

Flushing International High School

FINAL REPORT



Contents

- Introduction 1
 - About This Report 1
 - About Flushing International High School. 1
 - Audit Process at Flushing International High School. 2
- Key Findings 3
 - Critical Key Findings 3
 - Positive Key Finding. 3
 - Additional Key Finding 4
- Recommendations 5
 - Overview of Recommendations. 5
 - Recommendation 1: Instructional Rigor and Self-Guided Learning for ELLs 6
 - Recommendation 2: Student Engagement in Academic Intervention Services 13
- References 20

Introduction

About This Report

This final report is the result of an external school curriculum audit (ESCA) of Flushing International High School (FIHS) conducted by Learning Point Associates, an affiliate of American Institutes for Research. This audit was conducted in response to the school being identified as being in need of improvement under the New York State Education Department (NYSED) differentiated accountability plan, pursuant to the accountability requirements of the Elementary and Secondary Education Act, as reauthorized by the No Child Left Behind Act. The utilized ESCA process was developed for and carried out under the auspices of the New York City Department of Education (NYCDOE) Office of School Development, within the Division of Portfolio Planning.

About Flushing International High School

Located in Flushing, Queens, FIHS (Q263) serves 393 students in Grades 9–12. The school population comprises 2 percent Black, 49 percent Hispanic, 1 percent White, and 49 percent Asian students. The student body includes 89 percent English language learners (ELLs) and 1 percent special education students. Boys make up 53.66 percent of the student population; 46.34 percent of students are girls. The average attendance rate for the 2009–10 school year was 91 percent. Approximately 89 percent of the student population is eligible for free lunch, and 8 percent of students are eligible for reduced-price lunch.

At FIHS, all students are recent immigrants to the United States and new learners of English. According to the school's mission, the goal is to “help each student learn to read, write, and communicate fluently in English while also providing opportunities to maintain their native language. We believe that students' native languages, cultures, and families are a resource for the student, the school, and society.” All activities in the school, including curriculum and instruction, are closely aligned to the school's team structure. Students engage in many project-driven interdisciplinary courses that feature instruction focused on both native languages and English language acquisition. Students also participate in a variety of activities, and their experience at the school culminates with a career-based internship during 12th grade.

The biggest challenge facing FIHS, as noted in its Comprehensive Educational Plan and during the co-interpretationSM meeting (see Positive Key Finding 1), is integrating newly immigrated ELLs into an accountability system that expects academic literacy in English. While research indicates that full academic literacy in a new language requires five to seven years to acquire, FIHS has only four years (frequently less) to both build students' English language proficiency and ensure that students meet high school graduation requirements in terms of credits earned and Regents proficiency. The school staff is dedicated to an approach that provides as much individual attention to students as possible, using school and community resources to enrich the instructional environment and provide extensive intake and outreach supports for the school's families. In addition, FIHS has a strong relationship with the Internationals Network for Public Schools and other partner schools in that organization.

Audit Process at Flushing International High School

The ESCA approach utilized at the high school level examines six topic areas: student engagement, academic interventions and supports, support for incoming students, classroom instruction, professional development, and courses and extracurricular activities. Data were collected at the school level through teacher surveys, administrator interviews, classroom observations, and an analysis of documents submitted by FIHS. From these data, Learning Point Associates prepared a series of reports for the school's use.

These reports were presented to the school during a co-interpretation meeting on May 26, 2011. During this meeting, nine stakeholders from the FIHS community read the reports. Through a facilitated and collaborative group process, they identified individual findings, then developed and prioritized key findings that emerged from information in the reports.

The remainder of this report presents the key findings that emerged from the co-interpretation process and the actionable recommendations that Learning Point Associates developed in response. Please note that there is not necessarily a one-to-one connection between key findings and recommendations; rather, the key findings are considered as a group, and the recommended strategies are those that we believe are most likely to have the greatest positive impact on student performance at FIHS.

Key Findings

After considerable thought and discussion, co-interpretation participants determined a set of key findings. These findings are detailed in this section and presented in the co-interpretation participants' own words.

Critical Key Findings

CRITICAL KEY FINDING 1:

Students are asked to reflect on their work periodically in the form of notebooks and, less frequently, portfolios.

Critical Key Finding 1 was the top finding prioritized for improvement by the FIHS co-interpretation team. It is supported by data from the teacher survey and informed by the high priority the school places on project- and portfolio-based work that includes student reflection. This key finding relates to Critical Key Finding 2, and both will be addressed together in the recommendations.

