

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

Binghamton City School District
Final Report**

May 2008

**Submitted to
Binghamton City School District**

**Submitted by
Learning Point Associates**



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Introduction

This final report is the result of an audit of the written, taught, and tested English language arts (ELA) curriculum of Binghamton City School District by Learning Point Associates. In 2007, 12 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 ELA curriculum for all students, including students with disabilities (SWDs). 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 provides 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 Comprehensive District Education Plan or Consolidated Application.

District Background

Overview

Geographic Background

Binghamton City School District is one of 12 school districts in Broome County, located in the Southern Tier of New York state. The city of Binghamton is located at the confluence of the Susquehanna and Chenago rivers and sits at the crossroads of Interstates 81 and 88. The estimated population of the city in 2006 was 45,217 (City-data.com, 2008).

Student Population

Data from the *2005–06 Accountability and Overview Report* indicate that Binghamton City School District served a total of 6,235 students, with 133 prekindergarten students; 6,016 K–12 students; and 86 ungraded students (New York State Education Department, 2006). Of those students enrolled, 66 percent were Caucasian; 23 percent were African American; 7 percent were Hispanic; and 4 percent were Asian, Pacific Islanders, Alaskan Natives, or Native Americans.

Demographics

In Binghamton City School District there are 10 schools: seven elementary schools, two middle schools, and one high school (Binghamton City School District, 2008). Data from the 2003–04, 2004–05, and 2005–06 school years indicate that approximately two thirds of the student population was eligible for free or reduced-price lunch (64 percent, 63 percent, and 66 percent, respectively). District data also indicate that the overall percentage of English language learners (ELLs) during those three school years was small: 5 percent, 5 percent, and 4 percent, respectively. During the 2005–06 school year, the percentage of students with disabilities enrolled was approximately 13.5 percent (New York State Education Department, n.d.).

According to the 2005–06 New York State School Report Card Fiscal Accountability Supplement for Binghamton City School District, the district spent an average of \$7,501.00 for every general education student. The total NYSED school aid to Binghamton City School District will increase from \$47.7 million in 2007–08 to \$54.3 million in 2008–09, an increase of \$6.6 million or 13.8 percent (New York State, n.d.).

Student Academic Performance

As of 2005–06, the state accountability status of Binghamton City School District has been designated as a district in need of improvement—Year 3 in the area of ELA. During 2005–06, students categorized as SWDs were the only student accountability group that did not make adequate yearly progress (AYP) in ELA in elementary, middle, and secondary schools.

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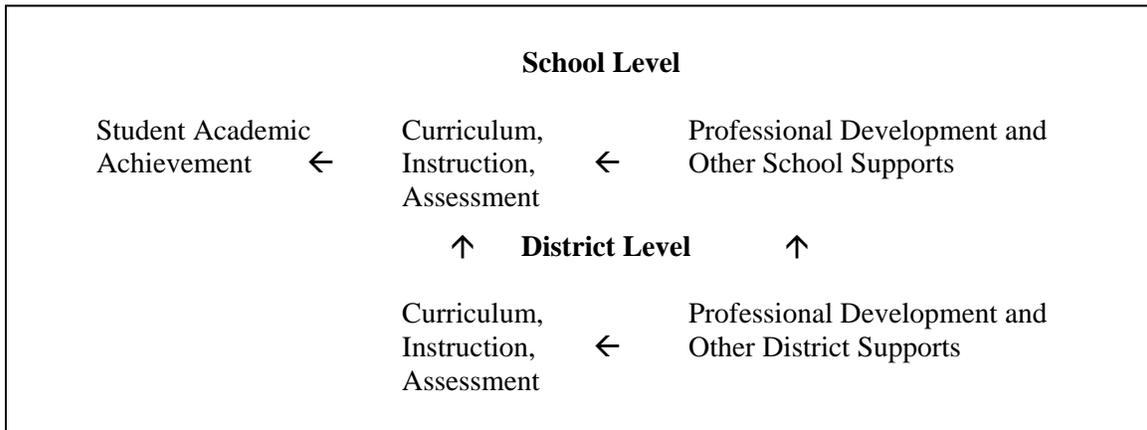
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Theory of Action

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 the school and district levels. Therefore, information for the audit was gathered from both levels. Figure 1 shows a graphic representation of the theory of action dynamic.

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 six essential questions for the focus of the audit:

1. To what extent is a comprehensive, clearly articulated, and aligned curriculum guiding instruction across the district?
2. How does instruction focus on the effective delivery of the curriculum?
3. What academic interventions are available for students who need additional academic support?
4. What professional learning opportunities that support instruction and student learning are provided to teachers?
5. To what extent do student achievement data (formative as well as summative) inform academic programming, planning, and instruction?
6. What staffing practices and profiles are utilized to effectively support teaching and learning across the district?

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; selecting a school sample and teacher samples; and planning and delivering communications about the audit to the district's key stakeholders, including holding a kickoff meeting with the larger district community.

Phase 2: Data Collection and Analysis

To conduct this audit, Learning Point Associates examined district issues from multiple angles, gathering a range of data and using the guiding questions to focus on factors that affect curriculum, instruction, assessment, and other school supports. These data sources work together to bring focus and clarity to the main factors contributing to the district's corrective-action status. Broadly categorized, information sources included NCLB accountability status, the surveys of enacted curriculum (SEC), observations of instruction, interviews of school and district personnel, review of key district documents, alignment of the district's written ELA curriculum, and reviews of the special education programs.

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 ensure the inclusion of at least one intermediate school and one high school.

NCLB Accountability Status

Learning Point Associates compiled NCLB accountability data for the most recent three years available. These data provided the district with an overview of student achievement trends by level and subgroup.

Surveys of Enacted Curriculum

To examine whether instruction was aligned to the New York state standards and assessments, teachers in the district completed the SEC. Based on two decades of research funded by the National Science Foundation, the SEC are designed to facilitate the comparison of the enacted (taught) curriculum to standards (intended curriculum) and state tests (assessed curriculum), 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 general education 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.

Observation data were collected from between four and eight classrooms in each of the sample schools in the district. Observations were conducted on two days a minimum of two weeks apart in each school. Each observation lasted approximately 45 minutes. In observing classrooms, observers noted the presence or absence of classroom features per 15-minute instructional segment. Each 45-minute observation session produced a summary, which was based on three 15-minute classroom segments. Observation data were aggregated to the district by school grade levels: elementary, middle, and high schools.

Interviews

To garner additional data concerning the alignment of the written, taught, and tested ELA 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 40 minutes in length for teachers and 60 minutes or more for coaches, principals, and district staff. The protocols were developed specifically to address the audit's 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 and between schools. Principal and coach interviews included questions designed to elicit longer, more elaborate responses. District personnel interviews were even more open-ended. When agreed to by interviewees, 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.

Key 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 matrix was developed and used to synthesize document information against a subset of the audit's guiding questions. The matrix was designed to determine whether each submitted group of documents contained clear evidence of district plans or policies, implementation of those plans or policies, and internal monitoring and evaluation of the implementation in support of each identified question. The extent to which each respective document addressed the relevant question was evaluated by three Learning Point Associates

analysts to ensure multiple perspectives during the process. After individual reviews were completed, the reviewers held a consensus meeting and generated a report.

Curriculum Alignment

A district's written curriculum demonstrates its program of ELA studies for students. Learning Point Associates focused its attention on two key areas for this curriculum alignment process. First, Learning Point Associates used the Revised Taxonomy Table (Anderson & Krathwohl, 2001) to code and compare school district learning objectives/expectations and performance indicators from the New York State English Language Arts Core Curriculum (New York State Education Department, 2005) in terms of levels of knowledge and cognitive demand. Second, using criteria for identifying and describing a cohesive, comprehensive, and clearly articulated curriculum identified in literature cited above, Learning Point Associates examined curriculum documents submitted by the district. In both areas, materials were examined and analyzed at Grades 2, 4, 6, 8, and 10.

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 the following: district or regional staff interviews; teacher interviews (including 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 six guiding questions developed for the audit.

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	SEC	Observations	Interviews	Key Document Review	Curriculum Alignment	Special Education Review
1. To what extent is a comprehensive, clearly articulated, and aligned curriculum guiding instruction across the district?			X	X	X	X
2. How does instruction focus on the effective delivery of the curriculum?	X	X	X	X		X
3. What academic interventions are available for students who need additional academic support?			X	X		X
4. What professional learning opportunities that support instruction and student learning are provided to teachers?	X		X	X		X
5. To what extent do student achievement data (formative as well as summative) inform academic programming, planning, and instruction?	X		X	X		X
6. What staffing practices and profiles are utilized to effectively support teaching and learning across the district?			X	X		X

Phase 3: Co-InterpretationSM of Findings

The purpose of co-interpretation was to interpret the data in a collaborative group setting.

The co-interpretation process consisted of several steps, starting with the interpretation of the data within individual data sets, followed by the identification of key findings across data sets, and concluding with the identification of district strengths and potential restraining forces that may be brought to bear on the issues facing the district. These steps occurred during a two-day co-interpretation 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., document review, curriculum alignment, interview data, SEC data, classroom observations, and special populations) in a small-group setting. Individual groups were asked to select the findings from their data report(s) that they believed were most significant and then to categorize those findings

according to one of the six topic areas addressed by the guiding questions: curriculum, instruction, academic intervention services, professional development, data use, and staffing.

Identification of Key Findings

Participants then were separated into topic-area groups for the purpose of grouping individual findings across data sets along common themes. From various data sources, the participants used the method of triangulation to provide support for combining and subsuming some of the findings. As the investigative groups presented their findings to the whole group, some natural combining and winnowing of results occurred.

The whole group used a voting process to prioritize the findings. Participants then were led through a discussion process to rate the prioritized findings based on the following questions:

- Is the identified key finding 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, would there be a measurable, positive impact systemwide?

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

Prioritization of Key Findings

District participants then prioritized the key findings, voting for those key findings they believed were the most important leverage points for Binghamton City School District. The six key findings earning the most votes became the focus of the next co-interpretation activity and are discussed in the Key Findings section of this report.

Identification of Driving and Restraining Forces

Identification of driving and restraining forces occurred next. During this brainstorming stage, participants created a list of district initiatives, programs, or other dynamics that were positively influencing the top six prioritized key findings. A second round of brainstorming resulted in a list of potential restraining forces that might be impeding progress or on the key finding or might serve to maintain the status quo. A graphic of these driving and restraining forces are included in Appendix C.

Phase 4: Action Planning

NYSED will provide a recommended process and templates to the districts to meet the action planning requirements of the proposal. Submission of the completed action plan is the responsibility of each district.

Implementation of the Process

The recommended process for action planning includes the following steps: goal and strategy setting, action and task planning, integration and alignment of actions, and integration and alignment with the Comprehensive District Education Plan or Consolidated Application.

In the goal- and strategy-setting step, the district team identifies what it wants to achieve during the next three years. For each goal, the team identifies key strategies, along with success indicators for each. Then, the team sets specific objectives, which drive more detailed action development by those who will be assigned to implement the plan. Learning Point Associates will work not only with the larger team but also with the smaller teams and individuals responsible for setting actions and associated costs.

Rollout of the Plan

The final component of the action planning process is communicating the audit action plan to the larger school community. This process is crucial to ensure that schools are aware of the action plan and are prepared to revise their comprehensive education plans or other guiding plans as necessary to reflect the district's plan.

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Key Findings

As indicated in the description process for Phase 3 (co-interpretation of findings), each key finding statement was generated through the co-interpretation process. During a facilitated process, groups of school and district administrators, teachers, parents, and district technical assistance providers identified key findings across multiple data sets. These key findings were prioritized by the participants during co-interpretation and are included below in priority order. The supporting findings, which can be mapped back to the original data sets, are included in the data map in Appendix B.

Key Finding 1

K–12 curriculum maps generally are aligned with New York state education standards. There is a great deal of variance in how the level of cognitive demand is addressed. Curriculum maps are a blueprint of what to teach but do not necessarily help teachers with the delivery of instruction. Instruction lacks intensity across grade levels in higher-level thinking skills.

The first key finding consists of three findings that were considered separately during the co-interpretation meeting. Meeting participants decided that the individual findings were closely related in that they referred to guidance for teachers with respect to ELA instruction. When the three findings were combined into one key finding, the key finding received more votes as a priority area than any other of the key findings. Key Finding 1 is supported by evidence from the curriculum alignment report, the document review, the interview report, and the SEC reports.

Binghamton City School District has ELA curriculum maps, according to the document review, but the extent that the use of curriculum maps was monitored could not be determined. No relevant evidence was submitted to demonstrate district policies regarding consistent delivery of the ELA curriculum within and across the schools. Elementary-level respondents interviewed for the interview report indicated that the ELA curriculum is consistently implemented in the elementary schools, mainly because the district reading series provides consistent instructional guidance. In secondary schools, this is not the case. Interview respondents in the middle and high schools indicated that the curriculum is not consistently guided by a curriculum map, reading series, or other alignment tools. The SEC reports noted more areas of misalignment in the secondary than the elementary schools. Generally, the alignment of the taught curriculum decreases as grade levels increase.

The curriculum alignment report indicates that these maps provide a blueprint of what teachers should be teaching but do not describe how teachers are to implement the curriculum or provide specific instructional guidance. The maps list the units, topics, skills, and concepts to be taught but are not specific about student learning goals. In addition, there are gaps in the alignment of the district and state standards in many curriculum areas, particularly with respect to what is expected of students in the cognitive and knowledge domains.

Key Finding 2

Documents reflect an inconsistent working relationship between classroom and special education teachers and SWDs and the responsibilities of all parties.

The evidence for this finding is found in the special education reports, particularly interviews of teachers and administrators and in classroom observations. During the co-interpretation meetings, participants stated that the issue of coteaching has been a significant issue in district improvement.

Many teachers and special education leaders described resistance from general education teachers toward having SWDs and special education teachers in their classrooms. The coteaching arrangements between general education and special education teachers have not been established consistently across the district. Although teachers reported that they usually share responsibility in coteaching, observation data demonstrated that in coteaching classrooms, general education teachers had more interaction than special education teachers with SWDs. In approximately one quarter of the coteaching situations observed, for example, the special education teacher had no interaction with students. Special education teachers were active instructors for at least half the classroom sessions in only 13 percent of the observed classrooms.

Key Finding 3

Documentation and interviews with teachers and administrators indicate that the district has offered professional development in differentiated instruction, collaboration, and coteaching; however, they say that there needs to be more professional development in these areas K–12. In addition, they indicated that staff need time for collaboration and professional development around topics such as the use of data, ELLs, “Special Education 101,” and legal issues for SWDs.

This finding is supported by the special education report, the document review, and the interview report. Together these indicate an uncoordinated approach to professional development, in which key instructional areas are not covered or are reaching only part of the district’s teaching force.

When interviewed, a number of ELA teachers said they have participated in professional development sessions that have focused on differentiated instruction, inclusion, coteaching, and general information about special education. The documents reviewed suggest that ELA professional development is strong at the primary level (K–3) but much less so in Grades 4–6. A much higher portion of secondary than elementary teachers participated in professional development sessions about how to run an inclusive classroom (92 percent of secondary versus 42 percent of elementary teachers who were interviewed). Although a majority of inclusion teachers participated in general education professional development opportunities, more than half of self-contained special education teachers (60 percent) did not attend these events.

Interviewed school respondents said there were few professional learning opportunities that support general education teachers in providing instructions to ELL students. District

respondents agreed that professional development for general education teachers of ELLs is not adequate. A number of teachers said they would like more professional development in this area.

