional development in mathematics on both the proper use and implementation of the selected mathematics materials which incorporates the teaching and learning of mathematics through the process strands and the implementation of a variety of instructional strategies.

- Train mathematics coaches and other building leadership positions to monitor classrooms for proper use of required mathematics curriculum materials as well as the use of a variety of instructional strategies.

References

Corallo, C., & McDonald, D. (2002). *What works with low-performing schools: A review of research*. Charleston, WV: AEL.

Guskey, T. (2000). *Evaluating professional development*. Thousand Oaks, CA: Corwin Press.

Kaplan, L. S., & Owings, W. A. (2001, February). How principals can help teachers with high-stakes testing: One survey's findings with national implications. *NASSP Bulletin*, 85(622), 15–23.

National Council of Teachers of Mathematics. (2000). *Professional standards for teaching mathematics* (3rd ed.). Reston, VA: Author.

New York State Department of Education. (2005). *Introduction to mathematics standards*. Retrieved July 1, 2007, from <http://www.emsc.nysed.gov/ciai/mst/mathstandards/intro.html>

Porter, A. (2002). *Measuring the content of instruction: Uses in research and practice*. *Educational Researcher*, 31(7), 3–14

Stigler, J. W., & Hiebert, J. (1999). *The teaching gap: Best ideas from the world's teachers for improving education in the classroom*. New York: Free Press.

Trafton, P. R., Reys, B. J., & Wasman, D. G. (2001, November). Standards-based mathematics curriculum materials: A phrase in search of a definition. *Phi Delta Kappan*, 83(3), 259–264.

Recommendation 3

Create a two-pronged approach to address turnover among school personnel that includes:

- Targeted strategies to *recruit* and *hire* teachers and principals who have been prepared to work in at-risk schools and/or who have experience with at-risk schools or students who are at-risk.
- Focused and sustained strategies to *retain* high-quality educators by offering more support and concentrating on issues related to improved working conditions, including financial incentives; creating a professional community of teaching and learning; and providing quality leadership.

Link to Findings

During the co-interpretation process, district personnel brought forward the issue of teacher and school-based personnel experience as a concern for the district. In their opinion, a high percentage of new teachers along with new personnel in coaching and building leadership positions have a significant impact on student achievement. Teacher experience is a concern across New York City Schools with just over half of teachers (53 percent) having more than five years of experience. In District 7 less than 48 percent of the teachers have more than five years of experience. Teacher interviews noted teacher turnover as being a significant concern in approximately half of the sample schools. The average experience of those teachers interviewed was five years. One third of those teachers interviewed reported being at their school for less than two years. Group consensus identified attracting and retaining high-quality school-based personnel to be a critical issue for District 7.

Link to Research

Quality educators, including teachers and leaders, have an indisputable impact on student achievement, particularly the achievement of students who tend to be at-risk (Cotton, 2003; Leithwood, Louis, Anderson, & Wahlstrom, 2004; Nye, Konstantopoulos, & Hedges, 2004; Rivkin, Hanushek, & Kain, 2005; Sanders & Rivers, 1996). Many of District 7's students fit this profile. In 2005, more than 85 percent of the district's students were eligible for free or reduced-price lunch and the district's student test results in 2005 were lower than the state's in mathematics, ELA, and science. When schools and districts like District 7 have difficulties recruiting and retaining high-quality educators to teach and lead in their schools, student growth is compromised. Unfortunately, several studies have shown that teachers systematically move away from schools with low levels of achievement and high concentrations of poor children of color (Boyd, Lankford, Loeb, & Wyckoff, 2005; Carroll, Reichardt, Guarino, & Mejia, 2000; Hanushek, Kain & Rivkin, 2003; Lankford, Loeb, & Wyckoff, 2002). Furthermore, Mitgang (2003) shows that at-risk schools struggle to recruit and retain high-quality principals.

Turnover among teachers and principals is particularly prominent in at-risk schools, making most of them hard to staff. In New York state, more than one fifth of teachers leave within the first three years (Boyd, Lankford, Loeb, & Wyckoff, 2002). Teacher turnover also is especially high in certain subject areas, such as special education. For example, each year more

than 13 percent of special educators leave the profession or transfer to general education; every four years, half of all special education teachers have departed (McLeskley, Tyler, & Flippin, 2003). Ingersoll (2001) notes that these staffing issues are frequently a result of teacher turnover rather than an insufficient supply of teachers. In other words, it is not necessarily the case that there are not enough teachers to fill most positions (although, this is often true for certain subject areas such as mathematics, science, and special education), but more the case that teachers are moving or leaving their jobs at relatively high rates. At-risk schools, including those in District 7, have a disproportionate number of new teachers. Studies show that approximately 50 percent of new teachers leave their initial teaching assignment within the first five years (Allen, 2005; Ingersoll, 2004). Furthermore, data from New York City show that teachers are more likely to quit if they live far away from the school (Boyd, Lankford, Loeb, & Wyckoff, 2005).

Recruiting, hiring, and training teachers can be labor intensive and expensive, especially if schools and districts have to shift financial and human resources in order to find new teachers. Turnover rates in at-risk schools make the resource costs especially damaging, adding to the long list of challenges already facing these schools. A national estimate of what it costs to replace teachers who have dropped out of the profession is \$2.2 billion a year (Alliance for Excellent Education, 2005). If the cost of replacing teachers who transfer schools is added, the total reaches \$4.9 billion every year. A study commissioned by the Texas State Board for Educator Certification (Texas Center for Educational Research, 2000) estimated that the financial costs of teacher turnover in Texas were between \$329 million and \$2.1 billion annually. These costs do not reflect the impact on overall teacher quality and student achievement, however.

Attracting and retaining high-quality personnel for at-risk schools is often a function of recruiting and hiring teachers and leaders matched to school positions reflective of their knowledge, experience, and expertise. Some of the factors that drive teacher candidates away from at-risk schools can be addressed during teacher preparation. Field placement in an urban school, training in multicultural awareness, and examination of deeply-held beliefs can make teacher candidates more comfortable and more confident in their ability to teach in an at-risk school (Cushman, 1999; Lyons, 2005; Lyons & Quartz, 2005; Yeo, 1997). Unless teachers are prepared to be successful in at-risk schools, they will continue to leave classrooms at troubling rates. Targeting recruitment and hiring of school personnel with these and other similar types of backgrounds and/or experiences may help to ensure that the fit between the teacher or principal and the position are aligned (Liu, 2005). If a position does not closely match a new teacher's preparation, interests, and preferences, he or she may not stay in it for long. Research (Levin & Quinn, 2003; Scollen & Fifield, 2005) also shows that urban schools often miss out on the best and brightest teachers for their vacancies because of budget timelines and hiring delays. Urban districts often lose stronger applicants because those applicants have an earlier opportunity to accept positions in non-hard-to-staff schools, commonly in suburban districts with higher pay, such as those in District 7's neighboring Westchester County.

The decision of whether to stay or leave a school, for both teachers and principals, is frequently influenced by the working conditions found in the school, such as salary, support mechanisms, school conditions, and class size (Horng, 2005). Qualitative studies have found that many teachers move voluntarily from school to school in search of an environment that makes good teaching possible (Johnson & Birkeland, 2003). These factors certainly reflect some of the job

difficulties mentioned by teachers and leaders of District 7. Working conditions related to support mechanisms are particularly important for inexperienced teachers looking for guidance and orientation in their new positions. Most new teachers leave the profession and especially leave at-risk schools because of a lack of support, a poor professional environment, and a feeling of isolation. Comprehensive induction programs can produce a high rate of return on investment when novice teachers stay long enough to develop into professionals who help students meet their academic potential (Fulton, Yoon, & Lee, 2005). In her review of public opinion data, Coggshall (2006) mentions that another common reason for leaving a school is the lack of administrative support, particularly from school leaders. District 7 has recently experienced a wave of principal retirements and new principals taking their place. These new principals often have little experience supervising and may not yet be at the point in which they can offer significant leadership or general support to teachers. Therefore, school leadership not only impacts student learning but also can affect teacher retention.

Implementation Considerations

In order to implement the recommendation to recruit and retain more high-quality educators for District 7's schools, there are several potential strategies to pursue. These strategies can be implemented to varying degrees depending on the context. However, strategies focused on reducing teacher turnover should work in tandem with recruitment efforts because teacher retention will not improve if working conditions do not change.

Some audit findings point to the concern that new teachers are coming out of teacher preparation programs without enough training that is reflective of the realities of being a teacher—particularly in the schools that comprise District 7. Educators, both teachers and leaders, for District 7 schools should have the skills to work with students who have the potential to be at-risk, including those in poverty, students whose first language is not English, and students with special needs. Educators also need to be able to address the cultural gaps that often exist between them and their students. These issues can often be addressed through field experiences. Cushman (1999) notes that “teacher education field work can serve as a powerful force for school change, by helping the school identify its reform priorities and building a cadre of prospective teachers” (p. 4).

Building school/district partnerships with local teacher preparation institutions to provide extended field experiences to teacher candidates is one strategy District 7 might consider.

- For example, Chicago's Academy for Urban School Leadership (AUSL) (www.ausl-chicago.org) offers residents hands-on experience for one school year to learn best practices, habits, and beliefs of successful urban school teachers and leaders. Cohorts of graduates are placed into carefully selected underperforming schools within Chicago Public Schools, where they work for at least five years. In the last six years, AUSL has trained 153 teachers, who serve more than 4,500 low-income children in Chicago Public Schools. The program maintains a 95 percent retention rate of its program graduates.
- The Broad Foundation has a similar program for principal training in which principals are trained to work in public schools in the 100 largest urban school districts in the country (www.broadfoundation.org/funding/principaltrainingRFP0306.pdf).

- Similar programs in New York include Teach for America (www.teachforamerica.org) and the New York City Teaching Fellows Program (www.nycteachingfellows.org).

Teachers from these latter programs, however, often do not stay in the school beyond their two- or three-year requirement. This situation is frequently the case for District 7 as well as for other urban areas that use the same or similar programs. Therefore, retention efforts are vital in order to keep these teachers on board. District 7 should consider the degree to which the district works with or has the potential to work with institutions of higher education (IHEs) or other alternative route programs to collaborate on preparation programs targeted to District 7 schools.

Another potential strategy includes focusing human resources efforts on targeted hiring that positively impacts at-risk schools such as those in District 7. By streamlining human resource systems and removing the barriers to making early hiring decisions, schools and districts can select candidates from a larger and more qualified applicant pool. Teachers are more likely to accept jobs with efficient application and screening processes. Late hiring is primarily the result of late student enrollment predictions, delayed budget decisions, prioritized transfer processes, and poorly organized central offices. Liu and Johnson (2003) recommend information-rich school-based hiring, including interviews with more than just the school principal and observations. It also is important to understand, recruit, and hire the kinds of teachers who are known to traditionally remain in District 7's schools. For example, using data from New York City, Boyd et al. (2005) report that teachers prefer to teach in areas close to home and that are similar to where they went to high school. In order to target hiring practices, District 7 might consider reviewing human resources processes to isolate potential barriers in the hiring process for candidates as well as any components to the district's collective bargaining agreement that may be contributing to teacher turnover.

Principals also are more likely to accept jobs with efficient application and screening processes. A recent report by The New Teacher Project (2006) proposed four key steps for an effective principal hiring process: (1) recruitment, (2) initial eligibility screen, (3) district competency screen, and (4) school-fit panel interviews.

For those teachers without the benefit of hands-on experiences during teacher preparation and/or to continually enhance teaching for those who did have those experiences, sustained and targeted induction and professional development are vital. These efforts should be targeted to the specific needs of District 7's teachers, which may include mentoring new teachers, bridging cultural gaps, and classroom management. Furthermore, retention strategies focused on induction and professional development should be job-embedded to create school communities centered around teaching and learning, something many teachers in District 7 believe is lacking. Comprehensive induction can build relationships among teachers as well as develop leadership and instructional practices for all of those involved in the process. It can literally open doors for shared classroom observations, facilitate discussions of student learning, and create more effective support and assistance. Furthermore, connecting experienced and novice teachers can lend emotional support to new teachers. Teachers and other staff working in such a mutually supportive learning community will be more effective in supporting and promoting students in at-risk schools. Research (Bartell, 2005; Ingersoll & Kralik, 2004; Johnson, 2004) shows that critical components of a high-quality new-teacher induction program include the following:

- Providing release time so that new teachers can observe their effective veteran colleagues, and veteran teachers can observe and provide feedback to new teachers.
- Creating a professional growth plan for new teachers and conducting regular, standards-based assessments of the new teachers' progress and performance in order to provide feedback and targeted support.
- Incorporating a formal mentoring process by which new teachers receive regular guidance from matched, trained veteran teachers.
- Providing ongoing, standards-based professional development for the new teacher specific to his/her needs.