CRITICAL KEY FINDING 2:

Of the 17 classrooms observed, 14 were rated in the mid range for analysis and problem solving. Teachers sometimes provided challenging activities and complex tasks.

This key finding is supported by data from classroom observations. Data show that the majority of observed classrooms were rated in the mid range for analysis and problem solving, with equal numbers of other classrooms rated in the high and low ranges. Observation notes clarify that these ratings indicate inconsistent provision and expectation of students to complete challenging activities, complex tasks, and instruction requiring higher-order thinking skills.

CRITICAL KEY FINDING 3:

FIHS uses multiple methods to provide support to at-risk students, such as the Intensive Senior Institute Seminar (ISIS) program, teacher interventions, and data analysis.

While the broad range of academic supports available to FIHS students is a positive feature of the school, co-interpretation participants prioritized it for improvement because they would like ideas for how to expand and continually improve these offerings. Evidence of these services was found in the teacher survey and within reviewed documents.

Positive Key Finding

POSITIVE KEY FINDING 1:

One huge challenge to helping at-risk students is the expectation that they graduate in four years, even though research shows it takes five to seven years to acquire language proficiency. To address this challenge at FIHS, instructional teams use student observations to make critical adjustments

because students lack traditional records. Teams work together to identify struggling students and develop their own academic support programs to help these students.

This key finding was prioritized as the top positive key finding during the co-interpretation meeting. The English language acquisition needs of FIHS students drive all curricular and instructional decisions made by the school, and students' ELL status will impact how recommendations provided in this report are implemented. It is supported by interview data and document review.

Additional Key Finding

The following additional key finding was identified by co-interpretation participants but not prioritized by the group for action planning. However, the auditors found this key finding worthy of consideration in developing recommendations.

ADDITIONAL KEY FINDING 1:

Students in Grade 12 complete career-based internships to support language development and career and college readiness. They are supported in this process by a mentor and an advisor.

This key finding is supported by interview data and review of documents addressing the internship program. It is related to Critical Key Finding 3 because the internship program is one of the school's highest valued programs that school community members would like to continue to expand and improve.

Recommendations

Overview of Recommendations

The co-interpretation meeting at FIHS was as much an exercise in validating some very positive practices and initiatives at the school as it was a means to uncover issues for improvement. The FIHS staff did identify and prioritize several items for improvement. Issues with instructional rigor and the types of instructional activities occurring in classrooms were targeted less because the data pointed toward a major deficit in these areas and more because the school stakeholders were not satisfied with what the data revealed and wanted to continuously improve. In addition, Critical Key Finding 3, identifying the types of supports offered to struggling students, was identified as an issue despite supporting data and summation that reads as neutral if not positive. During the co-interpretation meeting, participants prioritized this as an issue for improvement because they felt a strong urgency to continue refining practices and increasing engagement of students in need of support through these programs.

THE TWO RECOMMENDATIONS

With these issues in mind, Learning Point Associates developed the following two recommendations:

1. Implement instructional strategies that increase opportunities for higher-order thinking, analysis and problem solving, and deeper content understanding, while fostering support for more complex student activities such as reflective writing and portfolio creation, in a way that implants instructional practices that are culturally responsive for ELLs.
2. Implement the following: (1) strategies that foster student engagement in academic intervention services to promote academic achievement and (2) systems to monitor student participation in intervention services and programs.

These two recommendations are discussed on the following pages. Each recommendation provides a review of research, online resources for additional information, specific actions the school may wish to take during its implementation process, and examples of real-life schools that have successfully implemented strategies. All works cited, as well as suggestions for further reading, appear in the References section at the end of this report.

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

Recommendation 1: Instructional Rigor and Self-Guided Learning for ELLs

Implement instructional strategies that increase opportunities for higher-order thinking, analysis and problem solving, and deeper content understanding, while fostering independence and choice required for more complex student activities such as reflective writing and portfolio creation, in a way that implants instructional practices that are culturally responsive for ELLs.

The prioritization of Critical Key Findings 1 and 2, along with an essential understanding of the school's team-based structure and its emphasis on cross-disciplinary, project-based learning, point toward the desire of FIHS staff to encourage an environment where students engage in academically rigorous activities within the context of large portfolio projects that require self-reflection and choice. In addition, every student at FIHS is a newly immigrated ELL, and every member of the instructional staff is a teacher of language. Positive Key Finding 1 articulates the need for FIHS educators to create an environment of rigorous, authentic instructional activities that are designed to meet the specific needs of the school's unique student population. This recommendation provides strategies that FIHS can use to improve consistency of instructional rigor in a way that addresses some of the specific needs of ELLs and facilitates project and portfolio activities.