Together the reports identified a number of topics that interviewed teachers and administrators would like to have addressed through professional development. These include differentiated instruction (a high percentage of interviewed teachers reported that they had not been trained on how to use the data to make decisions about their instruction); techniques for teaching reading and writing (mentioned by general education teachers, special education teachers, and special education administrators); and additional training on special education topics such as related legal issues, reading IEPs, and specific disabilities. In addition, teachers said collaborative sessions with colleagues are too limited.

Key Finding 4

There is no evidence of a systemic process for implementation, monitoring, and documentation in regard to professional development, nor is there evidence of the instructional impact on student achievement.

Key Finding 4 is supported by evidence from the document review and the special education report interviews. In general, there is little or no monitoring of professional development to determine if it is influencing instruction, nor is there evaluation to indicate if professional development has a positive influence on student learning. Special education district and school administrators who commented on this issue agreed that although professional learning “is offered, it is not always taken advantage of.”

Although leaders at a number of schools are making decisions about professional development for their staff members, there is no evidence of monitoring. There are few instances of follow-up training sessions or refresher courses, and teacher input is not sought systematically.

Related Auditors’ Findings

Teachers and administrators cited several approaches for improving professional development, including making professional development relevant to teacher needs; eliminating jargon; making the built-in professional learning hours more effective; using a coaching model more often; reducing the power struggle between general and special education teachers; and helping teachers to be willing to embrace new ideas and to change.

Key Finding 5

There is no evidence a districtwide process to ensure that teachers use district- and state-level assessment data to inform instruction.

This key finding is supported by evidence from the interview report, document review report, and the SEC reports.

According to teacher responses on the SEC, K–11 teachers are not strongly influenced by state test results in deciding what to teach. Use of results from screening, diagnostic, and classroom assessments is inconsistent and decreases as grade levels increase. District, school, and special education interviewees cited barriers to usage such as the amount of time it takes to receive assessment results, lack of time for collaboration, inexperience with technology, and the limits of the district’s system of data use.

There was no evidence that the district adjusts curricular programming based on student achievement data, and documents did not clearly articulate district practices regarding providing teachers with data about ELLs and SWDs in general education classrooms.

Key Finding 6

There is a discrepancy between what teachers reported and what was observed regarding the variety of instructional strategies and differentiated instruction. Direct instruction was the predominant instructional method observed across all levels.

This finding is supported by evidence from the special education report, the interview report, the classroom observation report, and the curriculum alignment study. Several findings related to instructional practice are summarized in this finding.

According to interview respondents in the elementary schools, ELA instruction varies across schools due to different use of the core materials and curriculum. Many of the interviewed teachers reported using a number of strategies to differentiate instruction, though observations of classrooms revealed that differentiated instruction was evident in about half the classrooms.

Across all levels, direct instruction was a prevalent strategy in the observed classrooms. In middle school classrooms, direct instruction was a particularly dominant strategy. Independent seatwork was prevalent in 36 percent of elementary observed classrooms and hands-on learning activities observed in 26 percent of elementary classrooms.

Instructional practices that were rarely or never observed include individual tutoring, systematic individual instruction, peer collaboration, experiential learning activities, sustained writing, sustained reading, and peer student collaboration.

Moderately high levels of student engagement were noted in the elementary and high school classrooms (77 percent and 71 percent, respectively). Student engagement was lower in the middle school.

Additional Key Findings

Additional key findings were identified by co-interpretation participants but were not prioritized for action planning. These findings include the following:

Academic Intervention Services (AIS)

- Barriers to effective AIS include parents not granting permission for children to attend extended-day sessions, irregular student attendance, and lack of appropriate materials for the lowest performing students.
- There is inconsistent monitoring of effectiveness of AIS and use of student data.

Leadership and Staffing

- Documents show a lack of clearly defined leadership roles. There is no evidence of support for new administrators.
- Building-level administrators and faculty stated that the availability of curricular services is inconsistent across grade levels and subgroups. District-level administrators stated that the ability and quality of materials is consistent across all levels.
- Interviews and documents indicate that professional development opportunities exist for administrators, but there is not enough time to take advantage of them.
- The district has a goal for hiring and training a diverse staff that is reflective of the student population, but there is no evidence to support district efforts to address the retention of staff.
- At the elementary level, there is a difference between a reading coach and a literacy/curriculum specialist. At the secondary level, there are no coaches or literacy specialists.

Data and Monitoring

- Effective monitoring of ELA instruction across the district in Grades K–12 is inconsistent.
- Effective monitoring of testing accommodations for SWDs is inconsistent.
- In general, district staff are using informal and formative (including some standardized) assessment data to inform instruction.

Other

- Interviews of general and special education teachers and interviews of parents indicate minimal parent involvement.
- Observations of general and special education across the district indicated minimal use of instructional technology.

Positive Key Findings

A series of positive key findings also emerged from the district co-interpretation process. These findings, which indicate what is being done well in the district, were prioritized by district participants as follows:

- Special education students receive services based on individual needs. General education and special education teachers use IEPs and student needs to drive instructional practices.
- Surveys and interviews indicate that a variety of professional development is available. Teachers indicate that professional development influences their instruction.
- Surveys and interview data indicate that a strength of the district is the dedication and commitment of staff at all levels.
- Binghamton City School District has a prereferral process and academic intervention plan for students with and without disabilities.
- It was observed and reported that the level of student engagement in classrooms across the district is high.

Miscellaneous Findings

Some findings were identified from the data sets by co-interpretation participants but ultimately were not included in the development of the key findings outlined above. Some findings were considered outliers if the observations seemed outside the intended focus of the audit. In addition, some suggestions were tabled for later consideration. These findings are outlined in more detail in the data map (see Appendix B).

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 the co-interpretation with Binghamton City School District led Learning Point Associates to make three recommendations. The first recommendation provides research and guidance for the continued development of the district ELA curriculum. The second recommendation ties the implementation of this curriculum to instructional strategies, professional development, and monitoring of instruction. The final recommendation discusses the development of a comprehensive professional development program including the development of professional learning communities, which can be utilized for the implementation of all three 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 believed to be the most critical for the district. Furthermore, the order of listing does not reflect a ranking or prioritization of the recommendations. For each recommendation, additional information is provided about specific actions that the district could 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 as points of reference for consideration.

Recommendation 1

Fully develop and implement an ELA curriculum, materials, and assessments that:

- **Aligns with the New York state standards in breadth and depth**
- **Allows all students, including SWDs and ELLs, access to the same written curriculum**
- **Includes teacher support materials that specifically address articulated student expectations for learning**
- **Provides a plan for monitoring**

Link to Findings

The results of the co-interpretation process and the district’s close inspection of the data indicate that the Binghamton City School District does not possess or consistently implement a comprehensive, well-defined ELA curriculum for Grades K–12. A review of key documents revealed that district-level policies do not directly refer to or guide staff in use and implementation of the ELA curriculum maps. The curriculum alignment report states, “the district curriculum maps are a blueprint of what to teach but don’t necessarily help teachers with the delivery of instruction” (Wiggins & McTighe, 2005, p. 5). In fact, the curriculum maps for Grades 2, 4, 6, 8, and 10 list units/topics, skills, and concepts to be covered, but it is not clear

what students are expected to know. More specifically, it appears that Binghamton City School District performance indicators are not yet provided for Grades 2 and 4. For the remaining grade-level curriculum maps submitted for alignment review, maps for Grades 6, 8, and 10 show gaps in alignment with New York state standards in both the knowledge covered and the level of cognitive demand students are asked to demonstrate in ELA. An analysis of the SEC found that although ELA instruction in Binghamton City School District is guided by state standards and district curriculum maps in Grades K–11, the instruction lacks intensity across grade levels in higher-level thinking skills. Furthermore, Binghamton City School District’s SEC report revealed that although the district’s ELA instruction generally is aligned to the state standards, the alignment decreases as grade levels increase.

Link to Research

Comprehensive, Well-Articulated Curriculum. A comprehensive, well-articulated curriculum is a strong, quality curriculum that ensures all students receive the depth and duration of learning experiences necessary to achieve academic success (Anderson, 2002). A well-articulated curriculum also is flexible to assist in developmentally meeting the needs of diverse learners in all educational settings. In a comprehensive curriculum, performance indicators, assessments, and instructional strategies provide teachers with a common set of expectations. When the curriculum, materials, programs, instruction, and assessments are aligned to state standards, student progress can be monitored throughout the year (Guskey, 2000; Holcomb, 1999; Porter, 2002).

An aligned and fully articulated curriculum has four qualities (Danielson, 2002; English, 2000):

- The alignment of district and state standards in terms of content breadth
- The alignment of district and state standards in terms of cognitive depth
- Realistic pacing guidelines for coverage of the district standards
- Other curricular components in addition to district standards and pacing that may include instructional strategies, connections to district materials, other resources, or assessment options

Aligning a curriculum to the state standards is a necessary first step to improving student achievement. Using local standards that are aligned with the state standards, districts must provide guidelines to help teachers to appropriately and realistically pace the coverage of the standards. A viable curriculum is one in which the content that teachers are expected to address must be adequately covered in the instructional time teachers have available (English, 2000; Marzano, 2003).

NYSED states that the learning standards represent the core of what all people should know, understand, and be able to do as a result of their schooling (New York State Education Department, n.d.). Researchers further explain the purpose of state academic standards as “to create more intellectually demanding content and pedagogy, thereby improving the quality of education for all students, and to establish uniform goals for schools, thus producing greater equality in students’ academic achievement” (Sandholtz, Ogawa, & Scribner, 2004, p. 1178).

Without aligning the district standards to the state standards, “students cannot achieve the knowledge and skills they need to achieve the standards” (Linn & Herman, 1997, p. 17). The inclusion of explicit student outcomes allows teachers, students, and others to help ascertain if learning is taking place. It is essential to align the district curriculum with the state standards both in the breadth of content covered and in the depth of cognitive demand required (Danielson, 2002; English, 2000).

The Breadth and Depth of the ELA Curriculum. Research supports the need for teaching language arts skills with more depth and breadth as students develop their reading and writing abilities. Students do well with basic literacy skills such as decoding and comprehension, but struggle with higher-level concepts like making inferences, drawing conclusions, and communicating complex ideas (Carr, Saifer, & Novick, 2002). Research has shown that increasing instruction in any area of reading, such as decoding, phonics, vocabulary, or fluency, also will increase comprehension (National Panel of Reading, 2000). Research further indicates that similar skills are required for writing. Instruction in writing can and will improve reading comprehension (Biancarosa & Snow, 2004; Tierney & Shanahan, 1991). Furthermore, writing is a means of extending students’ knowledge. It acts as a tool for learning subject matter (Graham & Perin, 2007; Shanahan, 2004). Therefore, a district’s ELA curriculum must include more breadth and depth in addressing state reading and writing standards to prepare students for participation in a global economy (Corallo & McDonald, 2002).

Pacing Guidelines. Research states that a comprehensive well-articulated curriculum must incorporate coherent and logical curriculum pacing with consideration for varying levels of student development and background knowledge (Danielson, 2002). Well-articulated pacing guidelines assist teachers in moving through the curriculum rapidly, but in small steps that minimize student frustration and allow continuous progress (Redding, 2006). Of course, there will be differences between classrooms because different teachers direct the learning of distinct groups of students. However, by providing more detailed pacing guidelines, the district helps ensure that students are prepared for the next grade and that all grade-level standards are covered during the school year, regardless of which school a student attends or to which teacher a student is assigned. Through the inclusion of student outcomes, teachers will be able to further ascertain whether students are progressing as expected.

Instructional Strategies. Research has provided solid information linking high-quality literacy instruction to improved student achievement in literacy during elementary and secondary education (Allington & Johnston, 2002; Biancarosa & Snow, 2004; Graham & Perrin, 2007; Kamil, 2003). Using a variety of instructional strategies increases the likelihood that more students are successful (Torgesen, Houston, & Rissman, 2007). Research has shown that a didactic approach to instruction is far less effective than an interactive approach that includes a cycle of modeling, practice, discussion, and feedback. Teachers will more effectively allow special population students meaningful access to the general education curriculum when curriculum maps offer specific suggestions for research-based instructional strategies (Ansary & Babaii, 2002; Tomlinson, 2001). (See also the instruction and professional development recommendations for additional details.)

Curricular Materials. Teachers construct the taught curriculum from a handful of sources, including textbooks, other commercial materials, and materials created by teachers (Redding, 2006). Good instruction is enhanced by appropriate standards-aligned instructional resources. A district’s adopted curricular materials should be organized so that a teacher can target instruction to each student’s level of mastery (Redding, 2006). For instance, to meet the needs of ELLs, texts in English need to be designed with supporting graphics, linguistic accessibility, and helpful formats to engage students with text in a language they have not yet mastered. In addition, resource materials, academic texts, and other instructional resources in the home language are needed for students to bolster knowledge of academic content and developing literacy (Ansary & Babaii, 2002; Olsen, 2006).

Assessments. Assessment is the process of testing (written, verbal, or by examination of work). Kellough & Kellough (1999) describe the general purposes of assessment:

- To assist student learning.
- To identify students’ strengths and weaknesses.
- To assess the effectiveness of a particular instructional strategy.
- To assess and improve the effectiveness of curriculum programs.
- To assess and improve teaching effectiveness.
- To provide data that assist in decision making.
- To communicate with and involve parents.

Classroom assessments can include a wide variety of options, such as observing students and administering standardized tests. There are two main categories of assessments: formative and summative. Formative assessments are ongoing assessments (e.g., observations, reviews of student work, periodic quizzes). Teachers use formative assessments to inform and possibly modify instruction to meet the needs of students. Summative assessments typically are used to evaluate the effectiveness of instructional programs and services at the end of an academic year (e.g., statewide tests, final exams). This type of assessment is used to determine whether students have mastered specific competencies. As Kellough & Kellough (1999) state, one of the purposes of assessment is to assess and improve the effectiveness of curriculum programs. Therefore, as a district develops and evaluates its curriculum, aligning assessments to curricular aims or objectives is vital (Rothman, Slattery, & Vranek, 2002). Binghamton City School District administers various assessments, but to assist teachers to use them consistently and with the right intention, a clear connection must be made to the district’s ELA curriculum (Rothman et al., 2002).

Monitoring for Implementation and Achievement of Goals. Although the completion of a full curriculum is a tall charge, the work is not finished when this is done. A system of monitoring for both effectiveness and use of the written curriculum and components needs be designed and implemented. As more school districts are being asked to take an active role in both curriculum and instructional tasks, research is supporting the efforts of monitoring progress toward goals. In their analysis of high poverty districts successfully making the 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. Preuss (2003) also advocates that districts determine their own indicators of student success and that they be measurable results that are the focal points of district and school monitoring and decision making.

Implementation Considerations

Develop an ELA written curriculum that:

- **Identifies key components of the curriculum and sets expectations about its use in classroom instruction across all grade levels** (Brown, 2004)
- **Provides more detailed pacing to guide ELA instruction at each grade level** (English, 2000; Foriska, 1998; Redding, 2006; Zavadsky, 2006)
- **Clearly connects ELA curriculum content to the district’s core instructional strategies** (Torgesen et al., 2007)
- **Further explains how assessments are used to measure student progress in meeting learning objectives** (Rothman et al., 2002)
- **Ensures that the ELA curricular materials specifically address varying levels of student development and knowledge** (Ansary & Babaii, 2002; Olsen, 2006)
- **Determines success measures for monitoring** (Preuss, 2003; Togneri & Anderson, 2003)

Binghamton City School District needs to question what concepts, concepts, skills, and behaviors must be learned by students. This task could be articulated through a variety of formats such as curriculum mapping, benchmarking, and/or a written scope and sequence (English, 2000; Foriska, 1998).