In addition to enhanced support via induction and professional development, District 7 also must focus on retention strategies around improved working conditions. These include access to resources, competitive salary, tolerable class sizes, and assistance with behavior management. Suggestions related to teacher preparation, hiring, and professional support will fall short if the schools are not conducive places to work relative to teachers' other nearby options. For example, the district should consider offering financial incentives or accessing educator candidates who are benefiting from state-level financial incentives to teach in at-risk schools. While many financial incentive programs have not traditionally been effective in the long-term, instances where they are targeted, of sufficient amounts, and sustained may offset some teacher turnover.

The Center for Teaching Quality is working with the Clark County School District in Nevada (which struggles with many of the same issues as District 7) to assess teacher working conditions and develop feasible action steps for improvement. (Refer to the center's "What We Do" webpage at www.teachingquality.org/twc/whatwedo.htm.) Through a collaboration between the organization and the districts, teachers in the district were surveyed about issues related to time, leadership, resources, empowerment, and professional development. Results from those surveys are analyzed, and customized reports about the status of working conditions are provided to the districts. Schools and districts may also access the *Teacher Working Conditions Toolkit* (www.teacherworkingconditions.org), which helps users identify effective strategies for reform related to working conditions. Three toolkit topics that look particularly relevant for District 7 are "empowerment," "facilities and resources," and "leadership."

Schools, districts, and states must work to stem the tides of teacher turnover, and provide environments that allow good teaching to flourish. District 7 has taken the steps to identify areas of need and now must take the steps to address those areas of need through targeted recruitment and retention strategies to place and keep a high-quality teacher in every classroom.

References

Allen, M. (2005). *Eight questions on teacher recruitment and retention: What does the research say? A summary of the findings*. Denver, CO: Education Commission of the States.
Retrieved July 1, 2007, from <http://www.ecs.org/clearinghouse/64/58/6458.pdf>

- Alliance for Excellent Education. (2005). *Teacher attrition: A costly loss to the nation and to the states* (Issue Brief). Washington, DC: Author. Retrieved July 1, 2007, from <http://www.all4ed.org/publications/TeacherAttrition.pdf>
- Bartell, C. A. (2005). *Cultivating high-quality teaching through induction and mentoring*. Thousand Oaks, CA: Corwin Press.
- Boyd, D., Lankford, H., Loeb, S., & Wyckoff, J. (2002). *Initial matches, transfers, and quits: Career decisions and the disparities in average teacher qualifications across schools*. Albany, NY: Teacher Policy Research. Retrieved July 1, 2007, from http://www.teacherpolicyresearch.org/portals/1/pdfs/Initial_Matches_Transfers_and_Quits.pdf
- Boyd, D., Lankford, H., Loeb, S., & Wyckoff, J. (2005). Explaining the short careers of high-achieving teachers in schools with low-performing students. *American Economic Review*, 95(2), 166–171. Retrieved July 1, 2007, from http://www.teacherpolicyresearch.org/portals/1/pdfs/Explaining_the_short_careers_of_high_achieving_teachers_AER_final.pdf
- Carroll, S. J., Reichardt, R. E., Guarino, C. M., & Mejia, A. (2000). *The Distribution of Teachers Among California's School Districts and Schools*. (MR-1298.0-JIF). Santa Monica, CA: RAND. Retrieved July 1, 2007, from http://www.rand.org/pubs/monograph_reports/2007/MR1298.0.pdf
- Cogshall, J. (2006). *Prospects for the profession: Public opinion research on teachers*. Washington, DC: National Comprehensive Center for Teacher Quality. Retrieved July 1, 2007, from <http://www.ncctq.org/publications/October2006Brief.pdf>
- Cotton, K. (2003). *Principals and student achievement: what the research says*. Alexandria, VA: Association for Supervision and Curriculum Development.
- Cushman, K. (1999). Teacher preparation and renewal: Creating conditions for better practice. *Challenge Journal*. Retrieved July 1, 2007, from <http://www.annenberginstitute.org/Challenge/pubs/cj/v3n2/pg4.html>
- Fulton, K., Yoon, I., & Lee, C. (2005). *Induction into learning communities*. Washington, DC: National Commission on Teaching and America's Future. Retrieved July 1, 2007, from http://www.nctaf.org/documents/NCTAF_Induction_Paper_2005.pdf
- Hanushek, E. A., Kain, J. F., & Rivkin, S. G. (2003). Why public schools lose teachers. *Journal of Human Resources*, 39(2). Retrieved July 1, 2007, from <http://edpro.stanford.edu/Hanushek/admin/pages/files/uploads/lose%20teachers.jhr.pdf>
- Horng, E. (2005). *Teacher tradeoffs: Poor working conditions make urban schools hard-to-staff*. Los Angeles: Urban Teacher Education Collaborative. Retrieved July 1, 2007, from <http://www.idea.gseis.ucla.edu/publications/utec/wp/pdf/06.pdf>

- Ingersoll, R. (2001). *Teacher shortages, teacher turnover, and the organization of schools*. Seattle, WA: Center for the Study of Teaching and Policy. Retrieved July 1, 2007, from <http://depts.washington.edu/ctpmail/PDFs/Turnover-Ing-01-2001.pdf>
- Ingersoll, R. & Kralik, J. (2004). The impact of mentoring on teacher retention: What the research says (Research Review). Denver, CO: Education Commission of the States. Retrieved July 1, 2007, from <http://www.ecs.org/clearinghouse/50/36/5036.htm>.
- Johnson, S. M. (2004). *Finders and keepers: Helping new teachers survive and thrive in our schools*. San Francisco: Jossey-Bass.
- Johnson, S., & Birkeland, S. (2003). The schools that teachers choose. *Educational Leadership*, 60(8), 20–24.
- Lankford, H., Loeb, S., & Wyckoff, J. (2002). Teacher sorting and the plight of urban schools: A descriptive analysis. *Educational Evaluation and Policy Analysis*, 24(1), 37–62.
- Leithwood, K., Louis, K. S., Anderson, S., & Wahlstrom, K. (2004). *Review of research: How leadership influences student learning*. New York: The Wallace Foundation. Retrieved July 1, 2007, from <http://www.wallacefoundation.org/NR/rdonlyres/E3BCCFA5-A88B-45D3-8E27-B973732283C9/0/ReviewofResearchLearningFromLeadership.pdf>
- Levin, J., & Quinn, M. (2003). *Missed opportunities: How we keep high-quality teachers out of urban classrooms*. New York: The New Teacher Project. Retrieved July 1, 2007, from <http://www.tntp.org/files/MissedOpportunities.pdf>
- Liu, E. (2005). *Hiring, job satisfaction, and the fit between new teachers and their schools*. Cambridge, MA: Harvard Graduate School of Education, Project on the Next Generation of Teachers. Retrieved July 1, 2007, from http://www.gse.harvard.edu/~ngt/Liu_AERA_2005_Hiring_and_Job_Satisfaction.pdf
- Liu, E., & Johnson, S. M. (2003). *New teachers' experiences of hiring: Late, rushed, and information-poor* (NGT Working Paper). Cambridge, MA: Harvard Graduate School of Education, Project on the Next Generation of Teachers. Retrieved July 1, 2007, from http://www.gse.harvard.edu/~ngt/Liu_Johnson_NGT_Working_Paper.pdf
- Lyons, K. (2005). *Preparing to stay: Examining the effects of specialized preparation on urban teacher retention*. Los Angeles: Urban Teacher Education Collaborative. Retrieved July 1, 2007, from <http://www.idea.gseis.ucla.edu/publications/utec/wp/pdf/08.pdf>
- Lyons, K. B. & Quartz, K. H. (2005). *Aligning potential and opportunity: Recruiting non-traditional teacher candidates through specialized urban teacher education*. Los Angeles: Urban Teacher Education Collaborative. Retrieved July 1, 2007, from <http://idea.gseis.ucla.edu/publications/utec/wp/pdf/03.pdf>

- McLeskey, J., Tyler, N., & Flippin, S. (2003). *The supply of and demand for special education teachers: A review of the research regarding the nature of the chronic shortage of special education*. Gainesville: University of Florida, Center on Personnel Studies in Special Education. Retrieved July 1, 2007, from <http://www.coe.ufl.edu/copsse/docs/RS-1/1/RS-1.pdf>
- Mitgang, L.D. (2003). *Beyond the pipeline: Getting the principals we need where they are needed most* (Policy Brief). New York: The Wallace Foundation. <http://www.wallacefoundation.org/NR/rdonlyres/7860FFB1-ED79-425E-904B-D985BA748EF4/0/BeyondthePipelinePolicyBrief.pdf>
- The New Teacher Project. (2006). *Improved principal hiring: The New Teacher Project's findings and recommendations for urban schools*. New York: Author. Retrieved July 1, 2007, from <http://www.broadprize.org/2006BroadSymposiumTNTPPPrincipalHiring.pdf>
- Nye, B., Konstantopoulos, S., & Hedges, L. V. 2004. How large are teacher effects? *Educational Evaluation and Policy Analysis*, 26(3), 237–257.
- Rivkin, S. G., Hanushek, E. A., & Kain, J. F. 2005. Teachers, schools, and academic achievement. *Econometrica*, 73(2), 417–458.
- Sanders, W., & Rivers, J. (1996). *Cumulative and residual effects of teachers on future student academic achievement*. Knoxville: University of Tennessee Value-Added Research and Assessment Center. Retrieved July 1, 2007, from <http://www.mccsc.edu/~curriculum/cumulative%20and%20residual%20effects%20of%20teachers.pdf>
- Scollon, K., & Fifield, S. (2005). *Late hiring of new teachers in Delaware* (Education Policy Brief). Newark: University of Delaware, Education Research & Development Center. Retrieved July 1, 2007, from http://www.rdc.udel.edu/policy_briefs/v17_January.pdf
- Texas Center for Educational Research. (2000). *The cost of teacher turnover*. Austin, TX: Texas State Board for Educator Certification. <http://www.sbec.state.tx.us/SBECOnline/txbess/turnoverrpt.pdf>
- Yeo, F. (1997). *Teacher preparation and inner-city schools: Sustaining educational failure*. Girardeau: Southeast Missouri State University, Department of Secondary Education.

Recommendation 4

Create and implement a professional development plan that is closely aligned to and meets the needs identified in the district and school comprehensive education plans. This plan should be monitored and implemented at the district and school levels.

Three areas in particular stood out in the audit findings and should be considered focal points for the plan:

- **Professional development for teachers on using data to drive instruction.**
- **Professional development on differentiated instruction and best practices within the context of the reading/writing and mathematics programs offered by the district/schools.**
- **Support for general education teachers to meet the needs of SWDs and ELLs, including increased collaboration with special population teachers.**

Link to Findings

As expected, an expressed need for some type of professional development can be found in nearly every data set. This is not uncommon, as professional development, if well executed, can be a strong driver for instructional improvement. This is why we recommend a focus on professional development as one of five core recommendations to move the district out of correction action. Teacher interviews indicated that professional development is not consistent across the district. This situation is especially true for new teachers. Further, while the district has some policies and plans in this area, there is no clear evidence that they are implemented and monitored. For example, there exists a professional development plan and calendar for Reading First, but not for the larger district. Also, no alignment of the Reading First methodologies to the current district curriculum was offered. A comprehensive plan also would avoid a layering of programs, instructional methodologies, and supplantative professional development. There are documents that suggest the district offers high-quality professional development experiences, but these experiences need to be consistently implemented across the district. These findings, along with others, led to a key finding that professional development is not a consistent priority throughout the schools and that the district and school are not consistently held accountable for monitoring the professional development that takes place.

Looking deeper into the findings, three areas emerged as strong needs for teachers. First is professional development on using data for instructional purposes. One of the key findings is that teachers are not prepared to use formative and summative test data for instructional purposes, although they know they should. Observations show little evidence of performance assessment strategies being used K–12. One hypothesis, offered at co-interpretation, was that data driven instruction and differentiation go hand-in-hand, and that teachers cannot learn one without the other.

Second, there is a need for professional development on differentiated instruction and research-based instructional practices within the context of the current literacy model and mathematics programs. Teachers expressed this need in interviews; classroom observations, likewise, support

it. Direct instruction and individual seatwork were the primary instructional methods observed during the general education classroom observations. Differentiation of instruction was again rarely observed in the ELL-focused observations of general education classrooms. Furthermore, the SEC survey indicated that majority of mathematics teachers have students working individually over 75 percent of the time. The district's literacy framework and the mathematics text series provide foundations for student learning. However, teachers need professional development within the context of these models to maximize impact and make a direct, successful connection into daily instruction.

Finally, there is professional development for general education teachers teaching to improve instruction for SWD and ELL populations. Both the ELL and SWD populations are failing to make AYP. With most of these students in general education classrooms at least some of the school day, it is critical that general education teachers are equipped to modify instruction to meet their needs and to assess progress. Teacher interviews indicated that this is an area of high need. With a growing movement toward response to intervention (RTI), teachers are expected to use sound evidence-based practices and implement frequent diagnostic assessments for students (Fuchs, Mock, Morgan, & Young, 2003).