LINK TO RESEARCH

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

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

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

QUICK LINKS: Online Sources for More Information

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

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

Organizing Instruction and Study to Improve Learning (Publication)

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

ePortfolio (Tool for building and sharing portfolios)

<http://www.eportfolio.org/index.cfm>

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

Daggett (2005) agrees, stating that all students should be pushed “to achieve academic excellence, which ultimately boils down to applying rigorous knowledge to unpredictable, real-world situations, such as those that drive our rapidly changing world” (p. 5). Disciplined inquiry, which occurs in the classroom, requires that students “(1) use a prior knowledge base; (2) strive for in-depth understanding rather than superficial awareness; and (3) express their ideas and findings with elaborated communication” (Newmann et al., 2001, p. 15). Current research also suggests that what we know about effective instruction in general should be the foundation for the way we approach instruction of ELLs. Echevarria, Short, and Vogt (2008) indicate that direct and explicit instruction is especially helpful.

Empirical research has demonstrated that supporting student choice, autonomy, and leadership in the classroom can train students to regulate their own learning and deepen their cognitive process to improve academic achievement. Efforts to foster supportive autonomy consist of establishing a link between students’ classroom behavior and the resources that motivate them to succeed, such as personal interests, goals, and values (Reeve, 2010). This approach inherently involves students in their own learning process by creating a direct link between their personal motivations and classroom activities. These approaches also create an environment ideal for self-reflection and project- and portfolio-based work that depends on students’ abilities to evaluate their own work and be directive about how discreet instructional activities relate to and are compiled in a larger product.

Autonomy-supportive instructional strategies have been shown to improve student engagement, conceptual understanding, academic achievement, and persistence in the classroom (Young, 2005). The goal of these strategies is to encourage students to engage in self-regulated learning, which involves students interpreting learning tasks, determining goals, and implementing strategies to meet goals (Young, 2005). Creating an autonomy-supportive classroom environment requires teachers to incorporate students’ preferences, choices, curiosity, and challenges into lessons (Reeve, Jang, Carrell, Barch, & Jeon, 2004). Student preference and choice drive project work, in which students are required to lead and collaborate with fellow students, take ownership of components of a group assignment or project, and ensure that the end product appropriately reflects their personal goals for the assignment as well as the goals set by the teacher.

IMPLEMENTATION CONSIDERATIONS

1. Cultivate schoolwide high expectations for students.

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

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

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

Incorporating Cultural Awareness and Responsiveness in Teacher Instructional Practices

Hampton and Resnick (2009) make the case that by ensuring that second-language learners understand how text is constructed in English—including building understanding of genres, midlevel structures, and cohesive devices—teachers can support better understanding of academic text, perhaps reducing the need to act on that text to make it simpler and more accessible.

Explicitly teach students the demands made by the various genres of text, with emphasis on nonfiction text, and the language and features of this text that help make it accessible for the reader. Specifically, acquaint students with the following:

- **The five design features of factual texts** (text divisions, graphics, the print itself, layouts, and organizational tools), the specific details of each, and the author’s purpose in employing these features. For example, the features of print may include type size and style (such as italic, regular, and boldface), the font itself, and color.
- **Midlevel structures**, more commonly called *patterns of organization*, which generally include comparison and contrast, cause and effect, definition and example, and analysis and classification. These structures assist comprehension in specific ways, so if an opening sentence states, “All mountain ranges share the same characteristics,” the reader would be alerted to the fact that subsequent sentences would analyze these characteristics. Sometimes these structures occur within individual sentences, such as, “Whereas the geologically more recent mountains of the western United States are extremely high and jagged, the geologically older ranges of the eastern United States tend to be lower, and their peaks more rounded in appearance.” Understanding such devices creates a reader with better comprehension skills.
- **Signal words**, often called *connectors* or *connection words*, link and form relationships between ideas. Signal words can be additive (*in addition, furthermore*), contrastive (*however, on the other hand*), causal (*hence, as a result*), or temporal (*in conclusion, finally*). Students must not only know the role of these words in the reading process but be able to use them in writing and fully understand their individual meanings.

3. Encourage student autonomy in the learning process.

Instruction should include the following elements to promote the student motivation and ownership required to successfully engage in activities such as reflection and project portfolios.