There are gaps in the district’s alignment with the NYSED standards. The district’s curriculum maps for Grades 2, 4, 6, 8, and 10 list units/topics, skills, and concepts to be covered, but it is not clear what students are expected to know. In the force field analyses activity, co-interpretation participants determined that the driving forces that can be leveraged to move the ELA curriculum in a positive direction include the existing curriculum maps that continue to evolve (although presently some consider these curriculum maps as not user-friendly). The district has utilized the curriculum mapper tool, and participants state that everyone has access to the ELA curriculum maps. Therefore, Binghamton City School District is urged to refine and expand their ELA curriculum maps to ensure that the alignment gaps are addressed to further articulate the curriculum for all stakeholders.

This task could be accomplished through a variety of formats such as well-articulated curriculum map, scope and sequence or unit plans (English, 2000; Foriska, 1998; Redding, 2006).

The curriculum maps for Grades 2, 4, 6, 8, and 10 identify four to six units with guiding questions to be covered from September to June. It appears that each unit is expected to last two

to three months. However, the curriculum maps do not provide more detailed suggested or expected scheduling or pacing for instruction within each unit. It is not possible to determine from these maps if these expectations can be accomplished during the timeframe. The referenced units are not fully articulated on the curriculum maps.

Curricular documents with clearly articulated instructional strategies guide teachers in meeting the needs of all students. For instance, providing specific examples of how to implement the curriculum to serve ELLs at various language proficiency levels or SWDs can affect student achievement (Olsen, 2006; Redding, 2006).

Curriculum maps for Grades 2 and 4 list skills, concepts, and materials. However, it does not appear that this information is presented in sufficient detail to guide lesson planning or instruction. For example, lists of terminology appear under skills and concepts, with no fully phrased learning objectives or student expectations. Maps for Grades 6, 8, and 10 do present articulated objectives and expectations. However, it does not appear that this information is presented in sufficient detail to guide lesson planning or instruction. These materials do not provide a detailed plan for how the district envisions instruction taking place.

In regard to differentiated instruction, the curriculum maps for Grades 2 and 4 provide information on the variety of materials offered; however, no concrete information is provided to assist in scaffolding instruction for students that need assistance. Maps for Grades 6, 8, and 10 list required readings to but do not include written information about how to use these readings to scaffold instruction for struggling students.

During the co-interpretation process, participants stated that instructional strategies change from day to day in the district. Observation and interview data could not verify this claim, but did show that consistent strategies are not being implemented. Therefore, identifying a core of instructional strategies that are used consistently and districtwide could positively affect ELA instruction throughout the district. In addition, participants noted concern that the curriculum maps do not address the needs of SWDs or ELLs; this also was noted by the formal review of these materials. As the district's curriculum work continues, ensuring the connection to instructional strategies to utilize with these student populations would address this concern.

Maps for Grades 2 and 4 indicate End of Unit Benchmark Assessments and Dynamic Indicators for Beginning Early Literacy Skills (DIBELS), but no explanation is provided for whether or how these assessments are used to determine student learning of specific skills or content. Maps for Grades 6, 8, and 10 list some general formative assessment suggestions but not specific tools and guidelines that teachers can use consistently with their instruction. The direct and explicit connections between stated student expectations and further developing guidelines of how to administer formative assessments would assist teachers in using assessments to inform their ELA instruction.

Binghamton City School District's curriculum maps for Grades 2 and 4 list texts at different reading levels (e.g., emergent, on level, independent). It is not clear whether these are supplemental materials from the core reading series. Maps for Grades 6, 8, and 10 list required readings, apparently for all students, but they do not specifically address varying levels of

student development and background knowledge. Further articulating this information is one way to address this area of the ELA curriculum

Binghamton City School District has many of the other elements of this recommendation in place. However, the creation of a monitoring system that measures the successful implementation of the curriculum system, assessments, and teacher supports is a new endeavor. It may be helpful to gather key members of all initiatives to set benchmark measures of success, with clear measureable outcomes at regular intervals. Having a plan for the gathering and use of data will be key.

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Additional Resources for Review

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Recommendation 2

Create, implement, and monitor an ELA classroom instruction process that:

- **Aligns with the student expectations presented in the districtwide ELA written curriculum**
- **Informs ELA teaching staff through professional development activities of a variety of research-based instructional strategies to engage all students in learning, address the needs of students, and improve student achievement in literacy**
- **Monitors the implementation of the ELA instructional strategies throughout the district**

Link to Findings

The results of the co-interpretation and the district’s close inspection of the data indicate that direct, whole-group instruction was the predominant instructional method observed across all grade levels. Overall reports illustrate that teachers in both general education settings and special education classrooms are not utilizing a variety of instructional strategies to teach ELA in Binghamton City School District. The data also revealed that there is a discrepancy among the seven elementary schools regarding the degree of flexibility permitted in implementing recommended instructional practices and the use of the core materials and curriculum. Likewise, a prevalence of independent seatwork was observed in 36 percent of elementary classrooms and hands-on learning was observed in 26 percent of elementary classrooms. Systematic individual instruction, individual tutoring, and peer–student collaboration were rarely or never observed across all grade levels. The special education observation report noted that SWDs were seldom engaged in independent inquiry or research, experiential learning activities, independent seatwork, sustained writing, sustained reading, or collaborative work.

Link to Research

Research indicates that high-quality literacy instruction in elementary and secondary school improves student achievement in literacy (Allington & Johnston, 2002; Biancarosa & Snow, 2004; Graham & Perrin, 2007; Kamil, 2003). Although direct instruction can be an effective instructional strategy in some circumstances, using a variety of instructional strategies, including those that encourage higher-level thinking and discussion that students may use in multiple situations over time, is likely to be more effective for various students (Torgesen et al., 2007). Research has shown that the most effective instructional model includes teacher modeling and practice, including discussion and feedback during the process, rather than the implementation of a didactic approach to instruction. This point is important and often is a misconception during the interpretation of research. Therefore, we offer the following description of a direct instructional model, from Armbruster, Lehr, and Osborn, 2001 (p. 53):

- “Direct explanation: The teacher explains to students why the strategy helps comprehension and when to apply the strategy.”
- “Modeling: The teacher models or demonstrates how to apply the strategy usually by ‘thinking aloud’ while reading the text that the students are using.”

- “Guided practice: The teacher guides and assists students as they learn how and when to apply the strategy.”
- “Application: The teacher helps students to practice the strategy until they apply it independent.”

Turning its attention to strategy instruction in reading and writing is one way the Binghamton City School District may expand the instructional practices teachers implement in their classrooms and thereby scaffold students into independent use and further achievement.

The National Reading Panel (2000) has identified five areas of reading in which readers need instruction: phonemic awareness, phonics, vocabulary, fluency, and comprehension. The amount of instructional time in each of the five areas varies depending on the knowledge and ability of the reader. As instructional time decreases in phonemic awareness and phonics, instructional time in comprehension increases. Comprehension is the construction of meaning between the reader and the text (Rosenblatt, 2005). Many students who are struggling readers and writers can read, but cannot understand what they read (Biancarosa & Snow, 2004). Successful readers flexibly use multiple strategies to construct meaning as they read (Roller et al., 1987). There are scientifically based reading strategies for instruction in the multiple areas of comprehension (e.g., inferencing, summarizing) (National Reading Panel, 2000).

Middle and high school students need to use multiple comprehension strategies across content areas as well as in language arts classes. Teaching reading comprehension in all content areas is most effective if it is embedded into the content itself, providing a context for understanding that is dependent on the concepts. Too often, students are asked to absorb content information without having learned the strategies for planning, organizing, and synthesizing the material (Langer, 2001). Research indicates that readers can be taught to be strategic in their approach to reading (Paris, Wasik, & Turner, 1996) and writing (Graham & Perin, 2007).

Students are asked to reflect on the use and effectiveness of the strategy while constructing meaning (Duffy et al., 1987; Taylor, Graves, & Van den Broek, 2000). Guthrie and Davis (2003) recommend that teachers explicitly teach comprehension strategies (e.g., questioning before/during/after reading) during reading and writing lessons across content areas. Practicing these strategies will help readers and writers develop these skills and strategies and eventually allow them to apply them independently across all content areas. It is strongly suggested that the district investigate content area-specific strategies and incorporate these into the instructional protocols.

Strategy instruction in the area of writing may range from generic processes such as brainstorming and working with a peer to more explicit processes for a specific writing task. Regardless of the strategy, explicitly teaching adolescents strategies for planning, revising, and editing has a strong impact on the quality of their writing (Graham & Perin, 2007). As previously mentioned, students need to utilize these various strategies across the content areas and for specific disciplines.

Effective teachers seek to meet students directly at their level, not at arbitrary grade or age levels (Darling-Hammond, 1997). Teachers are urged to provide intensive instruction for students who

are significantly behind their peers (Torgesen et al., 2007). Varied instructional strategies increase the opportunities for student success. Co-interpretation participants shared the concern that not all the teachers at Binghamton City School District were observed to differentiate instruction based on student need; therefore, the district is urged to revisit this instructional practice and determine how it can be implemented across classrooms in the district. Because students vary in readiness, interests, and learning styles, appropriately differentiated instruction allows teachers to vary instructional approaches by varying the content, process, or product (Tomlinson & Strickland, 2005). Varying the process as a method of differentiation allows schools to choose a variety of instructional strategies while holding all students to the same content standards.

Tomlinson (2004, p. 231) notes:

“Rooted in research and theory of psychology and education, differentiated instruction asks teacher to do the following:

- Actively work with students to develop learning environments that are positive for each learner.
- Routinely engage in reflection on learners as individuals as well as on learners as a group.
- Systematically assess learner knowledge, understanding and skill via pre-assessment, formative assessment, and summative assessment in light of desired learning goals.
- Purposefully modify instruction in response to learner need and to extend learner proficiency from its current point base, as indicated by assessment and reflection.
- Consistently adapt content (how students get access to what they need to learn), process (activities or how students learn), and/or products (how students show what they know, understand and can do) based on student learner readiness, interest, and learning profile (Tomlinson, 1999, 2001).”

For instance, when addressing the needs of learners at the initial stages of reading, the focus of literacy instruction should be on improving alphabets, including phonemic awareness, word analysis, and sight word recognition. Grouping for reading instruction is one of the most effective ways to provide a safe learning environment for adolescents (Curtis & Longo, 1999). Once benchmarks are established, however, teachers have a range of choices in methods, strategies, and materials when designing lessons. Research shows that students learn in a variety of ways and need multiple exposures to the same content (Tomlinson, 1999). Differentiation is one way that teachers can meet the diverse needs of all students, and this approach can be accomplished by varying content, process, or product (Tomlinson, 1999).

Implementation of systemic, aligned, research-based instructional strategies requires a professional development plan with some method of tracking its implementation and evaluating its effectiveness. Reform advocates argue that under standards-based policies, teachers must know more about their subject, teach in a more dynamic style, respond to their students’ varying levels of knowledge and ways of learning, and engage in continuous learning. Research has shown that internal factors may impede teachers’ willingness or ability to modify curriculum and

instruction for academically diverse learners. Internal factors include teachers' uncertainty of the essential knowledge and skills all students need to learn as well as their limited knowledge of effective and diverse strategies for delivering differentiated instruction to target and support all students (Jetton & Dole, 2004).

Therefore, while teachers are learning and trying different strategies, they need guidance and support from building- and district-level leaders and training in this area. Tying student learning or achievement to professional development allows all stakeholders to have a clear understanding of the goal (Guskey, 2000).

After the district has identified core instructional strategies and teachers have received training on these strategies, literacy leaders should monitor the classrooms to observe and support the implementation of explicit literacy strategies (National Association of Secondary School Principals, 2005). The National Association of Secondary School Principals (2005) states that such observation provides administrators with critical knowledge related to student learning, as well as insight into the professional development needs of teachers. One way to assess the implementation of literacy strategies is by conducting literacy walks (National Association of Secondary School Principals, 2005). Another method of monitoring the implementation of instructional strategies is by collecting lesson plans that document the instructional strategies utilized in the lesson. This documentation may act as formative data that allow for teacher to monitor whether a strategy is successful.

Implementation Considerations

- **Identify a core of instructional strategies for instruction. The district needs to ask what concepts, concepts, skills, and behaviors must be learned by the student** (Foriska, 1998). (See also the curriculum and professional development recommendations for additional details.)
- **Expand the instructional strategies used in ELA instruction. Teachers need to implement instructional strategies other than direct, didactic instruction and independent seatwork with more frequency to ensure they meet the diverse needs of their students** (Torgesen et al., 2007). (See also the professional development recommendations for further details.)
- **Provide professional development activities that allow staff to acquire the needed literacy knowledge of skills and strategies, with activities that are interactive and collaborative and that provide multiple opportunities for practice** (Jetton & Dole, 2004). (See also the professional development recommendations for further details.)
- **Monitor the implementation of the literacy instructional strategies across the district.**

A driving force mentioned at co-interpretation was the grade-level collaboration and sharing of ideas among the teachers. This collaboration can be leveraged to assist in expanding the core instructional strategies implemented in the district.

During the co-interpretation meeting, participants shared that job-embedded professional development on instructional strategies is occurring at the elementary level. The force field analysis conducted during the co-interpretation process revealed that participants consider the professional development occurring at the elementary level as a driving force that can act as a model across the district.

Co-interpretation participants shared that communication is a driving force in Binghamton City School District that can be leveraged to positively affect student achievement. By monitoring the implementation of instructional strategies in the district, administrators are ensuring that the message regarding ELA instruction is communicated clearly to all stakeholders.

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Recommendation 3

Develop a strategic three- to five-year professional development plan that addresses the needs of all teachers through differentiated and job-embedded professional development options. The plan needs to be systematic and systemwide and must include a process for monitoring implementation and impact on teaching and learning in ELA.

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

- 1. Professional learning communities**
- 2. Differentiated instruction**
- 3. Inclusion strategies for:**
 - a. SWDs**
 - b. ELLs**
- 4. Use of data to inform practice**

Link to Findings

Professional development was identified as a concern in both the general and special education portions of the ELA curriculum audit. Participants at the co-interpretation meeting realized the importance of this issue and generated two key findings concerning professional development. Binghamton City School District has implemented the Reading First program in many of their elementary schools and has extended that model to the other elementary schools in the district. Because of the push for increasing literacy development in early childhood, it is not surprising to find that research for ELA professional development is stronger in Grades K–3 (these are covered by the Reading First initiative) than in Grades 4–12. However, the documents show that little attention is paid to upper elementary, middle, or high schools.

In analyzing the findings, four areas regarding professional development emerged as strong needs for teachers. The first professional development need concerns the desire for collaboration. Interviews with teachers showed that the second most frequently cited professional development need is to have time to collaborate with their coteachers and colleagues, including teachers specializing in special education and ELLs. Teachers and school-level administrators reported that not all schools provide collaboration time for teachers. Professional learning communities are an effective way to structure and add value to collaboration time.

Second, teachers requested additional professional development on differentiated instruction. Although some professional development has been offered on differentiated instructional strategies, teachers expressed a need for more professional development in this area.

The third area that emerged as a priority concerned professional development surrounding inclusion. This included strategies to target the needs of SWDs and ELLs. Interviews showed a marked difference between elementary and secondary ELA teachers' participation in professional development opportunities offered to help them manage an inclusive classroom:

92 percent of secondary teachers and 42 percent of elementary teachers participated in professional development activities in this area. However, there was no evidence or documentation that instruction improved across the district or that student achievement improved as a result of the professional development offered. Consequently, teachers at all levels need more training on meeting the needs of SWDs. In addition, teachers and school administrators would like more professional development on meeting the needs of ELLs. General education teachers with ELLs in their classroom reported feeling moderate to low support from the district. District-level respondents agreed that current professional development is not adequate for general education teachers of ELLs.