Link to Research

Impact on School Improvement. Educators and researchers know a great deal about the elements of effective professional development (National Staff Development Council, 2001). Numerous case studies of successful schools have documented the role that high-quality professional development can play in school improvement (Hassel, 1999; National Partnership for Excellence and Accountability in Teaching, 1999; WestEd, 2000). Learning Point Associates encourages District 7 to review these and other resources when designing the professional development, to assist in defining high-quality professional development and to set criteria to ensure that all professional development in District 7 is high quality.

In addition, large-scale surveys of teachers about their professional development experiences show that well-designed professional development leads to desirable changes in teaching practices (Garet, Berman, Porter, Desimone, & Herman, 1999; Parsad, Lewis, & Farris, 2001; Wenglinsky, 2000). A number of studies demonstrate that well-designed professional development activities can have a direct, measurable impact on student achievement (Cohen & Ball, 1999; Kennedy, 1998; Wenglinsky, 2000).

Importance of a Comprehensive Plan. Evidence-based professional development is most successful when it is connected to a comprehensive change process. One national survey of teachers found that when teachers report a connection between professional development and other district and school improvement activities, they are much more likely to say professional development has improved their teaching practice (Parsad et al., 2001). This is why it is so critical to have a comprehensive professional development plan tied to the District Comprehensive Education Plan and the Comprehensive Education Plan. Given the fluctuation of the New York City regional structure, a comprehensive plan is still possible and needed. Districts and schools that follow this approach target their professional development toward the highest

priority needs and pursue activities with the greatest chance of improving student performance (Geiser & Berman, 2000).

Building a Successful Plan. For several years, the U.S. Department of Education sponsored the National Awards Program for Model Professional Development to encourage and reward schools and districts that successfully implemented high-impact professional development. In interviews with staff members at these schools and districts, researchers discovered that despite their many differences, there were several common steps taken by each of these award winners. Some of these steps included the following:

- **Seek input from participating educators.** Especially in New York City, where the school is now a key decision-making body, it is critical to have school-level participation in the plan. Administrators and teachers should both be included. While schools may be purchasing a variety of services, depending on the support organizations they partner with, it is critical that the prioritized needs from the district professional development plan are addressed, and thus the key staff should be engaged in creating it. The district plan should have core focus areas but allow flexibility for individual school needs to be addressed. When teachers help plan their own professional development, they are likely to feel a greater sense of involvement in their own learning. This engagement increases motivation, empowers teachers to take risks, ensures that what is learned is relevant to a particular context, and makes the school culture more collaborative (Corcoran, 1995; Hodges, 1996; National Partnership for Excellence and Accountability in Teaching, 1999).
- **Focus planning on what students need to learn.** Research increasingly supports targeted professional development. According to one overview of the literature, professional development that provides teachers with general information about a new instructional practice, or about new developments in a particular content field, usually does not result in improved teaching (National Partnership for Excellence and Accountability in Teaching, 1999). Instead, effective professional development concentrates on the specific content that students will be asked to master, the challenges they are likely to encounter, and research-based instructional strategies to meet those challenges (Cohen & Hill, 1998; Garet, et al., 1999; Kennedy, 1998). This is why the recommendation about literacy and mathematics professional development falls in the context of the specific content and program. The more targeted the professional development, the better its chance for success. In other words, design professional development that goes deep.
- **Plan for job-embedded learning opportunities.** Collective bargaining agreements in New York City may limit the amount of time teachers can be required to attend professional development activities. However, when professional development is built into the routine practices of schooling, it becomes a more powerful tool for teacher growth. Instead of relegating professional development to specific “inservice days,” schools with excellent programs make professional development a part of teacher’s everyday work lives (Hassel, 1999; Sparks, 1999). By using everyday activities such as lesson planning, staff meetings, and curriculum development as opportunities for professional growth, schools can develop a culture of collaboration and shared inquiry (Fullan & Miles, 1992; WestEd, 2000; Wood & McQuarrie, 1999). When these activities

are focused on meeting agreed-upon goals for student learning, they are especially powerful. Because they are relevant to the real problems that teachers face in their work, they allow teachers to see immediate evidence of what they are learning.

- **Plan for longer term activities, not stand-alone workshops.** National surveys confirm that successful professional development takes place over a long period of time. In one study, the simple duration of an activity predicts its success; when teachers report that their activities extended over a longer period of time, they cite more improvement in teaching practice (Garet et al., 1999). Other studies suggest that it takes months and even years to fully implement new practices (Hodges, 1996). If teachers have the opportunity to try out new practices and then to discuss with their colleagues any insights or concerns that develop, they are more likely to persevere in implementing those new practices (National Partnership for Excellence and Accountability in Teaching, 1999). One way that schools ensure follow-up is by tying professional development goals to teachers' ongoing self-assessments (McColskey & Egelson, 1997).
- **Include plans to support, monitor, evaluate, and adjust.** Districts and schools that develop clear goals for professional development are better able to evaluate whether certain professional development activities are having the desired impact on teacher practice and, ultimately, student achievement. When evaluation is done well, it can bolster professional development efforts, no matter what the results. Researchers suggest that districts and schools design evaluations that do the following: help educators reflect on their practice; use multiple sources of information, including teacher portfolios, observations of teachers, peer evaluations, and student performance data; and collect evidence of impact at multiple levels—educator reaction, learning, and use of new knowledge and skills, organizational support and change, and student learning (Guskey & Sparks, 1991; Hodges, 1996; National Partnership for Excellence and Accountability in Teaching, 1999). Learning Point Associates suggests that the regional team spend time on this during action planning. Building an effective monitoring plan is one of the most important pieces. Knowing when professional development is working, and when to adjust due to spotty implementation or outcome, will ensure that time and funds are wisely spent.

Providing Professional Development on Data-Driven Decision Making. The elements needed for successful implementation of professional development resemble those needed for developing a data-driven organization and should include supporting common articulated goals, building professional knowledge as well as providing support to teachers. Naturally, professional development on data-driven decision making is most successful when the district and/or school has an established system of data use. This includes district-, school-, and classroom- level uses. A starting point for establishing systemic data use is ensuring that data are easily accessible and that the analysis, interpretation, and questioning of different kinds of school data occur. Bernhardt (1998) identifies the four lenses of data: (1) achievement data, (2) demographic data, (3) perceptions data, and (4) program data. The district/schools should establish a set of key data sources, across types, to monitor progress toward accountability goals. This includes formative assessments in the content areas to focus instruction.

Staff at the district and school level should have the opportunity to review, interpret, question, and make formative plans in response to data as a regular part of grade-level meetings, school

staff meetings, and district-level meetings. Engaging with data gives district and school staff an opportunity to identify strengths or to develop data-based hypotheses around areas that need improvement. In an environment of collaborative inquiry, the district will not only identify and collect substantial data to inform decisions—thereby becoming “data rich”—but will have a process by which they will analyze the data, in collaboration with colleagues and utilize it to ultimately take formative actions, thereby becoming “question rich” (Love, 2002).

To reach this end, teachers need professional development in order to understand, buy into, and implement a systemic plan for data analysis and data use. Professional development can take place in workshops and group meeting settings. Another way to support teachers in using data is to designate a data analyst, who would be available to support schools in data interpretation processes through workshops and collaborative support. The use of a collaborative inquiry model is critical to the success of any professional development in this area.

Differentiated Instruction in the Content Areas. Differentiated instruction is often referred to as the solution for improved student achievement. It is important to understand its definition and application. Although differentiated instruction is critical, if it is not combined with effective use of data, the benefits from differentiation will be lessened.

Differentiated instruction is a process approach to teaching and learning for students of differing abilities in the same class (Hall, 2002). There are three elements that can be differentiated: the content, the process, and the products (Tomlinson, 2001). *Content* includes the actual concepts being taught and the alignment of the objectives and learning goals; it content includes the same concept for all students at varying levels of complexity. *Process* involves how students learn and includes flexible grouping, classroom management, and instructional delivery approaches. Several other strategies, such as in *How to Differentiate Instruction in Mixed Ability Classrooms* (Tomlinson, 2001), can be used for successful differentiation. Finally, *products* includes student assessments and task assignments. A well-designed task allows for multiple means of expression and various levels of complexity (Hall, 2002).

Learning Point Associates provides this explanation to demonstrate the complexity of differentiation. Not only do teachers need to learn about what differentiation is, but they also need to learn about and practice a variety of instructional strategies. Without these, the process cannot be differentiated.

It also is important that the methods used for professional development are conducive to improving instruction and developing and retaining high-quality teachers. Job-embedded professional development is regarded by experts as a strong approach that offers multiple pathways. Professional learning communities (DuFour & Eaker, 1998), schoolwide study groups (Taylor, 2004), literacy coaching using specialists (Walpole & McKenna, 2004), lesson study (Lewis & Tsuchida, 1998), mentoring and induction (Boyer, 1999, as cited in Holloway, 2001), and a myriad of other systemic initiatives have a strong research base and require similar elements for successful implementation.

One simple way that District 7 could work to support the use of differentiated instruction in the classrooms is to establish a committees of strong ESL, Special Education, and general education

teachers at the elementary, middle, and high school levels. These teachers could design and articulate information on differentiated instruction that use the written curriculum as examples.

Supporting General Education Teachers Who Have ELLs. The Center on Instruction recently issued *Practical Guidelines for the Education of English Language Learners: Research-Based Recommendations for Instruction and Academic Interventions* (Francis, Lesaux, Kiefer, & Rivera, 2006), which provides some guiding functions for ELA and mathematics instruction for ELLs specifically. For ELA instruction, the authors include the need to focus on phonemic awareness, phonics, vocabulary, and comprehension strategies. They also emphasize the importance of structured academic talk and meaningful independent reading. For mathematics, they include a focus on early, explicit instruction in basic mathematics concepts and skills as well as a focus on comprehension of academic language in mathematics; this comprehension is often difficult for ELLs but is especially important because it is often used for assessment and instruction.

Classroom Instruction That Works With English Language Learners (Hill & Flynn, 2006), looks at Marzano's original nine instructional strategies that work for all students (see Marzano, Pickering, and Pollock, 2001) and refines them for the ELL population. These practical strategies can be incorporated into professional development for all teachers. Still other research suggests that classroom teachers need to understand, at a higher cognitive level, the challenges faced by their students and ways to meet those challenges. For example, classroom teachers need to know about first- and second-language acquisition, reading and writing in a second language, alternative assessments, and sociocultural issues in education (Coady & Latina, 2003).

In addition, studies examined by August and Calderón (2006) affirm the following attributes of professional development that are deemed important for all teachers, according to the American Educational Research Association in the report created by the National Literacy Panel for Language-Minority Children and Youth. These attributes include the following:

- Long-term commitment to developing a particular knowledge base and skill set.
- Ongoing meetings between teachers and professional development providers.
- Opportunities for classroom practice with mentoring and coaching.
- Focusing on learning specific strategies for improving instruction for ELLs, the theory that informs those strategies, and how to apply them in the classroom.

A practical first step in this area would be to provide embedded professional development to general education teachers that integrates knowledge of language acquisition, literacy, and teaching strategies shown to be successful with ELLs.

Finally, the publication *Working with English Language Learners: Strategies for Elementary and Middle School Teachers* (Zehler, 1994) is an excellent resource containing jargon-free instructional strategies for teachers who are not specifically trained to work with ELLs. Teachers looking for more in-depth discussion regarding the topics presented (i.e., cultural differences, theories and methods of second-language acquisition) will find it limited in that regard, but it remains a good introductory overview of some of the issues related to educating ELLs.

Supporting General Education Teachers Who Have SWDs. With the increasing movement towards inclusion, RTI, and other nonrestrictive environments, pressure on general education teachers to meet the needs of SWDs is greater than ever.

In order to be most effective with their special education students, teachers need to know about the types of learning disabilities and how these disabilities affect students' receptive and expressive abilities in listening, speaking, reading, and writing. Thus, professional development that builds this knowledge and supports teachers through implementation in their own classrooms should be considered (Garcia & Beltran, 2003).

Research indicates that the most successful professional development efforts are those that provide regular opportunities for participants to share perspectives and seek solutions to common problems in an atmosphere of collegiality and professional respect (Little, 1982). Collaboration in professional development is especially useful for increasing the capacity to meet the needs of special populations, given that a history of sorting and separating both diverse students and classroom teachers has resulted in very little common ground (Ferguson, 2005). Classroom teachers are specialists in curriculum; special education teachers are specialists in the unique learning and behavior needs of students. Each specialist learns skills from the others, with all students being the ultimate beneficiaries (Beckman, 2001).