- **Fostering relevance:** Teachers should make an overt effort to incorporate their students’ interests, values, and goals into the learning process by learning about student concerns through informal and classroom dialogue (Learning Point Associates, 2005). Examples include asking students for their feedback about classroom tasks and trying to help them understand how these tasks contribute to their personal objectives (Assor, Kaplan, & Roth, 2002). Research has indicated that students are more likely to be cognitively engaged and use higher-order thinking skills when they find the subject matter interesting (Young, 2005).
- **Making learning authentic:** Instructional practice should build upon students’ foundational knowledge (i.e., background, ideas, skills, and attitudes), challenge students, and connect content to value beyond the classroom (Donovan & Bransford, 2005; Newmann, Marks, & Garmoran, 1995). Example activities include tasks that

are academically rigorous and have public or personal value, such as oral history projects or writing editorials for the local newspaper (Newmann et al., 1995).

- **Providing choice:** Teacher behavior should enable students to choose classroom activities and tasks that are consistent with their interests and goals. Providing students with the opportunity to understand how schoolwork can contribute to their personal goals increases their ability to work more autonomously (Assor, Kaplan, & Roth, 2002). In addition, asking students for input on classroom activities allows teachers to become more aware of students' psychological needs and incorporate them into the lesson (Reeve, 2010).
- **Promoting independent thinking and permitting student criticism:** Encouraging students to engage in independent thinking and to criticize lessons that they do not find interesting can provide teachers with opportunities to foster more in-depth conversations about classroom activities. These discussions may allow the teacher to make adjustments to lessons to increase student interest or engage in a dialogue with students about the importance of the task to make them value the work more highly (Young, 2005). The overall goal of this strategy would be to increase the opportunities for student voice in the classroom and promote mutual communication between teachers and students regarding lesson content.

Teachers also should be aware of how the following behaviors can inhibit student voice, choice, leadership, and autonomy:

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

4. Develop examples of authentic intellectual work.

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

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

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

High Scoring Writing Assignment

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

Commentary

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

Low Scoring Writing Assignment

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

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

Commentary

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

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

Further examples of authentic intellectual instruction, teachers' assignments, and student work can be found in the following source:

Newmann, F. M., King, M. B., & Carmichael, D. L. (2007). *Authentic instruction and assessment: Common standards for rigor and relevance in teaching academic subjects*. Des Moines, IA: Iowa Department of Education. Retrieved July 31, 2011, from <http://centerforaiw.com/sites/centerforaiw.com/files/Authentic-Instruction-Assessment-BlueBook.pdf>

Perrysburg High School

Perrysburg High School in Perrysburg, Ohio (a suburb of Toledo), serves students in Grades 9–12. This school has had success in implementing instructional rigor and self-guided learning.

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

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

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

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

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

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

Description excerpted from the *Doing What Works* website at: http://dww.ed.gov/media/CL/OIS/TopicLevel/case_perrysburg_52708rev.pdf. This information is in the public domain.

Recommendation 2: Student Engagement in Academic Intervention Services

Implement the following: (1) strategies that foster student engagement in academic intervention services to promote academic achievement, and (2) systems to monitor student participation in intervention services and programs.

Critical Key Finding 3, while framed as a somewhat neutral or positive key finding regarding the breadth of services offered for academically at-risk students, was prioritized by FIHS as an area for improvement. Positive Key Finding 1 also addresses support services for students, specifically related to their ELL status. Additional Key Finding 1 speaks to the strength of the school's internship program. Co-interpretation participants emphasized that while they feel that the services offered in these areas are strong, they would like to improve them continually to better meet students' needs. Without data to validate individual school programs or services or recommend that they be discontinued, the best way to recommend improvement of academic intervention services is to offer strategies and practices to improve student engagement in existing programs and services. This recommendation provides such strategies and practices and offers a list of free resources that the school may consider utilizing as it works to engage specific students and student groups in their learning.

LINKS TO RESEARCH

Ensuring that at-risk students are actively engaged in intervention programs and services can be challenging for schools, given the diversity of most student populations in terms of their racial and socioeconomic backgrounds, as well as their academic, social, and emotional needs. (Greenberg et al., 2003; Lane, Wehby, Robertson, & Rogers, 2007). Thus, there is a growing demand for schools to offer academic interventions that are composed of coordinated, schoolwide efforts around social, emotional, and academic learning (Greenberg et al., 2003; Kalberg, Lane, & Menzies, 2010).