Finally, the reports indicate a need for professional development concerning data use. In interviews, 88 percent of teachers reported that they had not been trained on how to use the data to make decisions about their instruction. There also was no documentation of a systemic, districtwide practice of professional development in the analysis and use of student achievement data. This prevents teachers from using state assessment data and district benchmark testing data to its fullest potential.

Link to Research

Lieberman and Wilkins (2006) discuss teacher reactions to professional development:

Mention professional development to teachers and note their reaction. It is not uncommon to hear, “that was an *interesting* workshop, but I don’t see how I can use that information in my classroom.”... Sadly, teachers often admit that the professional development they receive provides limited application to their everyday world of teaching and learning. This state of affairs is increasingly problematic for two reasons. First, over the past 25 years, professional development has gone from a choice to a mandate (Holmes Group, 1986; National Commission for Excellence in Education, 1983; National Commission on Teaching and America’s Future [NCTAF], 1996, 2003; U.S. Department of Education, 1994, 2002). Because professional development now is required for teachers and is often linked to certification, workshops and in-services must be better designed and relevant (Illinois State Board of Education, n.d.; National Board for Professional Teaching Standards [NBPTS], 2002; Ross, 2005). Second, professional development increasingly is cited as a key mechanism for improving schools (Newmann, King, & Youngs, 2000; Elmore, 2002; Frechtling, 2001) (p. 1).

According to the National Staff Development Council Standards (2001), professional development must be results-driven, standards-based, and job-embedded. “Job-embedded professional development provides learning opportunities through individual or collaborative activity and conducted during the school day. The emphasis in job-embedded options is on teacher inquiry, discussion, planning, reflection, decision making, and use of data” (Fleming, 2004). Fleming (2004) identifies several types of programs that support these activities including mentoring, teacher portfolios, whole faculty or team/department study groups, literature circles, critical friends groups, data analysis, school improvement planning, analyzing student work, and teacher self-assessment and goal-setting activities.

Professional Learning Communities. We are all in this together. How can we leave the comfort of our classroom or office and become more involved in a professional learning community? There are myriad options for faculty, staff, administrators, and students to use to strengthen connections between people and concepts and to address changing issues. One strategy for increasing collaboration that is consistently gaining momentum is to create professional learning communities. In 2003, the National Commission on Teaching and America's Future (NCTAF) sponsored a summit on Transforming Schools into Strong Learning Communities. Myriad definitions were constructed. From these definitions, a shared set of attributes was created that includes the following (National Commission on Teaching and America's Future, 2003, p. 2):

- “A shared mission, vision, and values”
- “Collective inquiry”
- “Collaborative teams”
- “Action orientation and experimentation”
- “Continuous improvement”
- “Results orientation”

Creating learning communities can occur at multiple levels, e.g., grade level or content area within a school or across the district or with groups of teachers facing similar issues or instructing similar students. Hord (1997a, 1997b) and DuFour (2004) provide overviews of professional learning communities.

Some options for beginning to create learning communities include, but are not limited to, the following:

- Peer coaching strategies for educators to “consult with one another, to discuss and share teaching practices, to observe one another's classrooms, to promote collegiality and support, and to help ensure quality teaching for all students” (Association for Supervision and Curriculum Development, n.d.; also see Laster, n.d.).
- Creating lesson study groups specifically to collaborate on lessons or creating study groups that allow teachers to choose more general topics
- Analyzing student work allows groups of teachers to investigate learning of individual students in a structured yet collaborative way to improve teaching and learning (Allen & Blythe, 2004)
- Participating in literature circles with small discussion groups of teachers who have read the same material based on current need. (see <http://www.literaturecircles.com/> or <http://www.litcircles.org/> for additional information)

Initially, creating a culture that includes professional learning communities is time consuming. However, research consistently shows that when faculty, staff, administration, and the larger education community comes together to work on improving teaching and learning, improvement follows (Annenberg Institute for School Reform, 2004; Blankstein, Houston, & Cole, 2007; National Commission on Teaching and America's Future, 2003).

Differentiated Instruction. According to Tomlinson (2001), differentiated instruction, in its most basic form, “consists of the efforts of teachers to respond to variance among learners in the classroom” (p. 1). Tomlinson cites four elements in which teachers can differentiate based on student readiness, interest, or learning profile:

(1) content—what the student needs to learn or how the student will get access to the information; (2) process—activities in which the student engages in order to make sense of or master the content; (3) products—culminating projects that ask the student to rehearse, apply, and extend what he or she has learned in a unit; and (4) learning environment—the way the classroom works and feels (p. 1).

Tomlinson’s (1995, 1999, 2001) research, along with others (e.g., Csikszentmihalyi, 1997; Danielson, 1996; Vygotsky, 1986), indicates that using differentiated instruction provides teachers with multiple options for varying instruction to better meet the individual needs of their students.

According to Tomlinson (1999), differentiated instruction implies the following:

- All students participate in respectful work.
- Students and teachers are collaborators in learning.
- Goals of a differentiated classroom are maximum growth and individual success.
- Flexible grouping is the hallmark of a differentiated classroom.

Although there is no set recipe, Tomlinson (1995, 1999, 2001) proposes the following steps to differentiate instruction for students at different levels:

- Conduct initial assessment
- Systemically monitor progress to inform instruction
- Provide explicit instruction
- Provide intensive instruction
- Teach in small groups based on instructional needs
- Use materials appropriate to student level
- Provide scaffolded or supported instruction
- Provide ample practice opportunities
- Create a collaborative supportive system among school, students and parents

These strategies also may be considered in the inclusion of SWDs and ELLs.

Inclusion Strategies.

Students With Disabilities. Historically, general education teachers have struggled to teach SWDs in an inclusive classroom. Three recent publications may be useful to teachers as they

engage in professional development to acquire a wider array of inclusion strategies. Many of these strategies can be used for ELLs or to differentiate instruction in the classroom.

There has been a recent focus on considering the research related to brain-research in addressing the needs of students. Willis (2007) presents a clear, concise way to learn about implementing brain-research strategies to improve student learning. *Brain Friendly Strategies for the Inclusion Classroom* includes an overview of brain-based research and multiple strategies for more inclusion of more students.

Willis outlines strategies for using brain-based research to enhance inclusion. Her strategies are based on brain-research that acknowledges each student as a unique learner with different challenges, life experiences, and interests. Willis's first strategy is to start slowly and build on the learning based on where each student's knowledge level is in the content area. Getting to know students' ways of learning is a critical piece of this strategy. This is connected to Willis's second strategy, which is to watch students and make adjustments when necessary in the way in which the curriculum is delivered. Third, Willis argues that it is important to make physical accommodations for students, e.g., to move closer to the board or away from distractions from the hallway, to be aware of relationships between students and adjust seating accordingly. Next, Willis echoes the sentiments found in the National Board for Professional Teaching Standards (n.d.-a) to make learning meaningful and relevant by knowing students.

Knowing students and their developmental levels is required to implement the next two strategies, which are to provide realistic challenges and to set realistic goals. Willis argues that teachers will have more success with students by offering choices that support their learning styles and by providing reasonable accommodations for participation, e.g., some students may only partially participate in certain activities. Another strategy Willis espouses is to teach students how to organize their time and their work to keep from becoming frustrated and overwhelmed. It also is important to provide timely feedback and recommendations for improvement. Willis's advises teachers to lower the barriers rather than to lower the bar.

Yanoff (2006) also discusses strategies for working with students with special needs within a mainstreamed classroom. He includes suggestions for working with 14 types of students based on identified characteristics and strengths and weaknesses. Of particular interest is a chapter devoted to inclusion strategies designed to help general educators set goals for students with disabilities, as well as define the roles of other students in the classroom. These strategies are aligned with those found in differentiated instruction, as well as those supported by brain-research strategies.

Rayner (2007) provides leadership strategies for special education administrators and school and district leaders working with teachers struggling with inclusion. The book is divided into three sections: Understanding Special Education and Inclusion Policy; Inclusive Leadership, Managing Change and Networking; and Inclusive Leadership and Managing Change: Enabling the Learning Professional. The third part is particularly useful for school leaders as it provides detailed suggestions on managing support for learning in the school community, including exclusion, well-being, and diversity in teaching and learning, managing learning differences and a differential pedagogy, and managing differences through personalized education.

English Language Learners. The Institute for Education Sciences (2007) reviewed strategies to better meet the needs of ELLs in language literacy and/or academic achievement. The review identified 69 studies of 32 programs that focused on improving the academic achievement of ELLs in Grades K–6 across the United States. The review ranks programs based on their effectiveness in reading achievement and English language development on a six-point scale: positive effect, potentially positive, mixed effects, no discernible, potentially negative, and negative effect.

Of the programs reviewed, three showed a potentially positive effect for reading achievement and English language development:

- The Bilingual Cooperative Integrated Reading and Composition (BCIRC) program, an adaptation of the Cooperative Integrated Reading and Composition (CIRC) program, was designed to help Spanish-speaking students succeed in reading Spanish and then make a successful transition to English reading. Students complete tasks that focus on reading, writing, and language activities in Spanish and English while working in small cooperative learning groups. The intervention focuses on students in Grades 2–5.
- The Instructional Conversations and Literature Logs are commonly used together. The goal of Instructional Conversations is to help ELLs develop reading comprehension ability along with English language proficiency. Instructional Conversations are small-group discussions.
- The Vocabulary Improvement Program for English Language Learners and Their Classmates (VIP) is a vocabulary development curriculum for ELLs and native English speakers (Grades 4–6). The 15-week program includes 30- to 45-minute whole-class and small-group activities that aim to increase students’ understanding of target vocabulary words included in a weekly reading assignment.

Using Data to Inform Practice. One of the benefits of recent educational policy is the focus on using data to drive reform (Martinez & Harvey, 2004). This assures that targeted reforms and programs address the needs of students and meet those needs. Togneri & Anderson (2003) noted that districts improving student performance use data effectively. Specifically, they and others recommend the following:

- Creating a district and school culture where data use is embraced and seen as an avenue to change, not as a punitive or demoralizing force (Togneri & Anderson, 2003).
- Managing state and district data so that necessary stakeholders (i.e., district leadership, school leadership, teachers, parents, and community members) have access. This includes effectively organizing data from common district benchmark or end-of-course tests aligned with the district curriculum, demographic and survey data, and disaggregated and itemized state assessment data results (Martinez & Harvey, 2004; Olson, 2007; Togneri & Anderson, 2003).
- Providing professional development to administrators and teachers about the effective use of data (i.e., how to divide it into usable pieces, how to analyze it, how to use it formatively to improve and direct policy and instruction). The district may disaggregate and divide data into manageable pieces for school leaders and teachers. The district may

train administrators and teachers how to use data effectively. The district also could hire data specialists to work on data use and interpretation with several schools, an individual school, or a grade level or subject area (Martinez & Harvey, 2004; Massell, 2000; Office of Educational Quality and the University of Massachusetts Donahue Institute, 2007; Togneri & Anderson, 2003).

- Ensuring data are used to inform decisions at the district, school, and classroom levels, including policy and instructional decisions. Researchers agree that the district's policy agenda must be driven by the students' academic needs (Allen, Osthoff, White, & Swanson, 2005; Corcoran & Lawrence, 2003; Marsh et al., 2005; Office of Educational Quality and the University of Massachusetts Donahue Institute, 2007; Togneri & Anderson, 2003).

Implementation Considerations

It is critical to provide ongoing job-embedded differentiated professional development to all faculty and staff because professional development increasingly is cited as a major impact in raising student achievement and in teacher retention. High-quality professional development has been described by Darling-Hammond (1999) and Joyce and Showers (2002) as activities that are sustained over time, are embedded in educators' every day work, incorporate the best available research and practice in teaching and learning, and foster collaboration and reflective practice among participants. It is not enough, however, to offer high-quality professional development. Efforts must be made to determine the effectiveness of the professional development activities in which teachers are asked to be involved (Aspen Institute, 2008; The Center for Comprehensive School Reform and Improvement, 2006; Darling-Hammond, 1999; Galloway, 2002; Johnson, 2006; Johnson, Berg, & Donaldson, 2005; Joyce & Showers, 2002; Lieberman & Wilkins, 2006; Liu, 2005; National Staff Development Council, 2001; Fisher & Balch-Gonzalez, 2002; Spradlin & Prendergrast, 2006).

In order to implement high-quality job-embedded professional development, Binghamton City School District should consider the following steps:

- **Create school structures that allow for job-embedded professional development.** Job-embedded professional development is learning that occurs as educators engage in their daily work activities. It can be both formal or informal and includes but is not limited to discussion with others, peer coaching, and mentoring (Aspen Institute, 2008). The Center for Comprehensive School Reform and Improvement, 2006; Darling-Hammond, 1999; Joyce & Showers, 2002; Lieberman & Wilkins, 2006; National Staff Development Council, 2001; Fisher & Balch-Gonzalez, 2002).

Co-interpretation participants noted in the force field analysis that professional development in Binghamton City School District is voluntary except on superintendent's conference days, and the group noted that these days are overplanned. By creating a schedule that allows for job-embedded professional development, all teachers benefit from the professional development during the contracted school day.

- **Align professional development with the district and school improvement plans, mission, and vision.** This assures teachers are working to improve instruction in the

areas the district and school has identified as having the highest need (Aspen Institute, 2008; The Center for Comprehensive School Reform and Improvement, 2006; Darling-Hammond, 1999; Joyce & Showers, 2002; Lieberman & Wilkins, 2006; National Staff Development Council, 2001; NCREL, 1997; Fisher & Balch-Gonzalez, 2002).

District members at the co-interpretation meeting noted that professional development topics have become more focused and are no longer “flavor of the month” initiatives. By focusing on the district and school improvement plans, the district will continue to more effectively target those areas that can effect the greatest change on student achievement.

- **Conduct a needs-assessment to determine teacher needs concerning the professional development topics identified from the district and school improvement plans.** After conducting a needs-assessment, it is important to filter the needs-assessment results through three lenses: adult learning theory, teacher development levels, and state certification requirements. Teachers at different levels of development have different professional needs that should be considered in light of professional development opportunities. For example, if most staff members of a school understand basic differentiation strategies, the school should consider higher-level professional development on that topic. In contrast, new teachers might require training in more basic differentiation techniques (Aspen Institute, 2008; Bush & Middlewood, 2005; The Center for Comprehensive School Reform and Improvement, 2006; Leithwood, 1992; Lieberman & Wilkins, 2006).

Participants noted the lack of teacher input into professional development options, specifically citing the lack of selection or menu from which teachers can choose. Teacher input about the most essential needs they experience in the classroom can help prioritize professional development topics generated from district and school improvement plans.

- **Determine the appropriate professional development options and consider differentiated professional development.** Faculty and staff need to have choices regarding a common topic. They should be allowed to select individualized, grade-level, subject-area, or team-based opportunities to meet the identified goal that is aligned with areas of improvement defined in the district or school improvement plan, results from the needs assessment, as well as the 12 professional development standards created by National Staff Development Council (2001): context (learning communities, leadership, and resources); process (data driven, evaluation, research based, design, learning, and collaboration); and content (equity, quality teaching, and family involvement) (The Center for Comprehensive School Reform and Improvement, 2007; Fisher & Balch-Gonzalez, 2002; Lieberman & Wilkins, 2006; National Staff Development Council, 2001).
- **Provide choices to ensure meeting the needs of individual teachers.**
 - Schoolwide training or information sessions are appropriate when all stakeholders need to receive similar information (e.g., technology, emergency procedures, harassment, crisis and intervention planning).
 - Grade-level, content-area, or team development, in which teams have the freedom to determine strategies that best fit their needs (e.g., cognitive coaching, literature

circles, critical friends groups, mentoring, observation, analyzing student work, cooperative learning).