In addition, general education teachers learning to support the needs of SWDs in their classrooms report that the most useful professional development provides them with specific skills they can immediately use and implement in the classroom. In addition to hands-on skills training, classroom observations and/or videos of successfully inclusive classes, and situation-specific problem-solving sessions over the course of the school year can be key to providing a frame of reference for these teachers (Whitworth, 1999). In order for teachers to provide high-quality differentiation to their students they must understand both the theory and related practice as well as develop those skills (Hedrick, 2005). Staff developers that are effective in teaching differentiation will help instructors use differentiation in their classroom effectively. Hence, this recommended action links closely with the need to provide professional development in the area of differentiation.

Finally, for the mainstreaming of students to be successful, research supports the importance of strong collaboration among teachers (Ripley, 1997). Collaboration occurs at all three levels—the district, the school, and the classroom (as delineated in the hypotheses)—with time to meet, plan, and evaluate being the most critical variable of success (Ripley, 1997).

Implementation Considerations

This recommendation contains many facets. Given the diminished role of the district in New York City for the upcoming school year, our recommended approach involves convening schools to develop a comprehensive professional development plan that is aligned with school and district priorities. Determining what authority rests with the city, the district, and the schools will be critical—including developing, funding, implementing, monitoring, and evaluating. It will also be essential that schools take ownership of the core elements of the plan and determine how they will fully execute those elements. Typically, the process of bringing together district

objectives and school specific needs is an iterative process. In this case, it may be more school directed, with district audit recommendations and the DCEP used as guidance.

Currently, there are several professional development activities within the district but they are largely principal directed. Although principals will still have authority, they should focus on implementing the larger plan, with similar priorities across schools.

References

- August, D., & Calderon, M. (2006). Teacher beliefs and professional development. In D. August & T. Shanahan (Eds.), *Developing literacy in second-language learners: Report of the National Literacy Panel on Language-Minority Children and Youth* (Chapter 18). Mahwah, NJ: Erlbaum.
- Beckman, P. (2001). Access to the general education curriculum for students with disabilities. *ERIC Digest*. Arlington, VA: ERIC Clearinghouse on Disabilities and Gifted Education. Retrieved July 1, 2007, from http://www.eric.ed.gov/ERICDocs/data/ericdocs2sql/content_storage_01/0000019b/80/19/6c/3e.pdf
- Coady, M., & Latina, K. (2003). *Claiming opportunities: a handbook for improving education for English language learners through comprehensive school reform*. Providence, RI: The Education Alliance at Brown University.
- Cohen, D. K., & Ball, D. L. (1999). *Instruction, capacity, and improvement* (CPRE Research Report Series RR-43). Philadelphia: Consortium for Policy Research in Education. Retrieved July 1, 2007, from http://www.cpre.org/images/stories/cpre_pdfs/rr43.pdf
- Cohen, D. K., & Hill, H. C. (1998). *Instructional policy and classroom performance: The mathematics reform in California* (CPRE Research Report Series RR-39). Philadelphia: Consortium for Policy Research in Education. Retrieved July 1, 2007, from http://www.cpre.org/images/stories/cpre_pdfs/rr39.pdf
- Corcoran, T. (1995). *Helping teachers teach well: Transforming professional development* (Policy Brief No. 16-6/95). Philadelphia: Consortium for Policy Research in Education. Retrieved July 1, 2007, from http://www.cpre.org/images/stories/cpre_pdfs/rb16.pdf
- DuFour, R., & Eaker, R. (1998). *Professional learning communities at work: Best practices for enhancing student achievement*. Bloomington, IN: National Education Service.
- Ferguson, D. (2005). *Preparing teachers for the future*. Denver, CO: National Institute for Urban School Improvement. Retrieved July 1, 2007, from http://www.urbanschools.org/pdf/OP_Teach.pdf
- Francis, D. J., Rivera, M., Lesaux, N., Kieffer, M. & Rivera, H. (2006). *Practical guidelines for the education of English language learners: Research-based recommendations for instruction and academic interventions*. Portsmouth, NH: RMC Corporation, Center on

- Instruction. Retrieved July 1, 2007, from <http://www.centeroninstruction.org/files/ELL1-Interventions.pdf>
- Fuchs, D., Mock, D., Morgan, P., & Young, C. (2003). Responsiveness-to-intervention: Definitions, evidence, and implications from the learning disabilities construct. *Learning Disabilities Research & Practice, 18*, 157-171.
- Fullan, M. G., & Mies, M. B. (1992). Getting the reform right: What works and what doesn't. *Phi Delta Kappan, 73*(10), 745-752.
- Garcia, G. G., & Beltran, D. (2003). Revisioning the blueprint: Building for the academic success of English learners. In G. G. Garcia (Ed.), *English learners: Reaching the highest level of English literacy* (pp. 197-226). Newark, DE: International Reading Association. Retrieved July 1, 2007, from <http://www.reading.org/Library/Retrieve.cfm?D=10.1598/0872074552.9&F=bk455-9-Garcia.pdf>
- Garet, M. S., Berman, B. F., Porter, A. C., Desimone, L., & Herman, R. (1999). *Designing effective professional development: Lessons from the Eisenhower program*. Washington, DC: American Institutes for Research.
- Geiser, K. D., & Berman, P. (2000). *Building implementation capacity for continuous improvement*. Emeryville, CA: RPP International.
- Guskey, T., & Sparks, D. (1991). What to consider when evaluating staff development. *Educational Leadership, 49*(3), 73-76.
- Hall, T. (2002). *Differentiated instruction*. Wakefield, MA: National Center on Accessing the General Curriculum. Retrieved July 1, 2007, from http://www.cast.org/publications/ncac/ncac_diffinstruc.html
- Hassel, E. A. (1999). *Professional development: Learning from the best*. Oak Brook, IL: North Central Regional Educational Laboratory. Retrieved July 1, 2007, from <http://www.learningpt.org/pdfs/pd/lftb.pdf>
- Hedrick, K. (2005). Staff development for differentiation must be made to measure. *Journal of Staff Development, 26*(4), 32-37.
- Hill, J., & Flynn, K. (2006). *Classroom instruction that works with English language learners: Research-based strategies for increasing student achievement*. Alexandria, VA: Association for supervision and Curriculum Development.
- Hodges, H. L. B. (1996). Using research to inform practice in urban schools: 10 key strategies for success. *Educational Policy, 10*(2), 232-252.
- Holloway, J. (2001). Research link: The benefits of mentoring. *Educational Leadership, 58*(8), 85-86.

- Kennedy, M. M. (1998). *Form and substance in inservice teacher education*. Madison, WI: University of Wisconsin, National Institute for Science Education. Retrieved July 1, 2007, from <http://www.msu.edu/~mkennedy/publications/docs/NISE/Kennedy%20effects%20of%20PD.pdf>
- Lewis, C., & Tsuchida, I. (1998, Winter). A lesson is like a swiftly flowing river: Research lessons and the improvement of Japanese education. *American Educator*, 14–17, 50–52.
- Little, J. W. (1982). Norms of collegiality and experimentation: Workplace conditions of school success. *American Educational Research Journal*, 19(3), 325–340.
- Love, N. (2002). *Using data, getting results: A practical guide to school improvement in mathematics and science*. Norwood, MA: Christopher-Gordon.
- Marzano, R. J., Pickering, D., J., & Pollock, J. E. (2001). *Classroom instruction that works: Research-based strategies for increasing student achievement*. Alexandria, VA: Association for Supervision and Curriculum Development.
- McColskey, W., & Egelson, P. (1997). *Designing teacher evaluation systems that support professional growth* (2nd ed.). Tallahassee, FL: Southeast Regional Vision for Education.
- National Partnership for Excellence and Accountability in Teaching. (1999). *Characteristics of effective professional development*. Washington, DC: Author.
- National Staff Development Council. (2001). *Standards for professional development*. Oxford, OH: Author. Retrieved July 1, 2007, from <http://www.nsd.org/standards/index.cfm>
- Parsad, B., Lewis, L, Farris, E. (2001). *Teacher preparation and professional development: 2000* (NCES 2001-088). Washington, DC: U.S. National Center for Education Statistics. Retrieved July 1, 2007, from <http://nces.ed.gov/pubs2001/2001088.pdf>
- Ripley, S. (1997). Collaboration between general and special education teachers. *ERIC Digest*. Washington, DC: ERIC Clearinghouse for Teaching and Teacher Education. (ERIC Document No. ED409317). Retrieved July 1, 2007, from <http://www.ericdigests.org/1998-1/general.htm>
- Sparks, D. (1999). Try on strategies to get a good fit. *Journal of Staff Development*, 20(3), 56–60.
- Taylor, B. (2004). Schoolwide study groups. In D. S. Strickland & M. L. Kamil (Eds.), *Improving reading achievement through professional development*. Norwood: MA: Christopher Gordon.
- Tomlinson, C. A. (2001). *How to differentiate instruction in mixed-ability classrooms* (2nd ed.). Alexandria, VA: Association for Supervision and Curriculum Development.

- Walpole, S., & McKenna, M. (2004). *The literacy coach's handbook*. New York: Guilford Press
- Wenglinsky, H. (2000). *How teaching matters: Bringing the classroom back into discussions of teacher quality*. Princeton, NJ: Educational Testing Service. Retrieved July 8, 2007, from http://www.ets.org/Media/Education_Topics/pdf/teamat.pdf
- WestEd. (2000). *Teachers who learn, kids who achieve: A look at schools with model professional development*. San Francisco, CA: Author. Retrieved October 7, 2002, from http://web.wested.org/online_pubs/teachers_who_learn/TeachLearn.pdf
- Whitworth, J. E. (1999, June). *The effects of professional development activities on the skill acquisition of teachers*. Paper presented at the third International Conference on Teacher Education, Kfar Saba, Israel.
- Wood, F., & McQuarrie, F. (1999). On-the-job learning. *Journal of Staff Development*, 20(3), 10-13. Retrieved July 1, 2007, from <http://www.nsd.org/library/publications/jsd/wood203.cfm>
- Zehler, A. (1994). *Working with English language learners: Strategies for elementary and middle school teachers* (NCBE Program Information Guide Series, No. 19). Retrieved July 1, 2007, from <http://www.ncela.gwu.edu/pubs/pigs/pig19.htm>

Recommendation 5

Develop and implement a systematic and systemic plan for monitoring school and district practices and programs for effectiveness. This plan should include links to data, processes and tools in the following areas:

- **Curriculum implementation and instruction, as follows:**
 - **Identification of evidence to respond to the questions: “How do we know the curriculum and instruction are being implemented as intended?” “Are they having the desired effect on student performance?”**
 - **Development of tools to monitor curriculum implementation and instruction related to formative assessment data on student progress.**
- **Program effectiveness, as follows:**
 - **Identification of evidence to respond to the questions: “How do we know that a particular program is effective and having the intended impact?” “What does success look like?”**
 - **Determination of program data measures based on their intended impact on student performance or other critical success factors.**

Link to Findings

Throughout the co-interpretation process, monitoring arose as a need. District administrators (in interviews) identified the lack of a monitoring system to help assess curriculum, implementation, and program effectiveness. Later hypotheses indicated that monitoring curricular and program effectiveness is challenged by the sheer number of initiatives and programs in the district and their relatively brief lifespan. Administrators indicated, however, that these were areas of high leverage and that improvement was within in the district’s control. One additional hypothesis from co-interpretation connected the need for monitoring to the curriculum, implementation, and professional development needs in the district (please see Recommendation 4 concerning professional development). District personnel further noted that there is not a continuous cycle of examining practice at the school level—in essence, a lack of monitoring.

NCLB raised the expectation that all students can learn to one that says they can become proficient in reading and mathematics. Comparison of state, district, school, and student progress against this expectation is done by using annual assessments. This approach provides a once-a-year check on student achievement, but districts and schools need more frequent information regarding student progress. Especially where there is a high percentage of new teachers, there is a more critical role for the monitoring of student progress, implementation of instructional programs, and utilization of best practices. New teachers require frequent and consistent feedback to help identify priorities and areas that need improvement. Experienced teachers also need feedback regarding how they are doing in comparison to the rest of the school community. Regular monitoring and the maintenance of current data systems can clearly provide this feedback.

Consistent monitoring and real-time data systems allow districts and schools to prioritize and evaluate the effectiveness of instructional programs and initiatives. Human and capital resources and time are too scarce and valuable to be allocated to ineffective programs and initiatives. Annual state assessments are too infrequent and typically too broad to serve as evaluation tools for local programs and initiatives. In order to prioritize programs and initiatives for effective and appropriate allocation of human and capital resources and time allotment, schools and districts need to identify tools, processes, and measures to monitor effectiveness.

Monitoring is critical for this district so decision makers will know which interventions and practices work and which do not. In addition to informing the improvement of student proficiency, having this information will help the district redeploy its funds, energy and efforts to those initiatives that are proven to be effective and successful.

Link to Research

School districts have often played an indirect role in classroom-based instruction through the allocation of resources, hiring of staff, managing of operational and fiscal procedures, and setting of policies. Their role now includes ensuring high-quality instruction geared toward increased levels of student achievement. In their analysis of high poverty districts successfully making this transition, Togneri and Anderson (2003) detail seven strategies for increasing achievement. Among these is the building of systemwide approaches to improve instruction and guide instructional improvements; imbedded in these systems are structures for monitoring student learning and district progress. Elmore and Burney (as cited in Resnick & Glennan, 2002, p. 2) agree that focusing on instruction and learning—along with monitoring of student achievement at the individual student, classroom, school and district level—has a positive impact on student learning in urban districts.

Monitoring is a function of school leadership. In their meta-analysis of the effects of leadership practices on student achievement, researchers at Mid-continent Research for Education and Learning (McREL) identified “the extent to which the principal monitors the effectiveness of school practices and their impact on student achievement” to be one of the 21 leadership responsibilities significantly associated with student achievement (Waters, Marzano, & McNulty, 2003, p. 12). Cotton (1988) agrees, “The careful monitoring of student progress is shown in the literature to be one of the major factors differentiating effective schools and teachers from ineffective ones” (p. 1). Schmoker (1999) echoes this: “Regular monitoring, followed by adjustment, is the only way to expect success” (p. 5).

The National Association of Elementary School Principals (2001) identifies six core tasks of instructional leaders: (1) focusing on student and adult learning, (2) holding high performance expectations, (3) helping teachers understand the value of standards, (4) fostering professional collegiality and culture, (5) using data to guide decisions, and (6) tapping into community resources to improve school functioning. While instructional leadership typically is principal-centered—or principal motivated—tasks associated with instructional leadership should be dispersed among school-site staff (Elmore, 2000). Strong instructional leadership depends upon interrelated activities such as involving teachers in mentoring or professional development

presentations (Spillane, Halverson, & Diamond, 2000). In other words, instructional monitoring involves the principal working closely with on-site instructional staff.

Research recommends a balance between formative and summative assessments. While summative assessments are typically utilized at the district level, the use of formative assessments at the school level can impact both teachers' instructional decisions and student motivation and academic achievement. "High-stakes data give us only one piece of evidence about student learning. Well-designed classroom data collection and analysis, the everyday information a teacher collects, forms the backbone of student growth" (Gregory & Kuzmich, 2004, p. 10). Paying regular attention to both short term and annual measures of student proficiency allows teachers, schools, and districts to identify how close they are to reaching their goals (e.g., achieving AYP) and may suggest immediate practice adjustments.

New York City Schools Chancellor Joel Klein recently announced (Bosman, 2007) an increase in the amount of periodic tests students will have to take each year as a means of spotting "students who are falling behind":

Pupils in grades three through eight will be tested five times a year in both reading and math instead of three times as they are now. High school students, for the first time, will be tested four times a year in each subject. In the next few years, the tests will expand to include science and social studies.

Formative achievement assessments utilizing different forms of monitoring have always been available to teachers and administrators. These include observations, presentation and portfolio assessments, brief quizzes, classroom questions from teachers and from students to gauge understanding and comprehension, writing exercises, parent reports, and homework analyses.

Disaggregating of the results of formative and summative assessments allows for the monitoring of student progress along demographic lines. For instance, results garnered from formative assessments can be used as a monitoring tool in special education (IEPs, for example). If students are not showing individual improvement, adjustments to instruction or accommodations can be made. If a significant group of students is not showing progress, teachers and administrators can examine the appropriateness, adequacy and implementation of the content of IEPs.

Pruess (2003) advocates for schools and districts to determine their own "key indicators of student success," which are student-centered, measurable results that become the focal point of district and school monitoring and decision making. Determination of how the key indicators are to be measured is essential in improvement efforts. Monitoring of those measures requires data collection systems—including reporting formats, timelines, and feedback structures—that will allow the district to make appropriate adjustments and inform action planning.

There should be regular and agreed-upon measures of student proficiency that can be analyzed to determine individual student needs, specific classroom instructional decisions, and schoolwide and districtwide monitoring and decision making. The creation of group data allows teachers to monitor their own practice relative to their school and district. Group data additionally allow the

schools and districts to identify areas that need improvement and the impact or effectiveness of specific interventions (Schmoker, 1999).

Particular programs and initiatives are put into place to improve student engagement and/or academic performance. Key indicators of success need to be determined for them as well. Assuming fidelity to the program model, monitors would seek to assess whether the program is achieving its intended outcomes. If the program is not resulting in those outcomes or achieving them only to a degree, there are two alternatives: Alter the program so that it has more successful results and becomes more effective, or abandon it. Monitors would ask the questions: How does this program/initiative help move us toward improvements on our key indicators of success? What concrete measures help us see progress? If the answers are not clear, the measures are not concrete, and there is no way to rectify any gaps, the continuation of the program or initiative needs to be reconsidered. For instance, if an afterschool tutoring program includes measures that show intermittent improvements in mathematics computation for the students involved, but the periodic district and schoolwide assessments do not show progress for this group of students, adjustments need to be made to the instruction in the afterschool program. Monitoring of student achievement data from specific programs as compared to districtwide achievement measures allows teachers and leaders to inform a change to the content and/or methodology of the program and reevaluate its effectiveness.

Key indicators of student success should also be used in monitoring of instructional practices in the classroom. District 7 has already established a set of “walk-through protocols” (including learning walks, school walk-throughs, and reading and writing workshop walk-throughs). The protocols for these walks, however, have a broad range from “book baskets are labeled” to “includes learning activities with resources/materials that support rigorous instructional objectives and accommodates diverse learning needs.” Refocusing these practices on specific instructional strategies, clear indications of student progress directly related to the key indicators of success, and outcomes from data analysis would move these tools and processes from a simple compliance mode to systematically and assertively monitoring improvement.

Many models exist to promote district emphasis on instructional leadership—including structured classroom walk-throughs, principal support groups, and principal peer observations. What is most important, though, is that the district models to site leaders, and site leaders model to teachers, the critical importance of effective instruction (Blase & Blase, 2000, Fuchs & Fuchs, 2005). Analysis of group results would help the district identify and foster excellent practices as well as identify areas requiring intervention. Procedures that allow for school principals and teacher leaders to review data, compare understanding, and plan for intervention and feedback will build and broaden leadership capacity as it relates to instruction. This combined focus on student learning and improvement in instruction are characteristics of improved school districts (Shannon & Bylsma, 2004).

The theme of identifying key indicators of success and building tools and systems to monitor those indicators is a unifying approach to school and district improvement. Districts that have put in place systemic and systemwide approaches that include a clear vision focused on student learning and improving instruction, supported by multi-measure accountability and data systems

and coherent profession development designed to develop districtwide strategies to improve instruction, have improved student achievement (Togneri & Anderson, 2003).

Implementation Considerations

Implicit in Recommendation 5 are various steps. For instance, the identification of key indicators of student success serves to drive the design of monitoring processes, tools and data systems. Using data to assess needs, measure improvement and make decisions will likely require additional training, investment in collection tools and processes, and will create opportunities for teacher and school staff to collaborate.

This recommendation also may require well-focused redefinition of the priorities and practices of school and district personnel. The deepening of tasks from compliance routines to practices that inform reflection and progress must include disciplined and committed follow-through and the development of a comprehensive system for data collection, analysis, and synthesis. Creating “multi-measure accountability systems that specify desired student and school outcomes” (Togneri & Anderson, 2003, p. 51) strengthens every aspect of the school and district success.

District 7 needs to determine its own answers to the following:

- What do we want to know about our students, our programs/initiatives and our effectiveness?
- What should be monitored and in what priority order? (For example, student performance and proficiency outcomes, program effectiveness, translation of professional development learning into classroom practice)
- How should these be measured and monitored?
- What will the monitoring look like?
- How frequently is it effective and/or feasible to monitor these areas?
- Who will do the monitoring?
- What training will they need to conduct effective and efficient monitoring?
- What will monitoring tell us?
- What can/will we do with that information?

Analysis of current data and reporting systems within the district and the extent to which they can be utilized or retooled in shaping a comprehensive plan for monitoring and improving student achievement and instruction is a critical initial step. This may require determining new assessments, organizing data collection systems and structures across the district, and outlining processes for analysis and feedback. Identification of key indicators of student success and multiple measures for these indicators should also be included. The weaving of these key indicators into instructional programs and initiatives as well as walk-through protocols and procedures will require systemic and systematic strategic coordination. Key decision makers in the district and its schools would want to collaborate in the adaptation of current monitoring procedures that are effective and the design, development and implementation of a well-

integrated, efficient, and accurate monitoring system than will provide continuous assessment of the relationship of district and school-based practices to student academic outcomes.

References

- Blase, J., & Blase, J. (2000). Effective instructional leadership: Teachers' perspectives on how principals promote teaching and learning in schools. *Journal of Educational Administration*, 38(2), 130–141.
- Bosman, J. (2007, May 31). New York City expands test program in schools. *The New York Times*.
- Cotton, K. (1988). *Monitoring student learning in the classroom*. Portland, OR: Northwest Regional Educational Laboratory. Retrieved July 1, 2007, from <http://www.nwrel.org/scpd/sirs/2/cu4.html>
- Elmore, R. F. (2000). *Building a new structure for school leadership*. Washington, DC: Albert Shanker Institute. Retrieved July 1, 2007, from <http://www.shankerinstitute.org/Downloads/building.pdf>
- Fuchs, D., & Fuchs, L. (2005). Responsiveness-to-intervention: A blueprint for practitioners, policymakers, and parents. *Teaching Exceptional Children*. Washington, DC: Office of Special Education Programs. Retrieved July 1, 2007, from http://www.advocacyinstitute.org/resources/TEC_RtIblueprint.pdf
- Gregory, G. H., & Kuzmich, L. (2004). *Data-driven differentiation in the standards-based classroom*. Thousand Oaks, CA: Corwin Press.
- National Association of Elementary School Principals. (2001). *Leading learning communities: NAESP standards for what principals should know and be able to do. A guide for those who care about creating and supporting quality in schools*. Alexandria, VA: Author.
- Preuss, P. (2003). *School leaders guide to root cause analysis: using data to dissolve problems*. Larchmont, NY: Eye on Education
- Resnick, L., & Glennan, T. (2002). *Leadership for learning: A theory of action for urban school districts*. Pittsburgh, PA: Institute for Learning. Retrieved July 1, 2007, from <http://ifl.lrdc.pitt.edu/ifl/media/pdf/TheoryofActionResnickGlenna.pdf>
- Schmoker, M. (1999). *Results: The key to continuous school improvement*. Alexandria, VA: Association for Supervision and Curriculum Development.
- Shannon, G. S., & Bylsma, P. (2004). *Characteristics of improved school districts: Themes from research*. Olympia, WA: Office of Superintendent of Public Instruction. Retrieved July 1, 2007, from <http://www.k12.wa.us/research/pubdocs/DistrictImprovementReport.pdf>

- Spillane, J. P., Halverson, R., & Diamond, J. B. (2000). *Distributed leadership: Toward a theory of leadership practice*. Evanston, IL: Northwestern University, Institute for Policy Research.
- Togneri, W., & Anderson, S. E. (2003). *Beyond islands of excellence: What districts can do to improve instruction and achievement in schools*. Washington, D.C: Learning First Alliance. Retrieved May 4, 2007, from <http://www.learningfirst.org/publications/districts/>
- Waters, J. T., Marzano, R. J., & McNulty, B. A. (2003). *Balanced leadership: What 30 years of research tells us about the effect of leadership on student achievement*. Aurora, CO: Mid-continent Research for Education and Learning.

Appendix. Data Map

District 7 Co-Interpretation Key Findings and Hypotheses

During the co-interpretation process for District 7, participants analyzed eight individual reports (data sets). Participants identified findings from across the data sets under each of the areas examined through the audit. They worked together to identify which findings were most significant. Then they articulated hypotheses on the root cause of each key finding. The following data map documents the results of this co-interpretation process.

The data map contains all of the findings—including key and critical key findings—by guiding question if applicable. During the April 2007 co-interpretation meeting, Learning Point Associates staff guided district and school-level staff through a process to develop findings—based on their review and interpretation of the data sets listed below. The key findings were developed by organizing the findings according to a common theme, synthesizing the information across data sets, and then developing consolidated key findings to incorporate the purpose and intent of the individual findings. Participants then voted to prioritize the consolidated findings, to create critical key findings, using the criteria listed below:

- Does the critical key finding identified reflect one of the most critical problems faced by the district?
- If resolved, will student achievement improve sufficiently to move the district out of corrective action?
- If resolved, will there be a measurable, positive impact systemwide?