- Individual choice options, such as inquiry and individually guided activities (e.g., action research, graduate coursework, grant writing, workshops/conferences, analyzing student work, creating portfolios) (The Center for Comprehensive School Reform and Improvement, 2007; Fisher & Balch-Gonzalez, 2002; Lieberman & Wilkins, 2006; National Staff Development Council, 2001).

Binghamton City School District has a unique challenge concerning differentiated professional development at the elementary level. Binghamton City School District has implemented Reading First strategies in all of its elementary schools—in those that are officially Reading First schools and those that are not. The district needs to ensure that new elementary teachers receive the same training that the other elementary teachers received or at least an orientation to the Reading First program and structure. The needs in middle and high schools, of course, are as important as those at the elementary level.

- **Include time for professional reflection.** During the past decade, national standards for teachers and administrators have been drafted and refined. Each set of standards acknowledges the role of reflection as a way in which faculty members can revise their practice to improve teaching and learning. Reflection should include an emphasis on the relationship between the professional development provided and the impact on student learning (Council of Chief State School Officers, n.d.; Lieberman & Wilkins, 2006; National Board for Professional Teaching Standards, n.d.-b; National Staff Development Council, 2001).

Teachers in Binghamton City School District reflect on student achievement data during data huddles. As the teachers are familiar with the data huddle process, the same process can then be expanded to include reflection about teacher practice and best practices that could be incorporated into a schedule for job-embedded professional development.

Monitor implementation of professional development. The first step to monitoring implementation of professional development is to track attendance at professional development meetings. District participants at the co-interpretation noted that Binghamton City School District would begin using PDP time keeper as a way to track professional development attendance. The school and district also can monitor the implementation of instructional strategies discussed during professional development during observations or walk-throughs. These may or may not use the same protocols as or be tied to the evaluation of teachers. Implementation progress and concerns also can be discussed during department- or grade-level meetings. The school or district also may require teachers to include in their lesson plans instructional strategies and structures that were introduced during professional development. There also may be an expectation that student work will take a different form based on techniques and strategies covered during professional development opportunities (Boyd, 1989; Danielson & McGreal, 2000; Toch & Rothman, 2008).

The district should review the success of the Reading First walk-throughs conducted by principals and coaches. The walk-through structure may prove useful when monitoring the implementation of instructional strategies presented during professional development.

- **Revisit the district and school improvement plans.** In addition to using reflection as a strategy for improving teaching and learning, the technique also should be used to determine the next steps toward addressing the larger needs of the district. At this point, it is time to revisit district and school improvement plans to determine what is working and what needs to be addressed. This cyclical process allows for planning, implementation, and evaluation of initiatives to determine whether they are producing the intended improvements or additional change is needed. Change in direction often is required to increase the probability of achieving the initial objectives of the professional development (Lieberman & Wilkins, 2006).

Professional development is occurring in Binghamton City School District. These recommendations strive to provide a framework for strengthening the implementation and monitoring of specific professional development goals across the district. Focusing in on specific district and schoolwide goals, providing choice for teachers based on their developmental level across the teaching continuum, including monitoring tools, and providing for review, reflection, and revision are critical components of a systematic and systemwide professional development plan that can meet the needs of all Binghamton City School District teachers.

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Appendix A. Appreciative Interview Results

The following graphics represent the reports of seven small groups at the Binghamton City School District kick-off meeting held in September 2007 as the initial event of the audit process.

Table Group 1

Emerging Themes

- 1.) Team ethos, relationships
- 2.) Involvement of all parties: everyone is valued
- 3.) Student focus
- 4.) Diversity of programs
- 5.) Wishes: Funding and technology

Table Group 2

- Shared value in district (teachers/staff/parent/students)
- Instructional and administrative support (materials /openness to try new things)
- Problem solving district (diverse needs, willingness to try)
- Teacher roles (leadership, celebrating expertise, in house training)

Table Group 3

Themes

Value

- Student focus
- Building positive relationships

Wish

- No negative sanctions without positive balance (celebration of improvements)
- Time as a limited resource (we want more)

High Point

- Teachers, staff and everyone feel empowered
- Sense of community

Table Group 4

COLLABORATION

- Communicating
- Respect for professionalism
- Mentoring
- School parent partnership
- Bringing all to their fullest potential
- Sense of safety
- Support systems (knowing where to go to find what to do...resource or person)

KIDS FIRST!

Table Group 5a

Themes

Wishes:

- Continuation of:
 - Data driven instruction
 - Open communication
 - Alignment of PD to best practices
- Heightened vitality
 - Focus on vision
 - Students first!
 - Clear sense of direction
 - Plan to deal with disruptive student behavior

Table Group 5b

Themes

Experiences:

- Recognition for excellence
- Collaboration at all levels (colleagues, community, staff, parents, students)

Values:

- Leadership
- Relationships
- Collaboration
- Positive influence on teaching and learning

Table Group 6

Themes

- 1.) Parental Engagement
 - Parents need to know they have a voice and are heard
- 2.) District collaboration
 - Among all stakeholders
- 3.) Shared Responsibility and Adaptability
 - Administrators, teachers, staff, students community
- 4.) Diverse faculty to match the diverse curriculum and student population

Table Group 7

Highs:

- Collaboration with colleagues
- Mentor program
- “Aha!” moments with students
- “Arts” program
- True developmental middle school concept

Wishes:

- More input on important decision-making
- More parental involvement
- Better allocation of technology
- Special education teachers want to feel valued
- Establishment of a true spectrum of services

Appendix B. Data Map of Co-Interpretation Key Findings Binghamton City School District: February 27–28, 2008

During the co-interpretation process, Binghamton City School District participants analyzed six individual reports (data sets) and identified findings. Participants then grouped the individual findings from across the data sets under each of the six topic areas examined through the audit: curriculum, instruction, academic intervention services, professional development, data use, and staffing. Participants worked together to identify which of the resulting key findings were most significant.

The following tables document the results of the co-interpretation process. Each table lists a key finding identified by co-interpretation participants, together with the individual supporting findings from various data sources.

Key

Report Abbreviations:

CA—Curriculum Alignment Report

DR—Document Review Report

INT—Interview Report

OBS—Observation Report

SE—Special Education Report

SEC—Surveys of Enacted Curriculum Report

Voting Colors:

Red votes = areas for improvement

Green votes = positive areas

Key Findings: Areas for Improvement

Key Finding 1	Supporting Findings	Source/Page
<p>K–12 curriculum maps generally are aligned with New York state education standards. There is a great deal of variance in how the level of cognitive demand is addressed.</p> <p>Curriculum maps are a blueprint of what to teach but do not necessarily help teachers with the delivery of instruction.</p> <p>Instruction lacks intensity across grade levels in higher-level thinking skills.</p> <p>(curriculum/ instruction)</p> <p>23 red votes</p>	There is limited evidence that the district adjusts curricular programming based on student progress.	DR, p. 11
	In regard to curricular materials for SWDs, careers and life-skills course maps have significantly less rigor than the general education curriculum.	DR, p. 4
	It appears that Binghamton City School District performance indicators are not yet provided for Grades 2 and 4.	CA, p. 4
	Binghamton City School District Grade 6 has little or no intensity in factual and metacognitive knowledge domains.	CA, p. 11
	The levels of cognitive demand at Binghamton City School District Grade 10 are deficient for the following: analyze, remember, evaluate, create.	CA, p. 19
	Factual knowledge for Grades 6, 8, and 10 is deficient.	CA, p. 4, 11, 13, 15, 17, 19
	At the Grade 6 level, Binghamton City School District is deficient in placing emphasis on the levels of cognitive demand (with the exception of apply and understand). Analyze, remember, evaluate, and create are deficient.	CA, p. 11
	Many of the board policies for ELA curriculum are outdated.	DR, p. 5
	Binghamton City School District has curriculum maps in place that are a “blueprint” for what to teach, but they do not address the how to help/scaffold skills for students who are struggling or need intensive instruction.	CA, pp. 21–22
	Curriculum maps exist in the district for the secondary ELA curriculum, but it is unclear how globally they have been disseminated to teachers.	DR, p. 6
	No relevant evidence was submitted to demonstrate district policies regarding the consistent delivery of the ELA curriculum <i>within</i> and <i>across</i> the schools.	DR, p. 6
	Instruction is guided by state standards and district curriculum maps in Grades K–11.	SEC, pp. 20–22

Key Finding 1 (cont.)	Supporting Findings	Source/Page
	ELA curriculum maps do not illustrate consistent delivery of curriculum <i>across</i> the district.	DR, p. 6
	District-level policies do not directly refer to or guide staff in the use and implementation of secondary ELA curriculum maps.	DR, p. 4
	District respondents stated that there is a districtwide K–12 ELA curriculum map.	INT (district), p. 5
	The curriculum maps within and of themselves do not illustrate consistent delivery of the curriculum across the district. The consistent use of monitoring could not be determined.	DR, p. 6
	Binghamton City School District maps are a “blueprint,” but they don’t give a detailed explanation of Binghamton City School District /NY state expectations of “how to” teach and remediate. We need more detailed lesson planning for explicit instruction of materials.	CA, p. 22
	Elementary school respondents state that the majority of teachers in the elementary schools refer to the core reading series as their curriculum guide. They do not refer to a district ELA curriculum, curriculum maps, or pacing calendar.	INT (school), p. 15
	The apply level of cognitive demand meets the NYSED target for Grade 8.	CA, p. 15
	In the area of “factual knowledge” domain and the “evaluate” and “create” levels of cognitive demand, Binghamton City School District appears to not be aligned with state indicators.	CA, p. 15
	In Grades 2, 4, 9, and 10, curriculum coverage is more broad than deep.	SEC, p. 9, 10
	Grade 6 and Grade 8 curriculum and instruction are aligned well with NY state standards.	SEC, p. 11, 12
	Our Grade 6 curriculum is aligned well with NY state standards (0.74).	SEC, p. 11
	Grade 9 is generally aligned with NY state standards (0.57). Grade 9 is spending more time on vocabulary than dictated by NY state standards.	SEC, p. 13
	Respondents stated that among secondary schools, the alignment efforts are <i>not</i> consistent from grade to grade.	INT (school), p. 15
	Instruction is guided by state standards and district curriculum maps in Grades K–11.	SEC, p. 22

Key Finding 1 (cont.)	Supporting Findings	Source/Page
	District respondents stated they are often in schools to monitor use of curriculum maps and learning goals.	INT (district), p. 6
	One district administrators said that although it is important for teachers to follow the curriculum maps, teachers still have choice and the opportunity to express their own instructional style.	INT (district), p. 6
	At the elementary level, almost all respondents indicated that instructional consistency was high within their school and across other schools.	INT (school), p. 17
	At the secondary level, all schools received a rating of moderate in their judgment of instructional consistency within their buildings and across buildings.	INT (school), p. 17
	Instruction in writing process in Grade 2 lacks emphasis in prewriting and drafting.	SEC, pp. 9, 12
	Overall, the Grade 8 and Grade 6 curriculum aligns with NY state standards (0.61). (Focus in Grade 8 is on comprehension and less on the writing process in terms of generate/create.)	SEC, p. 12
	Grade 10 is not well aligned with the Grade 10 NY high school exam (0.34). Instructional time spent on listening and speaking increased in 10th grade.	SEC, p. 19B
	Grade 10 is not well aligned with the Grade 10 NY high school exam (0.34). Instructional time spent on listening and speaking increased in 10th grade.	SEC, p. 19B
	Instructional emphasis in third grade mirrors instruction in second grade, rather than developing more complex skills.	SEC, pp. 15, 16
	Instruction is broader than what is being tested on Grade 10 NY high school exam. There is not a strong enough focus on the skills being tested on the Grade 10 NY high school exam.	SEC, p. 19B
	Grades 4 and 6 lack depth in instruction in speaking and presenting in the cognitive demand of generate/create/demonstrate.	SEC, pp. 10, 11
	Survey indicates that preparation for the next grade level drives instructional choices (Grades 6–11).	SEC, p. 23
	Instructional emphasis at Grades 2, 4, and 9 in vocabulary and comprehension is on memorization/ recall and performance/procedures/explain.	SEC, pp. 9, 10, 13
	Instruction in Grade 2 in vocabulary, comprehension, listening/viewing, and speaking lacks emphasis in cognitive demands of analysis/investigate and evaluate/integrate.	SEC, p. 9

Key Finding 1 (cont.)	Supporting Findings	Source/Page
	Curriculum is covered broadly in Grades 4, 9, and 10, but lacks in intensity in higher levels of thinking.	SEC, pp. 10, 13
	At Grade 4, instruction in critical reasoning lacks depth in the areas of analyze/investigate and evaluate/integrate.	SEC, p. 10
	Instruction is generally aligned with NY state standards, but this trend is decreasing with increase in grade level (0.54). Focus is still on lower cognitive demand than on process skills.	SEC, p. 14
	Grade 9 instruction not well aligned with NY high school exam (0.33). Instruction is broader than exam at the Grade9 level. There is not a strong enough focus on the skills tested in Grade 9.	SEC, p. 19A
	Auditor's Findings	Source/Page
	Documents do not contain enough detail to clearly ascertain that the district is currently engaged in curriculum work at the secondary level.	DR, p. 6
	The written Binghamton City School District curriculum does not match the NY state standards in terms level of cognitive demand and type of knowledge addressed in Grades 6, 8, and 10.	CA, pp. 9, 11, 13, 15, 17, 19
	Curriculum maps for Grades 2, 4, 6, 8, and 10 list units/topics, skills, and concepts to be covered, but it is not clear what students are expected to know.	CA, p. 21
	The curriculum maps for the five target grade levels identify four to six units with guiding questions to be taught from September to June (each unit lasting two to three months). They do not provide more detailed suggested or expecting scheduling or pacing within each unit.	CA, pp. 21, 22

Key Finding 2	Supporting Findings	Source/Page
<p>Documents reflect an inconsistent working relationship between classroom and special education teachers and SWDs and the responsibilities of all parties.</p> <p>(staffing)</p> <p>19 red votes</p>	There is a struggle between general education and special education teachers.	SE (int.), p. 23
	Many teachers and special education leaders cited resistance from general education teachers toward having SWDs and special education teachers in their classrooms.	SE (int.), p. 29
	Teachers reported they usually share responsibility in coteaching. Observations did not support this reporting. In approximately one quarter of the coteaching situations observed, the special education teacher had no interaction with the students at all.	SE (int.), p. 29
	Approximately 63% of the special education teachers are frequently actively involved in the instruction and 13% are involved in at least half of a class period.	SE (obs.), p. 29
	Although teachers reported that they usually shared responsibility in coteaching, observation data demonstrated that in coteaching classrooms, general education teachers had more interaction with SWDs than special education teachers.	SE (obs.), p. 29