Participants were then guided in the following process:

- Identify a set of hypotheses or root causes that are supported by evidence for each key finding.
- Determine the significance of the hypotheses based on the following criteria:
 - Does the district have control to enact change associated with the hypothesis?
 - If the hypothesis is addressed, will it effect change?
 - Does the hypothesis address at least one of the 16 guiding questions?
 - Do the data exist, or can data be generated to support the hypothesis?
- Vote to prioritize they hypotheses by identifying the top-rated hypotheses for use in developing recommendations for the district, using the following criteria: For each question answered, the “+” symbol indicates “yes,” the “-” symbol indicates “no,” and “0” indicates “don’t know” or “no change.”

The data map organizes the findings under four themes that incorporate the applicable guiding questions. District 7 staff identified seven critical key findings. Data sources are provided for individual findings, and the final votes for critical key findings are indicated. Several of the key findings were combined across themes. The themes and data sources are as follows:

Theme 1: Achievement and Accountability

- GQ1: Where is the district struggling most in terms of content areas and demographic groups over time?
- GQ12: Is there a process in place within the district to monitor the effectiveness of instructional programs?
- GQ16: Do district and school plans prioritize the needs identified by NCLB?

Theme 2: Standards and Curriculum

- GQ2: Are teachers teaching the written curriculum in their classrooms
- GQ3: Does the district provide materials that support the implementation of the written curriculum and are they used?
- GQ4: Are the teachers teaching to the state standards?
- GQ5: Is the taught curriculum aligned with the state standards?
- GQ6: Is the written curriculum aligned with the state standards?
- GQ7: Do all students have access to a rigorous and challenging curriculum?

Theme 3: Instruction and Assessment

- GQ8: What does the district / school do for students who are not scoring at proficient levels according to NCLB (within and outside the school day)
- GQ9: Does classroom instruction maximize the use of best practices and research based practices?
- GQ10: Do teachers identify and provide appropriate additional instruction for students who are not proficient?
- GQ11: Do teachers use assessment data to inform instruction?

Theme 4: Professional Development

- GQ13: Is the professional development (regional district, school) of high quality and focused on the content/pedagogical areas of need?
- GQ14: Are teachers translating professional development into effective classroom practice?
- GQ15: Are there sufficient supports in place for new teachers?

Data Sources

- DR—Document Review
- ELACA—ELA Curriculum Alignment
- ELL—English Language Learners
- GQ—Guiding Question
- IP—Instructional Practice
- INT—District and School Interviews
- MCA—Mathematics Curriculum Alignment
- OBS—Observations
- SA—Student Achievement Data
- SE—Special Education
- SEC—Surveys of Enacted Curriculum

District 7 Co-Interpretation: Critical Key Findings

Theme 1: Achievement and Accountability

CRITICAL KEY FINDING #1			Source & Page
1. At the district level, there is a lack of a monitoring system that results in districtwide compilation, analysis, and evaluation of the effectiveness of curricula, their implementation and next steps for improvements. Final votes: 18	Findings	1. At the district level, there is a lack of a monitoring system that results in districtwide compilation, analysis, and evaluation of the effectiveness of curricula, their implementation and next steps for improvements.	District Administrators
Hypotheses			Votes
1. There are so many different initiatives and programs districtwide that it is difficult to monitor.			3 (_+++)
2. Change in leadership at many schools in recent years has meant that programs have shifted a lot.			1 (0+00)
3. Sometimes programs do not remain around long enough to measure effectiveness.			4 (++++)
4. Curricula and practices are too varied across the district, and capacity to build a data base needs to be addressed.			3 (-+++)
5. Curricula needs to be established in order for programs to be implemented and evaluated for effectiveness – and then assessed (combined)			4 (++++)
6. Need for building school capacity.			3 (0+++)
7. Lack of clear expectations on everyone’s part as to how the curriculum is standards based.			- (???)
8. Unidentified / unrecognized gaps in the curriculum.			2 (0+++)
9. Citywide mandates become overwhelming and put other important issues on the back burner.			2 (++00)
10. Standards and curricula are not explicit and clear even at the district and regional level.			3 (0+++)
11. Principals are not clear about what to look for in classrooms in order to monitor.			2 (++00)
12. District policy re: SPED and ELL needs to be explicit and clear.			4 (++++)

Theme 1: Achievement and Accountability (Continued)

CRITICAL KEY FINDING #2			Source & Page
<p>2. Schools are not consistently held accountable for monitoring their professional development, and there is little evidence to support the relationship between professional development and instructional impact.</p> <p>Final votes: 12</p>	Findings	<p>1. Schools are not consistently held accountable for monitoring their professional development, and there is little evidence to support the relationship between professional development and instructional impact</p>	<p>INT p. 36</p>
Hypotheses			Votes
1. Administrations lack pedagogical and content knowledge to support development of teachers.			4 (++++)
2. There are impediments to effective and efficient coaching – different problems in different schools.			4 (++++)
3. Teachers not always matched optimally to professional development opportunities.			2 (0++0)
4. PD options are not always based on school needs/data.			4 (++++)
5. Not using a backward by design / long-range approach for professional development.			4 (++++)
6. Principals tend to delegate their responsibilities for accountability rather than leading the change.			1 (0+00)
7. Not all levels are being engaged in the same professional development. They do not know and can't support what teachers are doing.			2 (0++0)
8. Teachers are not “buying-in” to the idea that they should be lifelong learners.			0 (0000)
9. Logistics around sending teachers out of the building.			1 (-+0-)
10. Administration does not monitor implementation of professional development.			0 (000-)
11. No system for turnkeying professional development.			0 (0000)
12. Monitoring in another layer of paperwork that takes school leaders away from classrooms.			0 (0000)
13. Teachers have difficulty pulling out the practicality / making connections between professional development and day-to-day instruction.			4 (++++)
14. Teachers can be overdeveloped – hear multiple messages.			0 (00--)
15. Some administrators lack pedagogical content knowledge to support development of teachers.			3 (+++0)

16. Some principals tend to delegate their responsibilities for accountability rather than leading the charge.	0 (0-00)
17. Teachers do not hold themselves accountable for the achievement of their students.	0 (0-00)
18. Lack of clarity in terms of necessary and consistent professional development geared towards schools' needs.	4 (++++)
19. Professional development is not school/job embedded among collaborative community of practices.	4 (++++)
20. Lack of continuous cycle of examining practice at school level.	4 (++++)

Theme 1: Achievement and Accountability (Continued)

CRITICAL KEY FINDING #3			Source & Page
<p>3. Attracting and retaining high-quality school-based personnel at all levels is a critical issue for the district. High turnover adversely affects school capacity and student achievement.</p> <p>Final votes: 6</p>	FINDINGS	<p>1. Attracting and retaining high-quality school-based personnel at all levels is a critical issue for the district. High turnover adversely affects school capacity and student achievement.</p>	<p>District Administrators</p>
Hypotheses			Votes
1.		High poverty, percent of ELL and SWD students contribute to high stress and frustration in the classroom that's causing high teacher turnover rate, etc.	2 (0+0+)
2.		Hiring of Teach for America and Teaching Fellows teachers who have no commitment to stay.	3 (-+++)
3.		Lack of school communities centered around deep discovery around teaching and learning.	4 (++++)
4.		Difficult conditions in which to teach – large class size, small classrooms, etc.	3 (++0+)
5.		Many new teachers are given the most challenging classes to teach.	2 (+++0)
6.		Cultural gap between teachers and the students they teach.	0 (0-00)
7.		Schools need to build a professional community of teachers as learners and researchers.	4 (++++)
8.		A sense of lack of support with materials, professional development, and behavior issues.	4 (++++)
9.		Seek higher pay outside New York City.	1 (000+)
10.		Outside personal life – marriage, children, etc... life-long commitment to teaching at a young age.	0 (0000)
11.		Teachers need to see themselves as a professional community of learners and researchers.	0 (Conclusion vs. Hypothesis)
12.		Colleges and universities are not training students to the realities of being a teacher.	2 (0++0)
13.		Second-career educators and international educators coming from different educational backgrounds.	2 (+-0+)
14.		Affect – feeling appreciated.	3 (++0+)

Theme 2: Standards and Curriculum

CRITICAL KEY FINDING #4			Source & Page
<p>4. There are unclear district-level guidelines and expectations for the ELA K–12 curriculum. There are many programs, but they are not clearly aligned to standards and leave gaps in content and cognitive expectations (i.e., speaking and listening, vocabulary and word knowledge, background knowledge, handwriting, and mechanics). (Curriculum Alignment, Document review, SPED, Interviews).</p> <p>Final votes: 9</p>	FINDINGS	1. There is a lack of agreement on what constitutes a curriculum	INT p. 31
		2. Only the teachers following TC [Teachers College reading and writing program] and mathematics teachers were aware of a required curriculum	INT p. 4
		3. Some teachers expressed opposition to finding out or implementing a required curriculum	INT p. 5
		4. Curricula exist, no evidence of monitoring expectations for consistency over time or across grades. Clear communication of expectations/policies is missing	DR p. 4, 7, 9, 12
		5. Low evidence of an established curriculum in secondary schools. There seems to be an ELA curriculum in elementary schools	DR p. 4
		6. Grade 4 ELA: Handwriting not addressed, weak crafting writing through vocabulary and mechanics, limited vocabulary instruction and speaking skills	ELACA p. 6
		7. Grade 6 Reading: No evidence was found that word recognition and background knowledge and vocabulary were addressed in the district curriculum	ELACA p. 2
		8. Grade 2 Listening: One out of 4 literacy competencies addressed; Speaking: 5 out of 18 literacy competencies addressed	ELACA p. 7
		9. Grade 10 Writing: There are 10 performance indicators in the area of composition. Evidence was found for 4 out of 10 (40 percent)	ELACA p. 6
		10. Grade 2 Listening: 3 out of four literacy competencies addressed. Missing evidence of read-aloud	ELACA p. 7
		11. Grade 2 Speaking: 4 out of 8 literacy competencies addressed. Missing use of vocabulary, conventional grammar, speak with expression, and offer feedback	ELACA p. 7
		12. CABL is a great resource for teachers. It helps them to know how to structure their time in the balanced literacy approach	ELACA p. 9
		13. Grade 2: 4 literacy competencies not addressed out of 31 for reading	ELACA p. 3
		14. Grade 2: 3 literacy competencies out of 16 not addressed	ELACA p. 6

Theme 2: Standards and Curriculum (Continued)

CRITICAL KEY FINDING #4 (CONTINUED)	Findings	Source & Page
	15. Grade 2 writing, 3 out of 4 areas in writing addressed. No evidence for handwriting. Demonstrate and explain level'	ELACA p. 6
	16. Grade 8-No evidence was found for the area of word recognition, Background Knowledge and Vocabulary development, and Fluency in the district curriculum.	ELACA p 2
	17. Grade 6 and 8 listening and speaking—Missing literacy competencies in listening speaking are key to state test standards for Grade 6	ELACA p 7
Hypotheses		Votes
	1. Citywide, districtwide, schoolwide curricula need to be developed.	3 (-+++)
	2. Curriculum vs. program – needs to be clearly defined.	2 (-++-)
	3. Assess ELA programs (America’s Choice, AUI, SS, ES, TC) being used by schools and develop curriculum from outcomes.	1 (-0+0)
	4. A deep/close study of standards (is needed).	3 (+++-)
	5. Examine word study programs for K–5. Most programs targeted K–3.	1 (+-00)
	6. Focus on ELA testing limits speaking standard. Listening is mostly read aloud.	3 (-+++)
	7. Teachers have to be curriculum writers for everything.	0 (----)
	8. There is a lack of administrative understanding of the level of expectations.	4(++++)
	9. Assumption is that teachers know what to teach and can fill in the gaps.	3(0+++)
	10. Lack of clear expectations about what and how students learn in ELA.	4(++++)
	11. There is not agreement as to what really constitutes best practices in literacy.	4(++++)
	12. Need for specific student outcomes across grades, schools, and district.	4(++++)
	13. Clearer entry and exit expectations for each grade (needed).	4(++++)

Theme 2: Standards and Curriculum (Continued)

CRITICAL KEY FINDING #5			Source & Page
<p>5a. The middle school mathematics curriculum is not well-aligned with the state standards in the measurement & geometry, number sense & operations strands at the 8-grade level. (Findings 1-3)</p> <p>5b. The city-issued mathematics pacing calendars do not address most of the mathematics process strands (from the state standards) in an explicit way, although they do address the content standards. The curricula have the process standards embedded, but teachers can teach the content devoid of process. (Findings 3-6)</p> <p>Final votes: 3 (sufficient consensus)</p>	FINDINGS	1. Weak alignment at Grade 8 to number sense and operations, as well as measurement, with no reference to the single measurement indicator.	MCA p. 14
		2. There is a concern with the low degree of alignment in Grade 6 in terms of measurement, and at Grade 8 in number sense and measurement.	MCA p. 4
		3. There is weak alignment at Grade 6 to the measurement and geometry strands in the New York state standards	MCA pp. 11-12
		4. Kindergarten teachers appear not to be incorporating the process standards into their mathematics instruction	SEC p. 13
		5. City pacing guides are not explicit about mathematics process strands K–12	MCA pp. 3, 4, 7, 8, 10, 11, 12, 13
		6. The HS curriculum is in the process of changing to align with the 2005 standards, over the next 3 years.	MCA p. 16
Hypotheses (Combined for 5a and 5b)			Votes
1. Processes are not deemed as important as content.			4(++++)
2. It is assumed that every teacher knows the processes for understanding math.			1 (0-+0)
3. Teachers are not themselves comfortable with mathematics and have difficulty teaching it.			2 (-++0)
4. Changing mathematics curricula has affected the alignment with standards.			0 (0-0-)
5. It's all about answers and test taking. Teachers feel lack of time to deal with process.			2 (-++0)
6. Teachers lack content knowledge for developing mathematical thinking in children.			3 (+++-)
7. Teachers are comfortable teaching the way they learned – a mind-set			3 (-+++)