Key Finding 3	Supporting Findings	Source/Page
<p>Documentation and interviews with teachers and administrators indicate that the district has offered professional development in differentiated instruction, collaboration, and coteaching; however, they say that there needs to be more professional development in these areas K–12. In addition, they indicated that staff need time for collaboration and professional development around topics such as the use of data, ELLs, “Special Education 101,” and legal issues for SWDs.</p> <p>(professional development)</p> <p>18 red votes</p>	<p>There is a marked difference between elementary and secondary ELA teachers’ participation in professional development opportunities offered to help them manage an inclusive classroom (92% of secondary versus 42% of elementary).</p>	<p>SE (int.), p. 20</p>
	<p>The most frequently mentioned need for training on teaching strategies was related to differentiated instruction and how to teach reading and writing. This need was mentioned by general education teachers, special education teachers, and special education administrators.</p>	<p>SE (int.), p. 22</p>
	<p>The interviewed ELA teachers said the special education-related professional development opportunities they receive usually focus on differentiated instruction, inclusion, coteaching, and general special education knowledge.</p>	<p>SE (int.), p. 20</p>
	<p>Although a majority of inclusion teachers participated in general education professional development opportunities, more than half of self-contained Special Education teachers (60%) did not attend these events.</p>	<p>SE (int.), p. 20</p>
	<p>Documentation for ELA professional development is strong at the primary level (K–3), but little attention is paid to Grades 4–6.</p>	<p>DR, p. 9</p>
	<p>The second most frequently identified professional development need is to have <i>time</i> to collaborate with their coteachers and colleagues.</p>	<p>SE (int.), p. 22</p>
	<p>Schools reported that not all schools provide collaboration time for teachers.</p>	<p>INT (school), p. 30</p>
	<p>The third most frequently identified need is for the general education teachers to have more training related to special education, such as information on legal issues, training on how to read IEPs, and workshops on specific disabilities.</p>	<p>SE (int.) p. 22</p>
	<p>88% of interviewed teachers reported that they had not been trained on how to use the data to make decisions about their instruction. Also, special education leaders did not provide evidence that teachers were trained.</p>	<p>SE (int.), pp. 20–21</p>
	<p>There is no documentation of a systemic, districtwide practice of professional development in analysis and use of student achievement data.</p>	<p>DR, p. 11</p>
<p>Schools perceive that support for regular education teachers in providing instructions to ELL students is moderate or low.</p>	<p>INT (school), p. 30</p>	

Key Finding 3 (cont.)	Supporting Findings	Source/Page
	Schools would like more professional development in the area of ELL.	INT (school), p. 30
	District respondents said professional development is not adequate for general education teachers of ELLs.	INT (district), p. 9
	Auditor's Findings	Source/Page
	Since Reading First is a program at the early elementary level (K–3 only), reviewers were left concerned about the documentation focusing most heavily on primary grades with little attention given to other grade levels.	DR, p. 13

Key Finding 4	Supporting Findings	Source/Page
<p data-bbox="201 293 562 589">There is no evidence of a systemic process for implementation, monitoring, and documentation in regard to professional development, nor is there evidence of the instructional impact on student achievement.</p> <p data-bbox="201 639 541 670">(professional development)</p> <p data-bbox="201 716 359 745">13 red votes</p>	No evidence of monitoring professional development in regard to instructional strategies was submitted.	DR, p. 9
	For a district to make informed decisions regarding professional development, a more comprehensive monitoring system needs to be in place.	DR, p. 9
	For documentation on professional development with regard to addressing the needs of SWDs, no evidence of policy, implementation, or monitoring was submitted.	DR, p. 9
	Some school-level administrators are developing their own staff. No documentation was submitted to demonstrate that these professional learning opportunities are monitored for effectiveness.	DR, p. 13
	The perceived effectiveness of professional development by special education leaders is inconsistent. There was no evidence that instruction improved across the district or that student achievement improved as a result of the professional development offered.	SE (int.), p. 22
	Teacher and administrators cited targeted areas such as teacher input on training and follow-up session/refresher courses	SE (int.), p. 23
	Special education administrators who commented on this issue agreed that while professional learning “is offered, it is not always taken advantage of.”	SE (int.), p. 21
	Auditor’s Findings	Source/Page
Teachers and administrators cited targeted areas to improve professional development, including the following: making professional development relevant to teacher needs, eliminating jargon, making the built-in professional learning hours more effective, using a coaching model more often, reducing the power struggle between general and special education teachers, and helping teachers to be willing to embrace new ideas and to change.	SE (int.), p. 23	

Key Finding 5	Supporting Findings	Source/Page
<p>There is no evidence of a districtwide process to ensure that teachers use district- and state-level assessment data to inform instruction.</p> <p>(data use)</p> <p>12 red votes</p>	<p>Similar to a lack of evidence illustrating that the district ensures that teachers use data to inform practice, weak evidence was submitted to illustrate that the district adjusts curricular programming based on the monitoring of student progress.</p>	<p>DR, p. 11</p>
	<p>No documents were submitted as strong evidence that the district provides data to classroom teachers regarding specifically the placement of ELLs and SWDs in general education settings.</p>	<p>DR, p. 11</p>
	<p>District respondents stated there are barriers to data use: not enough time to participate in collaborative sessions, inexperience with technology, lack of time for the district to develop an organized system.</p>	<p>INT (district), p. 8</p>
	<p>Survey results indicate that Binghamton City School District Grades K–11 are not influenced by “data” state test results when deciding what to teach.</p>	<p>SEC, pp. 20–23</p>
	<p>At the secondary level, respondents stated that data often are not helpful because the teachers do not receive information from the state.</p>	<p>INT (school), p. 24</p>
	<p>There is no documentation of a systemic, districtwide practice of professional development in analysis and use of student achievement data.</p>	<p>DR, p. 11</p>
	<p>There is a decreased use and influences of test results (screening, diagnostic, classroom) on classroom instruction moving from K to Grade 12.</p>	<p>SEC, pp. 20–23</p>
	<p>Auditor’s Findings</p>	<p>Source/Page</p>
	<p>However, to illustrate that the district is currently enforcing that student achievement data are utilized to inform decisions, the district would have to show monitoring of teachers’ data use (e.g., documenting teachers accessing databases containing student data and walk-through observations to confirm that data are informing instruction in some way).</p>	<p>DR, p. 16</p>
	<p>As a barrier for effectively using district and state assessment data, teachers frequently cited the length of time it takes to get results back.</p>	<p>SE (int.), p. 25</p>

Key Finding 6	Supporting Findings	Source/Page
<p>There is a discrepancy between what teachers reported and what was observed regarding the variety of instructional strategies and differentiated instruction. Direct instruction was the predominant instructional method observed across all levels.</p> <p>(instruction)</p> <p>8 red votes</p>	There is a discrepancy among the seven elementary schools regarding the amount of flexibility of instructional practices and the use of the core materials and curriculum.	INT (school), p. 18
	Individual tutoring was rarely or never observed at all levels.	OBS, p. 5
	Systemic individual instruction was rarely or never observed at all levels.	OBS, p. 5
	Although interviewed teachers reported using various teaching strategies to differentiate instruction, observation data revealed 52% used differentiated teaching.	SE (obs.), p. 10
	Although teachers reported using various teaching strategies to differentiate instruction, classroom observation data showed that occurrence of differentiated teaching strategies was not obvious in close to half of classrooms across grade levels and settings.	SE (int.), p. 10
	Limited opportunities for peer student collaboration were observed across grade levels.	SE (obs.), p. 13
	High levels of student engagement were reported in a majority of district classrooms observed, regardless of educational level.	OBS, p. 4
	High levels of student engagement were observed at all levels (table 5): E = 77%, M = 56%, H = 71%.	OBS, p. 4
	In middle school classrooms, the only practice observed most frequently was direct instruction.	OBS, p. 3
	Observers reported a prevalence of independent seatwork at 36% of elementary classrooms visits. Hands-on learning activities were observed in 26% of elementary classrooms.	OBS, p. 2
Students in approximately half of the classrooms were rarely engaged in independent seatwork. They also were seldom engaged in experiential activities, sustained writing/reading or working together collaboratively.	SE (obs.), p. 12	

Key Finding 6 (cont.)	Auditor’s Findings	Source/Page
	Students were seldom engaged in independent inquiry/research.	SE (obs.), p. 16
	“Curriculum maps for Grades 2 and 4 list texts at different reading levels (i.e., emergent, on level, independent). It is not clear if these are supplemental materials or from the core reading series. Maps for Grades 6, 8, and 10 list required readings, apparently for all students, but they do not specifically address varying levels of student development and background knowledge.”	CA, p. 22

Key Finding 7	Supporting Findings	Source/Page
<p data-bbox="199 651 571 883">At the elementary level, there is a difference between a reading coach and a literacy/curriculum specialist. At the secondary level, there are no coaches and/or literacy specialists.</p> <p data-bbox="199 930 317 959">(staffing)</p> <p data-bbox="199 1006 342 1036">5 red votes</p>	At the elementary level, most schools have full-time reading coaches available to them. Their influence is moderate to high, depending on the building.	INT (school), p. 37
	In the secondary schools, where there are no full-time literacy coaches. Teachers rely on department heads and lead teachers for instructional support.	INT (school), p. 37

Key Finding 8	Supporting Findings	Source/Page
<p>Barriers to effective AIS interventions include:</p> <ul style="list-style-type: none"> • parental permission for extended day • student attendance • the availability of appropriate materials for the lowest performing students <p>(academic intervention)</p> <p>5 red votes</p>	Schools report that factors impacting the effectiveness of interventions are student attendance and participation.	INT (school), p. 27
	School respondents indicate parents not granting permission for afterschool programs limits AIS possibilities.	INT (school), p. 26
	School expressed concerns about appropriate materials for lowest students.	INT (school), p. 30

Key Finding 9	Supporting Findings	Source/Page
<p>Interviews of general and special education teachers across the district and interviews of parents indicate minimal parent involvement.</p> <p>(instruction)</p> <p>3 red votes</p>	Parents from focus groups agreed with teachers’ view that not all parents are actively involved in their children’s education.	SE (focus group), p. 15
	Teachers and special education leaders identified a lack of parent involvement as a significant challenge in educating students with disabilities.	SE (int.), p. 15

Key Finding 10	Supporting Findings	Source/Page
<p>There is inconsistent monitoring of effectiveness of AIS and use of student data over time.</p> <p>(academic intervention)</p> <p>2 red votes</p>	Teachers and administrators have access to the e-database, AIS edge. This could <i>imply</i> that student achievement data are used to inform decisions regarding effectiveness of district’s AIS.	DR, p. 7
	The district has many plans for services, <i>and to some degree</i> , the current services are monitored for effectiveness.	DR, p. 7
	Several respondents said they would like a more constant system to measure the effectiveness of specific intervention services on student achievement.	INT (district), p. 9

Key Finding 11	Supporting Findings	Source/Page
<p>Observations of general and special education across the district indicated minimal use of instructional technology.</p> <p>(instruction)</p> <p>2 red votes</p>	Technology use was rarely or never observed at all levels (elementary, middle, and high).	OBS, p. 6
	An overwhelming majority of classrooms observed (81%) did not use computer technology to support teaching of the ELA curriculum.	SE (obs.), p. 8

Key Finding 12	Supporting Findings	Source/Page
<p>There are inconsistencies in the effective monitoring of ELA instruction across the district in Grades K–12.</p> <p>(instruction)</p> <p>1 red vote</p>	<p>Regarding consistent delivery of ELA curriculum <i>within</i> schools: There was evidence of plans and resource materials but a lack of evidence of the monitoring of ELA instruction.</p>	<p>DR, p. 6</p>
	<p>There is a discrepancy among schools to the degree to which instruction is monitored.</p>	<p>INT (school), p. 19</p>

Key Finding 13	Supporting Findings	Source/Page
<p>Documents show a lack of clearly defined leadership roles. There is no evidence of support for new administrators.</p> <p>(professional development)</p> <p>1 red vote</p>	<p>District did not submit documentation to illustrate that it is clearly defines expectations for leadership roles at all levels.</p>	<p>DR, p. 12</p>
	<p>No documentation was submitted as evidence that the district offers support for new principals.</p>	<p>DR, p. 12</p>

Additional Key Findings: Areas for Improvement

Additional findings were identified as key by the district co-interpretation participants but were not prioritized for action planning.

Key Finding 14	Supporting Findings	Source/Page
<p>Building-level administrators and faculty stated that the availability of curricular services is inconsistent across grade levels and subgroups. District-level administrators stated that the ability and quality of materials is consistent across all levels.</p> <p>(curriculum/ instruction)</p> <p>0 votes</p>	Respondents say curricular <i>materials</i> are consistent across school levels at both elementary and secondary levels.	INT (district), p. 6
	K–12 ELA curriculum does not have documentation to ensure that all teachers have sufficient materials.	DR, p. 4
	There is no evidence that there is a process in place to ensure curricular materials are utilized in the classroom. District policies do not directly refer to or guide staff in the implementation of these curriculum documents or their use.	DR, p. 4
	Binghamton City School District policy mandates that ELLs have access to ELA curriculum materials, but there is a lack of clear evidence of plans, implementation strategies, and monitoring practices.	DR, p. 5
	Secondary-level concerns were that textbooks are outdated and technology resources are not available in all classrooms.	INT (school), p. 17
	Schools stated that elementary teachers have core reading materials for the average students, but they have to bring in older curriculum materials or use teacher websites for supplemental materials.	INT (school), p. 17
Key Finding 15	Supporting Findings	Source/Page
<p>There is no evidence to support district efforts to address the retention of staff.</p> <p>(staffing)</p> <p>0 votes</p>	There are data on retention of staff from 1996 to 2000, but nothing more current was submitted as evidence that the district is examining retention rates in the district. Failure to analyze retention data may result in unanticipated losses.	DR, p. 13

Key Finding 16	Supporting Findings	Source/Page
<p>There are inconsistencies in the effective monitoring of testing accommodations of SWDs.</p> <p>(instruction)</p> <p>0 votes</p>	<p>There is a documented plan for state assessments, but there are inconsistencies with testing accommodations given to SWDs between district and classroom testing.</p>	<p>SE (int.), p. 25</p>
	<p>Document review <i>did not</i> demonstrate that the district monitors whether students receive the appropriate testing accommodations on the classroom assessments.</p>	<p>SE (doc), p. 26</p>

Key Finding 17	Supporting Findings	Source/Page
<p>The district has a goal for hiring and training a diverse staff that is reflective of the student population.</p> <p>(staffing)</p> <p>0 votes</p>	<p>District statements indicate district concern with hiring, training, and retaining staff while also reflecting the diversity of the student population.</p>	<p>INT (district), p. 12</p>

Key Finding 18	Supporting Findings	Source/Page
<p>In general, district staff are using informal and formative (including some standardized) assessment data to inform instruction.</p> <p>(data use)</p> <p>0 votes</p>	<p>Most respondents from elementary and secondary schools stated they use data to track student progress while others do not always have access to student data in a timely manner.</p>	<p>INT (school), pp. 23-24</p>
	<p>Teachers reported that they are using classroom assessment data more often than district or state assessment data for guiding instruction.</p>	<p>SE (int.), p. 28</p>
	<p>Sharing data within schools was accomplished at a high level in most elementary schools. Grade-level meetings are scheduled in which formative assessment data are reviewed by teachers. These meetings are characterized by open communication about student progress as reflected in assessments.</p>	<p>INT (school), p. 25</p>
	<p>There is little evidence of plan to illustrate teachers’ use of data to inform decisions about instruction.</p>	<p>DR, p. 11</p>
	<p>There is a decreased use and influence of test results (screening, diagnostic, classroom) on classroom instruction moving from K to Grade 12.</p>	<p>SEC, pp. 20-23</p>
	<p>Student special needs drive instruction in Grades K–12.</p>	<p>SEC, pp. 21-23</p>
	<p>According to interview participants, all of the interviewed administrators and teachers reported using a variety of formal and informal assessments to inform and support instruction.</p>	<p>SE (int.), p. 26</p>
	<p>A majority of classroom teachers (76%), including special education and general education teachers, reported that they used the informal classroom assessments more often than the state and district tests in assessing the performance of SWDs.</p>	<p>SE (int.), p. 26</p>
	<p>School and district special education leaders all reported reviewing data with teachers (“administratively directed”). Teacher-directed state and district data use is <i>not evident</i> in the interviews.</p>	<p>SE (int.), p. 27</p>
	<p>District administrators described <i>several</i> assessments used to monitor student progress in ELA.</p>	<p>INT (district), p. 7</p>
	<p>A majority of observed teachers (78%) were using formative assessment such as progress monitoring.</p>	<p>SE (obs.), p. 27</p>

Key Finding 19	Supporting Findings	Source/Page
<p>Interviews and document indicate professional development opportunities exist for administrators, but there is not enough time to take advantage of them.</p> <p>(professional development)</p> <p>0 votes</p>	<p>Binghamton City School District provides comprehensive professional development for teachers but not as much for administrators.</p>	<p>DR, p. 9</p>
	<p>District respondents said that principals do not always have enough time to engage in professional development.</p>	<p>INT (district), p. 12</p>
	<p>In most schools, principals said they have frequent and useful <i>opportunities</i> for professional development.</p>	<p>INT (school), p. 41</p>

Positive Key Findings

A series of positive key findings also emerged from the district co-interpretation process. These findings, indicating what is being done well in the district, were prioritized by district participants.

Positive Key Finding 1	Supporting Findings	Source/Page
Special Education students are receiving services based on individual needs.	Both special and general education teachers reported relying on information in the students' IEPs in planning their instruction.	SE (int.), p. 14
	Students' special needs drive instruction in Grades K–12. Teachers indicate that local priorities, directives, policies do not drive instruction.	SEC, p. 23
General education and Special Education teachers use IEPs and student needs to drive instructional practices. (instruction) 19 green votes	Approximately 85% of observed teachers used the core ELA program and/or supplemental materials.	SE (obs.), p. 5
	Accommodations and modifications for students are clearly reported on the IEPs.	SE (int.), p. 6
	Based on teacher interviews, the access to ELA general education curriculum does vary according to disabilities and settings.	SE (int.), p. 5
	Based on documents, there is access to ELA curriculum at varying levels in self-contained settings.	SE (doc.), p. 5
	Special education leaders cited various ways that schools ensured that SWDs had access to the general education ELA curriculum.	SE (int.), p. 5
	ELA curriculum for SWDs is different from the ELA curriculum for general education.	DR, p. 4

Positive Key Finding 2	Supporting Findings	Source/Page
Surveys and interviews indicate that a wide variety of professional development is available.	Three of the four elementary schools received a high rating on availability of professional development.	INT, p. 33
	All schools were rated moderate or high on professional development and its influence in instruction.	INT, p. 34
Teachers indicate that professional development influences their instruction.	District respondents said teacher and principal professional development is frequent and focused on key curriculum issues.	INT (district), p. 14
	At the secondary level, all three of the schools were rated high, based on nearly all of the respondents stating that the availability of teacher professional development was constant and frequent.	INT (school), p. 33
(professional development) 12 green votes	Professional development experiences are highly influential in influencing teaching decisions (Grades 6–11).	SEC, p. 23
	Respondents indicated that there are opportunities for professional development throughout the district.	SE (int.) p. 19
	Schools report teachers from Grades K–3 are highly satisfied with the availability of teacher professional development offered to them.	INT (school), p. 33

Positive Key Finding 3	Supporting Findings	Source/Page
Surveys and interview data indicate that a strength of the district is the dedication and commitment of staff at all levels.	Respondents noted the overall strengths of this district as being the camaraderie among teachers, the diversity of the student population, and the student-centered focus of schools.	INT (school), p. 41
	The biggest strength of the district mentioned by district respondents is the dedication and commitment of the staff at all levels, including teachers, principals, and district personnel.	INT (district), p. 12
(staffing) 9 green votes		

Positive Key Finding 4	Supporting Findings	Source/Page
<p>Binghamton City School District has a prereferral process and academic intervention plan for students with and without disabilities.</p> <p>(academic intervention)</p> <p>9 green votes</p>	Screening/diagnostic/classroom assessment results are used to identify students in need of AIS in Grades K–4.	SEC, p. 21
	Intensive intervention services were available to all students with or without disabilities, according to a district document review.	SE (doc.), p. 18
	Binghamton City School District requires the use of prereferral intervention teams to identify students who struggle academically before they are classified as having a disability.	SE (doc.), p. 17
	According to district respondents, all district schools have a school-based intervention team, which identifies struggling students who need academic support services based on student test scores and teacher observation.	INT (district), p. 8
	Respondents reported that schools provide multiple types of support for students performing below proficiency.	INT (school), p. 26
	Intensive intervention services were available to all students with and without disabilities.	SE (int.), p. 18
	District respondents stated at both the elementary and secondary levels, there are multiple resources for academic support both during and outside of the regular school day.	INT (district), p. 8

Positive Key Finding 5	Supporting Findings	Source/Page
<p>It was observed and reported that there existed a high level of student engagement in classroom across the district.</p> <p>(instruction)</p> <p>6 green votes</p>	In 96% of classrooms, visited teachers did not have to spend a substantial amount of time managing student behaviors during instruction. This was consistent across different educational settings and grade levels.	SE (obs.), p. 8

Miscellaneous Findings

These findings were identified from the data sets by co-interpretation participants but ultimately were not included in the development of the key findings. Some findings were considered outliers if the observations seemed outside the intended focus of the audit. In addition, some suggestions were placed in a “parking lot” for later consideration.

Outliers

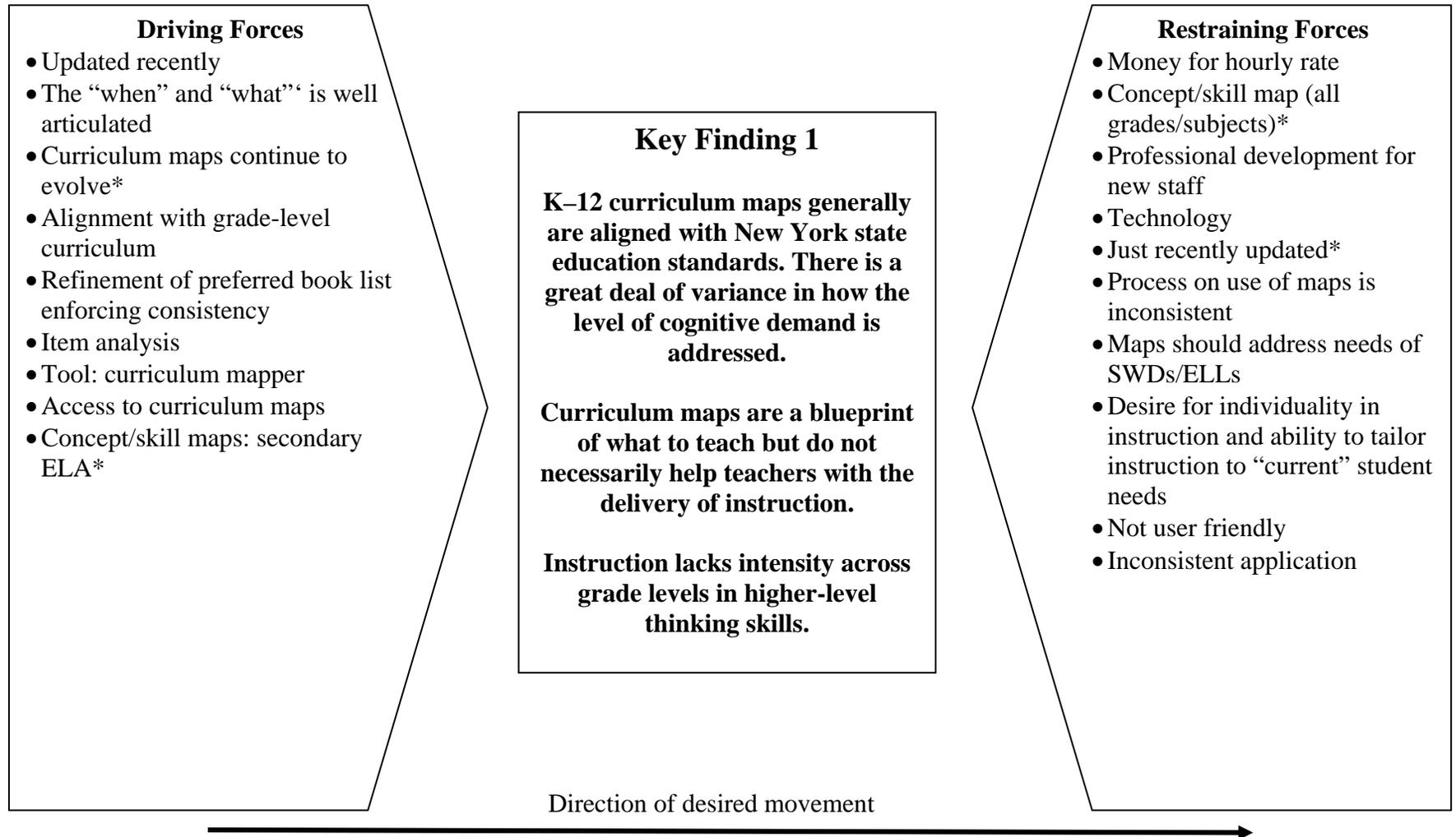
Miscellaneous Findings	Source/Page
There is a decrease use and influence of test results (screening, diagnostic, classroom) on classroom instruction moving from K to Grade 12	SEC, pp. 20–23
District respondents stated the importance of having articulated curriculum geared toward student success at all levels.	INT (district), p. 12
The district has curriculum mapping software that can facilitate teachers and professional development staff working together to look at the standards and link them to the instructional program.	INT (district), p. 6
Inconsistent attendance was frequently cited as a barrier in educating SWDs by both teachers and school leaders, especially at the secondary schools.	SE (int.), p. 15
100% of general and special education teachers and students have all instructional materials for ELA work (books for each student, paper, pencils)	SE (obs.), p. 8
There was a significant difference in the existence of well-equipped classroom library (88% versus 33%) between and inclusive and self-contained environment.	SE (obs.), p. 8
District respondents wanted earlier intervention services so that fewer students would be classified as learning disabled.	INT (district), p. 10
The board policy regarding academic intervention services is not recent (1993).	DR, p. 7
All teachers recognize that students have special needs, which influence their teaching.	SEC, p. 21
District respondents said the mentor program has a very positive influence at elementary and secondary levels.	INT (district) p. 11
In the majority of the schools, all or nearly all respondents indicated that the district provides new teachers with a high level of support through a district mentoring program.	INT (school), p. 41

Miscellaneous Findings	Source/Page
District respondents stated there is a lack of funding for some professional development initiatives.	INT (district), p. 11
District personnel indicate that a high level of professional development is provided to teachers on curriculum.	INT (district), p. 11
Teachers indicated students' special needs highly influenced their instruction.	SEC, p. 20
Majority of general education teachers believe that SWDs are performing well.	SE (int.), p. 24
A majority of the self-contained teachers (3 out of 5) reported that their students were not doing well.	SE (int.), p. 24
The following assessments were rarely or never observed in classrooms: performance assessment strategies and student self-assessment (portfolios, individual record books)	OBS, p. 6
About 70% of the paraprofessionals are engaged in supporting instruction, as reported by special education teachers and in the classroom observations.	SE (int.), p. 30
District respondents stated there is a growing Latino cohort within the district.	INT (district), p. 9
District personnel stated that a changing population within the city has resulted in the issues of poverty and student mobility moving to the forefront of district concerns.	INT (district), p. 5
There is lack of documentation of implementing/monitoring curriculum, instruction, AIS, professional development, data-driven decision making, and staffing practices.	DR, pp. 8, 9, 10, 12, 13
Some suggested areas of improvement expressed by respondents are more curriculum materials and resources for the lowest level students, more staff support in the classroom, and a clear and consistent behavior policy at the secondary level.	INT (school), p. 41

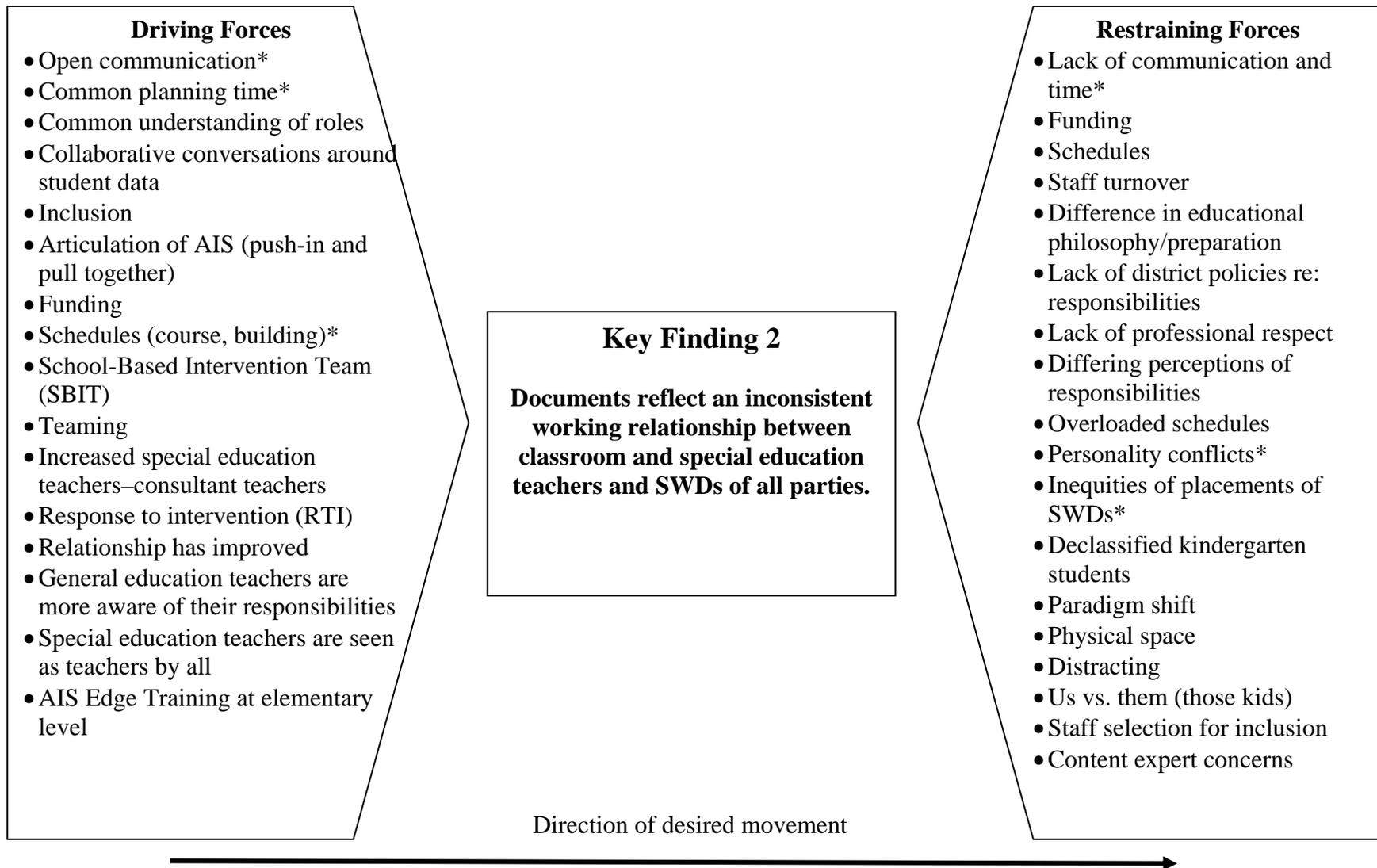
Parking Lot

Miscellaneous Findings	Source/Page
We need to look at the training, development, and needs of the paraprofessionals throughout the district.	