8. Not enough PD opportunities on how to teach content standards.	? (----)
9. Too much emphasis on “how to” instead of “why”.	2 (---)
10. Some teachers know the processes for understanding math, but others do not know the importance of applying process standards.	1 (--+0-)

Theme 3: Instruction and Assessment

CRITICAL KEY FINDING #6			Source & Page
<p>6. Multiple data sources indicate that direct instruction and individual seatwork is the predominant instructional strategy used by teachers; there is indication of very limited use of best practices and research-based practices. (K–12 Math and ELA Obs., ELL Obs. + ELL Int.)</p> <p>Note: All findings for Guiding Question #9 were combined into one key finding which culminated in the critical key finding above.</p> <p>Final votes: 7</p>	FINDINGS	1. Highly Academic class time was frequently or extensively observed (70%), however it seems to be teacher directed instruction.	Math OBS p. 18
		2. Under Instructional Orientation, 67% was observed to be direct instruction.	Math OBS p. 18
		3. The 9–12 Math observation shows that independent seatwork occurs frequently.	Math OBS p. 18
		4. Grades K–8 math observation data shows that independent seatwork was observed frequently or extensively 68.2% of time.	Math OBS p. 14
		5. There appears to be more solving of word problems from a text or worksheet than solving narrative math problems.	Math DR p. 19
		6. More than half of the respondents spent 25% or more of their time on computerized exercises or procedures from a text book or worksheet.	Math DR p. 14
		7. More than ¾ of respondents spend more time than 25% of their time demonstrating problems.	Math DR p. 13
		8. Limited to moderate frequency of instruction occurring. Most instruction is direct instruction – 33.3%.	ELA OBS p. 10
		9. No classrooms observed without direct instruction.	Math OBS p. 10
		10. Little discussion, student inquiry, or project-based work observed.	ELA OBS p. 7
		11. 83% of student work is independent seatwork – Grades 9–12.	ELA OBS p. 10
		12. Great variation in materials to supplement ELA curriculum for ELLs.	Int p.11-12
		13. ELL program classes demonstrate more strategies that facilitate ELL learning.	ELL p. 32
		14. All teachers incorporate language goals in lessons almost all exclusively vocabulary.	ELL p. 19
		15. Common planning time is when ELL and ELA / general ed teachers collaborate and whenever else they can.	ELL p. 14

Theme 3: Instruction and Assessment (Continued)

CRITICAL KEY FINDING #6 (CONTINUED)	Findings	Source & Page
<p>6. Multiple data sources indicate that direct instruction and individual seatwork is the predominant instructional strategy used by teachers; there is indication of very limited use of best practices and research-based practices. (K–12 Math and ELA Obs., ELL Obs. + ELL Int.)</p> <p>Note: All findings (1-47) for Guiding Question #9 were combined into one key finding which culminated in the critical key finding above.</p>	16. ELL engaged more often in small groups or in paired activities.	ELL p. 23
	17. ELL engaged more often in developing understanding and were exposed to culturally relevant content.	ELL EO p. 24
	18. General ed more often engaged in whole class and independent work.	ELL p. 23
	19. All incorporate language goals in their lessons taught in English.	ELL p. 14
	20. Kindergarten teachers are not using math literature at the K level.	Math SEC p. 13
	21. A majority of respondents have their students working individually over 60% of the time.	Math SEC p. 16
	22. General education math were weak in management and/or instructional content.	ELL p. 30
	23. Writing composition, sustained reading and inquiry research were not observed in high school math.	Math OBS 9–12 p. 18
	24. There was little discussion, student inquiry or project-based learning in high school ELA classes.	ELA OBS 9–12, p. 10
	25. General education classes showed little or no evidence of differentiation of instruction or clarity of purpose and content for all students.	ELL p. 22
	26. ELL classes were slightly more skill based while general ed classes were slightly more conceptual learning.	ELL p. 24
	27. General ed classes delivered significantly more whole class instruction than in the ELL program classes. However, classroom management consumed a greater amount of time in the ELL program classrooms than in the general ed classrooms.	ELL p. 30
	28. Student discussion was rarely observed in K–8 ELA classrooms.	ELA OBS p. 6
	29. Sustained reading was observed occasionally in the ELA K–8 classrooms	ELA K–8 OBS p. 6
ELLs and SWDS needs were not being met by the curriculum. There was evidence of a lack of curriculum adaptations for SWDS.	INT p. 4	

Theme 3: Instruction and Assessment (Continued)

CRITICAL KEY FINDING #6 (CONTINUED)	Findings	Source & Page
<p>6. Multiple data sources indicate that direct instruction and individual seatwork is the predominant instructional strategy used by teachers; there is indication of very limited use of best practices and research-based practices. (K–12 Math and ELA Obs., ELL Obs. + ELL Int.)</p> <p>Note: All findings (1-47) for Guiding Question #9 were combined into one key finding which culminated in the critical key finding above.</p>	30. Experiential, hands-on learning was not observed or rarely observed more than 50% of the time in K–8 math classes.	Math OBS K–8 p. 14
	31. Independent inquiry/research was rarely or not observed 99.9% of the time.	Math OBS K–8 p. 14
	32. ELL program classes were more often engaged in small group or pair activities while general education classes engaged in more independent work.	ELL p. 30
	33. The low % of instructional time being used does not correlate with the state high expectations.	INT p. 29
	34. Ability grouping, multiage classes, and work centers were rarely observed.	Math OBS p. 14
	35. Team teaching, cooperative learning, and individual tutoring were rarely observed.	Math OBS p. 14
	36. Higher level questions and teacher acting as coach facilitator were occasionally observed	Math OBS p. 14
	37. Integration of subject areas, project based learning, and parent involvement was not observed.	Math OBS p. 14
	38. No reading and writing was observed in the math classes.	Math OBS p. 18
	39. Student engagement was observed to be moderately high however this appears to be mostly in independent seatwork.	Math OBS
	40. Student discussion was rarely observed.	Math OBS p. 18
41. Systematic individualized instruction was rarely or not observed 100% of the time.	Math OBS p. 14	

Theme 3: Instruction and Assessment (Continued)

CRITICAL KEY FINDING #6 (CONTINUED)	Findings	Source & Page
<p>Note: All findings (1-47) for Guiding Question #9 regarding use of best practices were combined into one key finding which culminated in the critical key finding above.</p>	42. Technology as a learning tool was not observed in math instruction.	Math OBS p. 14
	43. No experiential, hands-on learning or systematic individualized instruction, and little inquiry or student discussion observed.	ELA OBS p. 11
	44. High student engagement No self assessment observed 34.8% of the time curriculum based teaching and learning were observed Low level of focused class time	ELA OBS p. 6
	45. Plans for research based instructional practices and best practices and implementation monitoring are provided but there is no evidence that implementation and monitoring of research based instructional strategies and best practices took place.	DR p. 9
Hypotheses		Votes
1. Lack of PD : -Use of data to guide grouping, instruction, etc. -Limited coaching/other support -Teachers feeling overwhelmed		4 (++++)
2. Teachers' lack of experience: -Limited understanding of conceptual development -Very small toolkit		2 (+_?+)
3. Lack of monitoring and follow-up of teacher instruction.		4 (++++)
4. Low teacher buy-in to differentiated instruction.		1 (0+00)
5. Classroom management concerns (should be addressed)		3 (++0+)
6. Teachers teach as they were taught.		4 (++++)
7. Lack of clarity/follow-through about expectations (i.e., guided reading groups, problem solving in math...)		4 (++++)
8. Teachers lack understanding as to when to use different instructional learning strategies.		4 (++++)

9. It's easier to "teach" this way, not necessarily for students to learn.	0 (0000)
10. Deep-seated beliefs that this is how people learn.	1 (0+00)
11. Lack of exposure to innovative teaching methods.	4 (++++)
12. It's seen as "easier" to keep kids' behavior under control (no noise, potential for conflict, etc) Fear that classroom management and control would suffer.	3 (++0+)
13. Thought that too much work for teachers to do it differently.	0 (0000)
14. Change requires taking risks. Teachers are concerned and thinking, "what will this do to the test results?" What if I fail? What if someone sees me doing this wrong? (thoughts of teachers)	0 (00000)
15. Lack of PD in best practices and differentiation.	4 (++++)
16. Lack of "internal voice" – teachable moments.	-----
17. Teachers lack the self discipline to become life long learners.	-----

Theme 3: Instruction and Assessment (Continued)

CRITICAL KEY FINDING # 7			Source & Page
<p>7a. Special Ed and ELL teachers believe they have the knowledge, support and materials to provide additional instruction to students, whereas general education teachers do not feel confident in working with identified ELL and Special Ed Students.</p> <p>GQ 10 (Findings 1-7)</p> <p>Final votes: 6</p>	FINDINGS	1. Evidence indicates that needs of special populations are not at a moderate or adequate level.	INT. p. 11
		2. Supplemental materials are widely available and used by ELL program teachers.	ELL p. 19
		3. Supplemental materials for ELLs are not available to general ed teachers.	ELL p. 19
		4. All adjust instruction in numerous ways for ELLs.	ELL p. 14
		5. ELL program classes describe facilitative teaching strategies, vocabulary was more often highlighted in ELL program classes.	ELL p. 32
		6. General education teachers stated that they had little or no familiarity with their students' IEPs.	SE p. 8
		7. There was no evidence that teachers understood what accommodations/modifications were and how to implement the accommodations/modifications.	SE p. 9

Theme 4: Professional Development

CRITICAL KEY FINDING # 7 (CONTINUED)	Findings	Source & Page
7b. Teachers have stated that they have limited opportunities to participate in PD that will enable them to meet the academic needs of our ELL and Sped students. (The findings to support this key finding came from both guiding questions 13 and 14).	8. There is a lack of proper training for sped teachers. There is more for ELL teachers.	INT p. 31
	9. There is a wide range of PD mentioned in the ELL interviews. However, there is a difference between what is available for ELL teachers and general ed teachers.	ELL p. 20
	10. It appears that most PD is on the general education curriculum implementation.	ELL p. 15
	Note: Hypotheses for Critical Findings 7a and 7b were combined across Themes 3 and 4, guiding questions 10, 13 and 14). (7a refers to Instruction and Assessment. 7b refers to PD).	
Hypotheses		Votes
1. Teachers are reluctant or unable to participate in after school, weekend PD opportunities.		1 (0+--)
2. Professional development is not offered in the specialized areas of SPED/BIL (Is it offered specifically to general ed teachers?)		4 (++++)
3. The teachers/school administration prioritizes PD workshops/opportunities.		2 (-++?)
4. Lack of awareness of PD opportunities.		2 (+++)
5. Difficulty in sending teachers to PD due to coverage situation.		1 (0/- +++)
6. System not in place, i.e. common planning time.		2 (+++)
7. Are structures in place for classroom and specialist teachers to co-plan; inquire into best practices; and share professional knowledge?		2 (+++)
8. PD doesn't always happen outside of school. It can happen collaboratively while teaching.		0 (----)
9. Do school leaders/staff developers and coaches know how to facilitate professional dialogue?		0 (----)
10. Lack of understanding about what the needs of their students are.		4 (++++)
11. It's hard for schools to release teachers and teachers are reluctant to do this after school or during vacations.		1 (0+--)
12. Schools are not communicating needs to District or Region.		0 (0000)
13. Teachers exercise the right to opt out of PD in their own time.		0 (----)
14. Undercurrent that "these kids" are not "my concern".		0 (----)
15. Teachers think there is magic pill – when good teaching is good teaching.		0 (----)

District 7-Co-Interpretation: Key Findings

Theme 1: Achievement and Accountability

KEY FINDINGS		Findings	Source & Page
<p>There is no data that allows the district to assess and compare the effectiveness of the different programs and approaches within ELL. This appears to be the case also for spec ed, because evaluated instructional models are not driving a cohesive approach.</p> <p>GQ12</p>	12.1	No one was aware of any comparative data among groups for ELLs or comparisons of ELL and general education outcomes.	ELL p. 21 SE p.15
	12.2	No knowledge of comparative evaluation of program offerings to ELLs (for ELL achievement)	ELL p. 16 SE p. 15

KEY FINDINGS		Findings	Source & Page
<p>Within schools, there is a lack of communication from administrators to teachers (regardless of dept) about ELL and Sped policies, academic expectations, and assessment. Also, there is a lack of lateral communication between general education and special needs teachers.</p> <p>GQ16</p>	16.1	There is inadequate communication regarding the implementation of the district’s improvement plan, and inadequate opportunity for their participation in the development and implementation of the plan.	SE p. 25
	16.2	City needs to look at a reducing self-contained classes.	INT p. 27
	16.3	High school SWDs are more isolated.	INT p. 27
	16.4	Teachers were not aware of any specific LAP at the district or school level.	ELL p. 13
	16.5	Teachers are not informed about who ELL students are.	INT p. 11
	16.6	Only 27% of the teachers developed or implemented accommodations based on student need.	SE p. 12
	16.7	There appears to be no district process for ensuring that IEPs are fully implemented although we are unsure if it’s a district function, but rather a regional function.	SE p. 9

Theme 2: Curriculum and Instruction

KEY FINDINGS		Findings	Source & Page
<p>ELLs are following the same curricula and are held to same standards as general education. Curriculum Alignment, SEC</p> <p>GQ7</p>	7.1	ELL program classrooms were somewhat more likely and align with curriculum mandates.	ELL p. 22
	7.2	Both general ed and ELL programs engaged in mostly or primarily conceptual instruction.	ELL p. 32
	7.3	ELLs have access to the regular curriculum and not diminished.	ELL /DI p. 7
	7.4	General ed ELA classes implemented core curriculum interactively and engagingly, supporting individual learners	ELL/SO p. 29
	7.5	Curriculum for ELLs is comparable to that of general ed.	ELL/EI p. 12
	7.6	ELLs are being prepared for Regent’s exam.	ELL/SI p. 18
	7.7	AP Spanish classes populated by ELLs (have enrichment in L1)	ELL/SI p. 18
	7.8	All teachers said ELLs held to the same standards as general ed.	ELL/SI p. 18
	7.9	All ELL program teachers have no specific curriculum for ELLs. They all follow general ed curriculum.	ELL/EI p. 11
	7.10	Math curriculum follows a specific text book – clear, uniform – required curriculum.	ELL/SI p. 18
	7.11	ELL program class somewhat more alignment with curriculum mandates, stated purpose and meeting developmental levels.	ELL/EO p. 22

Theme 2: Curriculum and Instruction (Continued)

KEY FINDINGS		Findings	Source & Page
<p>There is not a range of cognitive expectations in the ELA and Math curriculum. Curriculum Alignment, SEC</p> <p>GQ7</p>	7.12	Grade 10-Listening and speaking-The examination of the Grade 10 Listening and Speaking curriculum indicates that a range of cognitive demands (demonstrate// explain through generate/create is needed to meet the Grade 10 expectations	ELL p. 7
	7.13	Grade 2 - There is a misalignment between Grade 5 New York state assessment and the Grade 5 teacher response for comprehension at the demonstrate and explain level	SEC p. 14
	7.14	There is a significant misalignment between what the New York state Grade 3 assessment require for comprehension at the demonstrate and explain level	SEC p. 12
	7.15	Grade 5—The standards require greater emphasis in vocabulary in recall and demonstrating than shown in district level instruction	SEC p. 14
	7.16	There is an between teacher response and Grade 5 New York state standards for writing process and writing components at the evaluate and create level	SEC p. 13
	7.17	Grades K–1 on the Grade 1 standard map, comprehension is on the demonstrate, investigate, and evaluate level are stressed strongly, yet on the K–1 district level, comprehension on the investigate and evaluate level are slightly stressed	SEC p. 9
	7.12	Grade 10-Listening and speaking-The examination of the Grade 10 Listening and Speaking curriculum indicates that a range of cognitive demands (demonstrate// explain through generate/create is needed to meet the Grade 10 expectations	ELL p. 7
	7.18	Language study at the demonstrate level on the Grade 1 New York state standards and K–1 teacher responses are aligned	SEC, p. 9
	7.19	The Grade 2 standards require emphasis on the investigate level for listening and viewing as well as speaking and presenting whereas teacher responses show limited emphasis on these topics	SEC, p. 10
	7.20	Grade 3—On the standard speaking and presenting under demonstrate is highly stressed, yet on the district level it is lightly stressed	SEC, p. 11

Theme 2: Curriculum and Instruction (Continued)

KEY FINDINGS (GQ7 CONTINUED)		Findings	Source & Page
	7.21	Grade 3—On the standard writing components in the demonstrate expectation it is highly stressed, yet on the district level it is lightly stressed	SEC p. 11
	7.22	Grades K–1—On the Grade 1 standard, speaking and presenting in the create level is stressed strongly, yet in the district level it is slightly stressed	SEC p. 9
	7.23	Grade 5—On the standard level the writing process, and composition and application are stressed under demonstrate yet on the district level it is spread out with the same emphasis	SEC p. 13
	7.24	Grade 2—On the standard level comprehension in investigation is strongly stressed, yet on the district level comprehension is stressed moderately through out all of the cognitive expectations	SEC p. 10
	7.25	Grade 5—In the assignment level the focus is on the comprehension, critical reading, and author’s craft. Yet on the district level there is limited stress on all cognitive expectations	SEC p. 14
	7.26	Grade 3—Deeper emphasis on vocabulary in comparing standards and district level instruction as reported by teachers. These are on the demonstrate level	
	7.27	Grade 6—District standards do not expect students to function beyond analyze/investigate for cognitive expectations	CA p. 4
	7.28	Teacher responses in Grades K–1 demonstrate a deeper level of emphasis in the investigate , evaluate , and create level of features of text and print than the New York state standards require	SEC p. 9
	7.29	Grade 6- Writing—Cognitive expectations for Grade 6 writing is limited and does not move beyond the analyze/investigate level	CA p. 3
	7.30	A range of cognitive demands are needed to meet Grade 8 expectations. Broader range with higher production rates.	CA p. 6

KEY FINDINGS (GQ7 CONTINUED)		Findings	Source & Page
	7.31	Grade 4 ELA- Cognitive expectations at lower levels. Little opportunity planned for students to work at higher levels	CA p. 6
	7.32	Grade 4 –ELA—Limited instruction in identifying and establishing purpose audience, changing voice, tone gestures, vocabulary, etc.	CA p. 6
	7.33	Grade 2—Decoding 5 out of 6 areas in reading addressed. No evidence for print awareness. Frequently at the demonstrate and explain level	CA p. 2
	7.34	Math-Material is being covered, but not to the depth and focus necessary to meet New York state standards	SEC- Math p. 9–11
	7.35	Grade 3-Teacher responses show limited time spent on most topics for all cognitive expectations except for writing applications and languages study where moderate time is spent at all cognitive expectations whereas the Grade 3 ELA standards require moderate to significant emphasis on most topics at the demonstrate level	SEC p. 11
	7.27	Grade 6—District standards do not expect students to function beyond analyze/investigate for cognitive expectations	CA p. 4
	7.28	Teacher responses in Grades K–1 demonstrate a deeper level of emphasis in the investigate , evaluate , and create level of features of text and print than the New York state standards require	SEC p. 9
	7.29	Grade 6 Writing—Cognitive expectations for Grade 6 writing is limited and does not move beyond the analyze/investigate level	CA p. 3
	7.30	A range of cognitive demands are needed to meet Grade 8 expectations. Broader range with higher production rates.	CA p 6

Theme 3: Instruction and Assessment

KEY FINDINGS		Findings	Source & Page
<p>Supplemental instruction is available to students, but evaluation of whether or not programs are working is not existent. Furthermore, the communication of effectiveness or implementation, monitoring, and program effectiveness is lacking (for parents, schools, etc.).</p>	8.1	Supplemental instruction is available in 37.5 minute programs, after school, Saturday programs, and other special tutoring.	INT p. 19
	8.2	Additional learning opportunities exist in extended day, after school, Saturday, Newcomer, and Reading Resource programs.	INT p. 12
	8.3	New York started on horizon to track student performance more specifically.	INT p. 9
	8.4	Services for struggling students are not evaluated. There is little accountability regarding intervention programs.	INT p 11
	8.5	Written documentation of implementation, monitoring, and program effectiveness as well as outlining expectations for data analysis and frequency needed (SES/PIP) at the district level.	ELA DR p. 7
	8.6	Most of the parents expressed satisfaction in the programs that schools made available to their children.	ELA DR p. 35
	8.7	Parents did acknowledge receiving useful information on the ELL programs available to their children though it appeared that the breadth and depth of the dissemination efforts varied.	ELL p. 6
	8.8	Participants appeared to have limited knowledge of the support services provided by community-based groups.	ELL p. 36
	8.9	The emphasis is on school-level attention to student learning needs.	ELL p. 6

Theme 3: Instruction and Assessment (Continued)

KEY FINDINGS		Findings	Source & Page
Teachers say they are not prepared to use test data for instructional purposes, though they are aware this is emphasized. (11.1)	11.1	Teachers say they are not prepared to use test data for instructional purposes, though they are aware this is emphasized	INT p. 16
	11.2	Elementary schools use frequency to group students, pace lessons & make decisions about interventions.	INT p. 9
	11.3	100% of the classrooms observed had no students engaged in self assessment.	INT ELA p. 6
Teachers reported that they are using data to guide instruction. But classroom observation data do not support that statement. Adequate PD has not been provided on how to use assessment data to improve student achievement. (11.2-11.6)	11.4	Assessments were never to rarely observed.	OBS Math HS p. 18
	11.5	The SOM shows that in our classrooms, performance and student self assessments were rarely observed.	OBS Math p. 5
	11.6	The report states that performance assessment strategies were not observed in K–12.	OBS Math p 5
	11.7	ELL program teachers rely on in-class assessments and conferences to tell them what to re-teach.	INT p. 12
	11.8	ELL Classes more often engaged in assessments of student understanding than general education.	OBS p. 24

Theme 4: Professional Development

KEY FINDINGS		Findings	Source & Page
Adequate PD has not been provided on how to use Assessment data to improve instruction. (The findings to support this key finding came from both question guiding questions 13 and 14.). 13.3-13.6	13.3	It appears that most PD is on the general education curriculum implementation.	ELL p. 15
	13.4	General education teachers said they had no PD specific to ELL students.	ELL p. 15
	13.4	Teachers say they are not prepared to used test data for instructional purposes though they are aware this is emphasized.	ELL p. 16
	13.5	Teachers said they have not been instructed in how to use assessments to improve student learning.	ELL p. 20
	13.6	There is inadequate PD around using the data to improve student achievement.	ELL p. 20
	13.3	It appears that most PD is on the general education curriculum implementation.	ELL p. 15

KEY FINDINGS		Findings	Source & Page
There is little evidence to support the idea that there is a relationship between PD and instructional impact. . (The findings to support this key finding came from both question 13 and 14.).	14.1	PD impact on math and ELA was moderate.	INT p. 45
	14.2	Most of the teachers responding to the survey have never given a lecture or presentation to their colleagues.	ELA SEC p. 19
	14.3	Teachers' receptivity to PD depends on their level of self-reflection.	INT p. 13
	14.4	In many schools the impact of the coach in ELA and math was said to be ineffective.	INT p. 13-14
	14.5	PD is offered across the board, but is it always what teachers need and want?	INT. p 16
	14.6	There are mixed opinions on whether PD meets school and teacher needs. In some EL schools and nearly all secondary schools PD alignment to needs was questionable.	INT p. 14

Theme 4: Professional Development (Continued)

KEY FINDINGS		Findings	Source & Page
<p>There is little evidence to support the idea that there is a relationship between PD and instructional impact. . (The findings to support this key finding came from both question 13 and 14.).</p>	15.1	Documents submitted provide evidence of policies/plans and some implementation of professional development that is focused on content and pedagogical needs. Submitted documents provide limited evidence that professional development is monitored.	DR p. 16
	15.2	Individual teachers feel they may opt out of following mandates and PD.	ELL p. 29
	15.3	PD for teachers early in their careers not provided districtwide and varies from principal to principal.	ELL p. 9
	15.4	PD attendance is mandatory in elementary schools and more flexible with respect to attendance in secondary schools.	INT p. 15
	15.5	No firm participation figures on PD participation. No follow-up or turn-key implementation.	ELL p. 8
	15.6	No documents were submitted to indicate the expectations for (frequency, analysis) or outcomes for monitoring process.	DR p. 14
	15.7	Almost all teachers responded that they attend less than 2 conferences related to ELA per year.	ELA SEC p. 43
	15.8	There are policies and plans to train teachers but limited evidence that the policies and plans are implemented and monitored.	DR p. 12