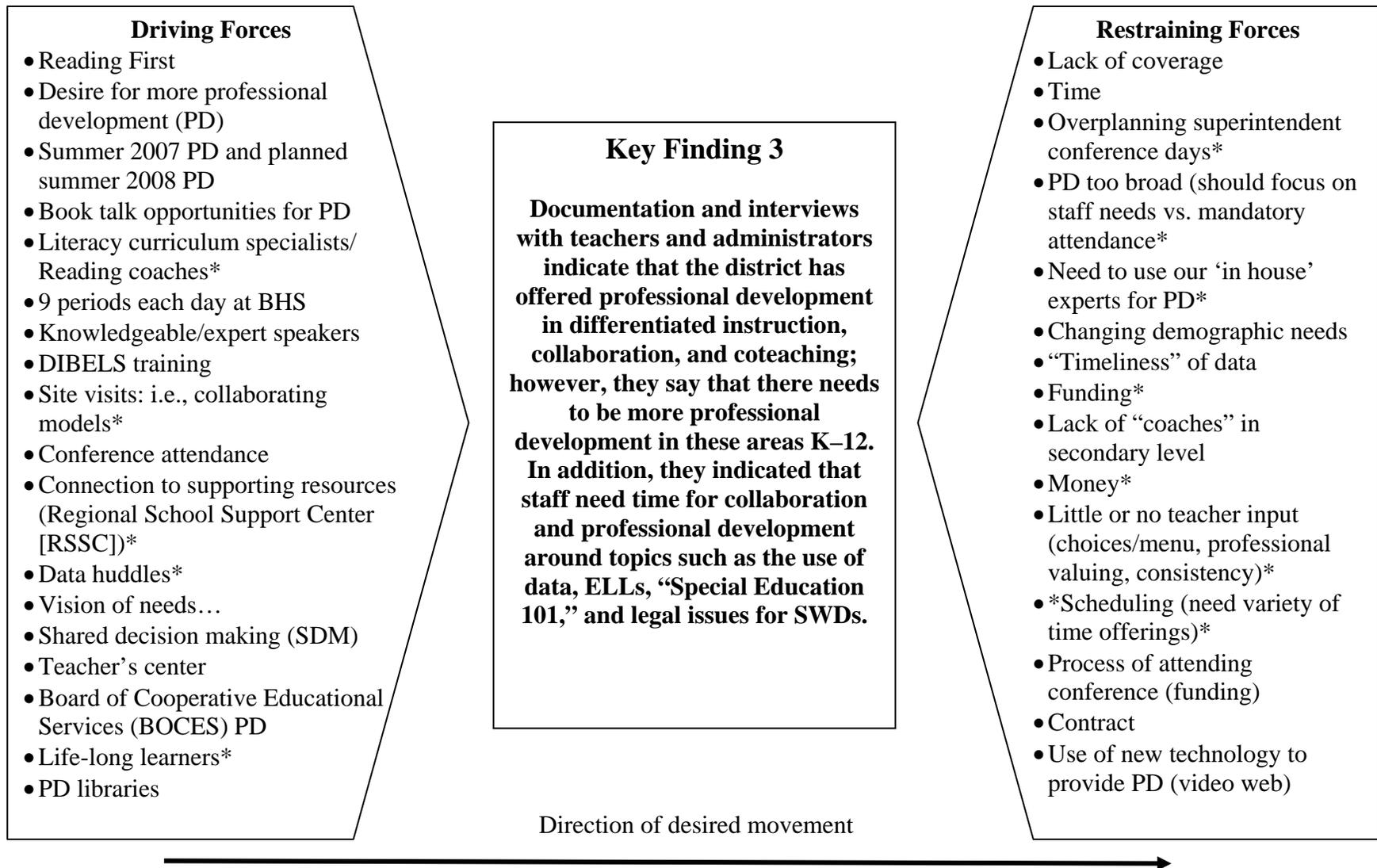
Appendix C. Force-Field Analysis



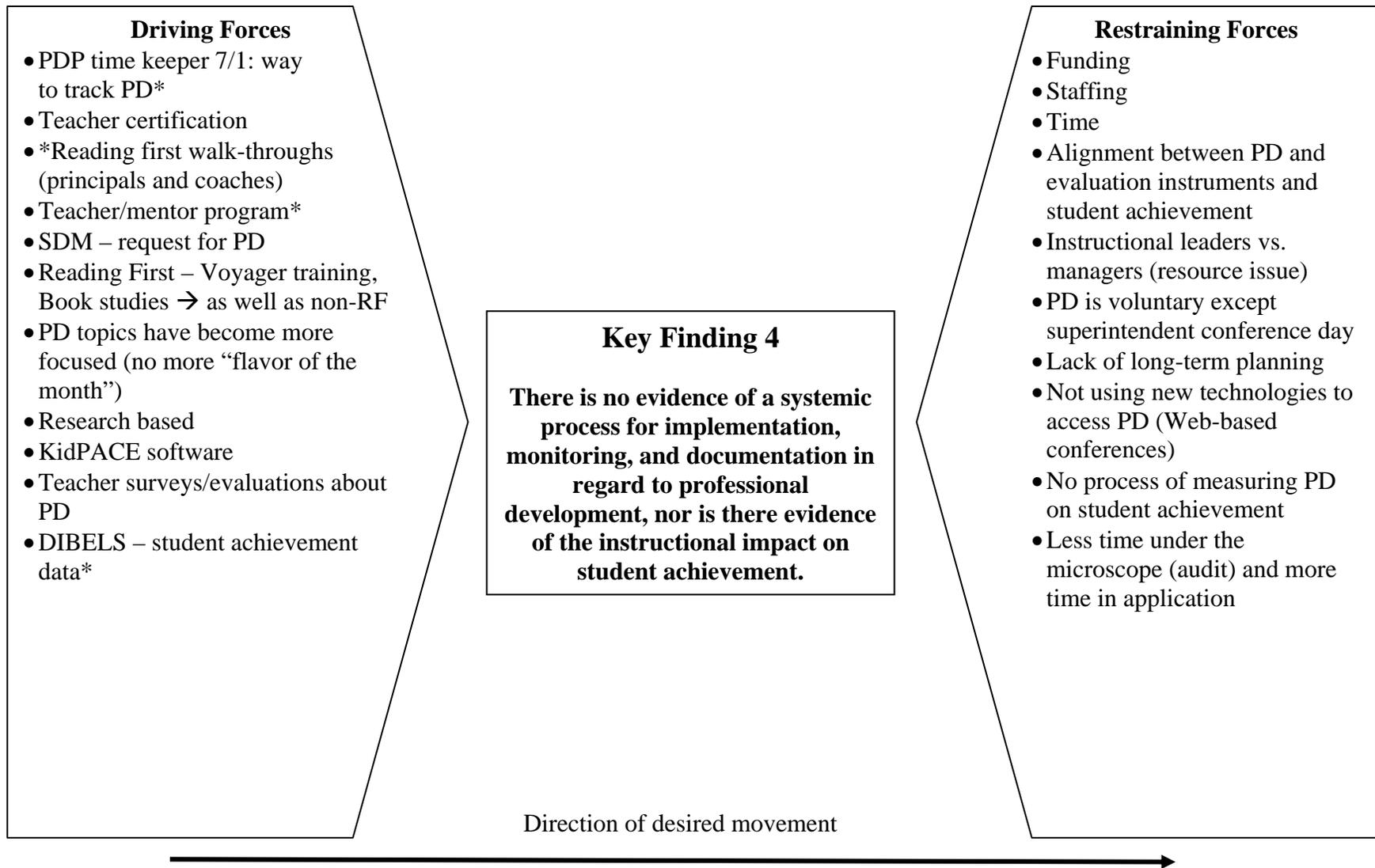
*District-identified leverage points for improvement



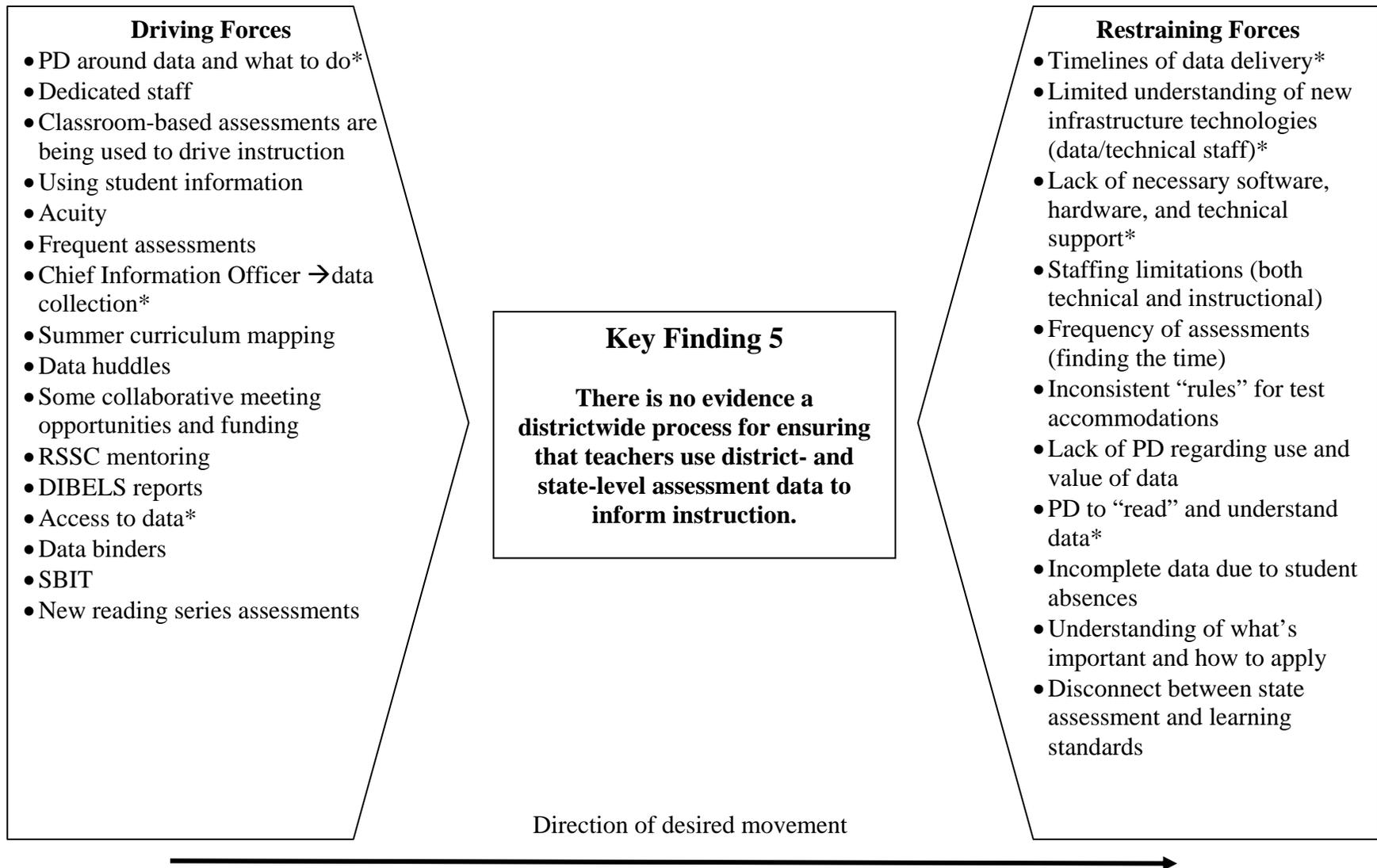
*District-identified leverage points for improvement



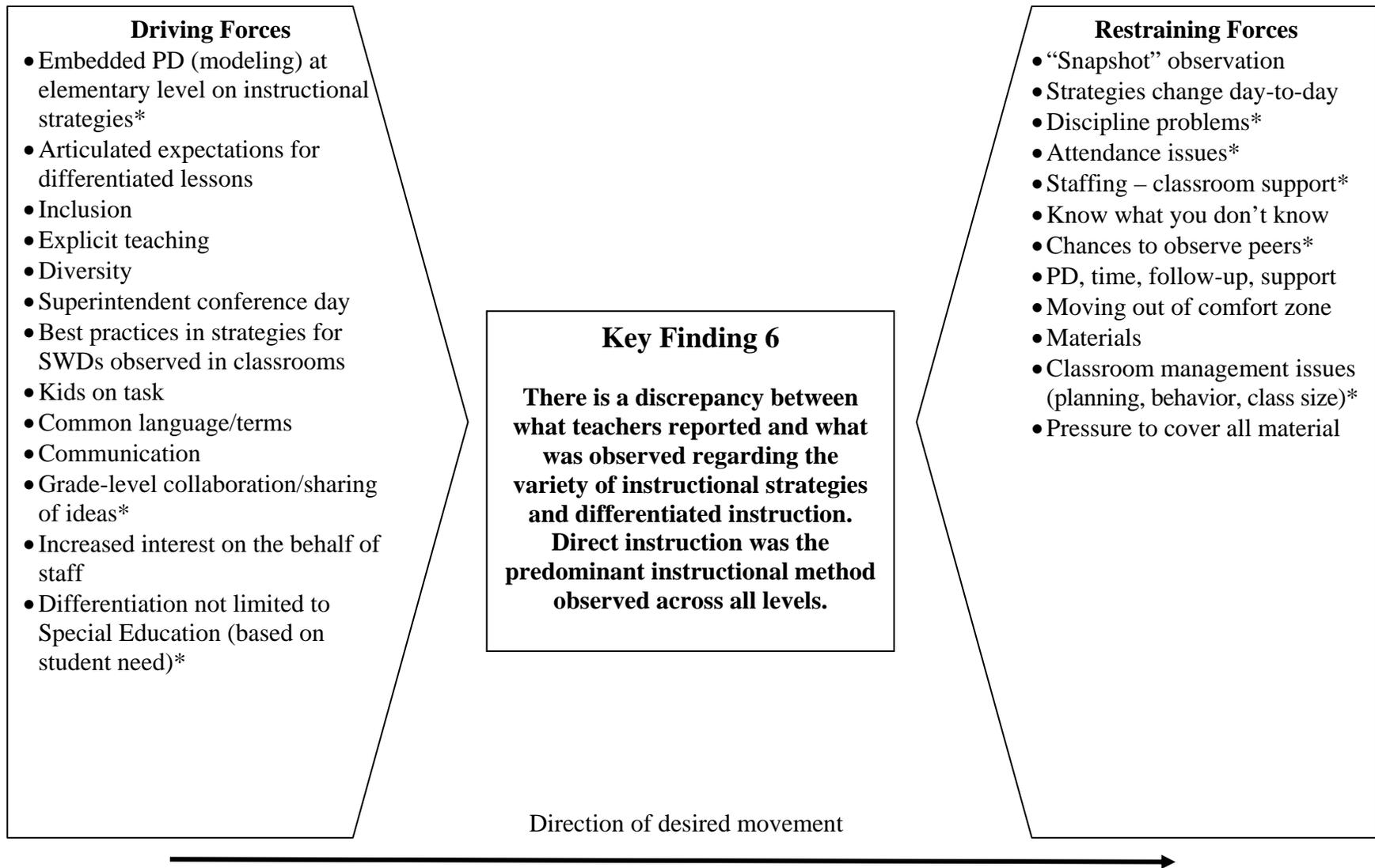
*District-identified leverage points for improvement



*District-identified leverage points for improvement



*District-identified leverage points for improvement



*District-identified leverage points for improvement