Research has shown that school-based interventions are most effective when linked to students' personal and social resources and thus designed to enhance the students' learning environment (Eccles & Appleton, 2002). In the context of positive youth development, personal and social resources refer to the following assets (Board on Children, Youth, and Families, 2005):

- **Physical development:** Positive health habits and health risk management skills
- **Intellectual development:** School success, decision-making skills, cultural awareness
- **Psychological and emotional development:** Good mental health and emotional self-regulation
- **Social development:** Connectedness, prosocial abilities, civic engagement

Adolescence represents a developmental period during which students are undergoing significant social, behavioral, cognitive, and emotional shifts, all of which can impact academic achievement (Archambault, Janosz, Morizot, & Pagani, 2009). For example, an estimated 20 percent of youth experience mental health issues during the course of year, and 75 to 80 percent of these fail to receive appropriate interventions (U.S. Department of Health and Human Services, 1999). The 2001 Youth Risk Behavior Survey also provides evidence

QUICK LINKS: Online Sources for More Information

Collaborative for Academic,
Social and Emotional
Learning (Website)

<http://casel.org/>

Check & Connect School
Dropout Prevention Program
(Website)

<http://checkandconnect.org/default.html>

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

www.nysrti.org

"Tiered Service-Delivery
Model," National Research
Center on Learning
Disabilities (Website)

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

that large percentages of high school students are involved in activities that could affect their academic performance, including substance abuse, risky sexual behavior, violence, and problem behavior related to mental health issues. Research has shown that students who are at risk for dropping out of high school exhibit behavioral, affective, and cognitive differences that can negatively influence their high school experience (Archambault et al., 2009). As a result, there is a need for more holistic school-based interventions that are flexible enough to target the needs of individual students who may be struggling academically for a number of reasons.

A number of school-based interventions designed to address the needs of students who are at risk for academic failure have been developed in recent years, such as:

- Social and emotional learning-based prevention programming
- Three-tiered interventions (e.g., response to intervention and positive behavior support)
- The Check & Connect model—A comprehensive student engagement intervention

IMPLEMENTATION CONSIDERATIONS

1. Foster student engagement in academic intervention services.

Strategies that encourage at-risk students to participate actively in academic interventions should represent important components of school-based interventions, such as the following:

- **Pairing a student with a mentor:** A number of research studies have shown that students can benefit both academically and psychologically from working with a nonparental adult. A study by DuBois and Silverthorn (2005) found evidence that at-risk students who worked with a nonfamilial adult as a mentor were more likely to complete high school and engage in health-promoting behaviors. Similarly, findings by Holt, Bry, & Johnson (2008) indicate that students who spend sufficient time with a mentor feel a deeper connection with their school environment, particularly with regard to their teachers.
- **Focusing on positive youth development:** Strategies that foster the development of students' interpersonal skills, quality of peer and adult relationships, and academic behaviors have the potential to reduce school misbehavior, truancy, and other risky behaviors such as alcohol and drug abuse (Greenberg et al., 2003). School-based programs include strategies that address key competencies related to the development of a student's personal and social skills. Example programs include the PATHS curriculum, which involves a three-step self-management process that utilizes red, yellow, and green stoplights to help students develop skills around monitoring and managing behavioral and emotional impulses (Catalano, Berglund, Ryan, Lonczak, & Hawkins, 2002).
- **Promoting social, emotional, and academic learning (SEAL):** School-based programming should make an effort to provide a connection between strategies to promote social and emotional learning and academic outcomes. According to Zins, Weissberg, Wang, & Walberg (2004), the SEAL approach provides a framework for promoting students' social-emotional competence to support better academic performance. Students who develop self-awareness and confidence related to their

learning abilities are more likely to motivate themselves, set goals, manage their stress, and organize their approach to schoolwork.

2. Monitor student engagement in academic intervention services.

Systematic screening and monitoring procedures should be in place, preferably as part of regular school practices, both to identify students in need of interventions and to monitor their engagement and progress in the intervention to ensure that their needs are being met (Kalberg et al., 2010). These procedures include the following:

- **Continuous data collection:** When implementing schoolwide intervention programming, schools need to collect reliable data regularly to evaluate the overall school response to the intervention, as well as to identify students who may need secondary or tertiary supports if the intervention has three tiers (Lane, Kalberg, Bruhn, Mahoney, & Driscoll, 2008). For example, student engagement can be monitored through data on attendance and student participation in individual interventions.
- **Survey administration:** Schools should consider administering surveys to students, parents, and teachers in order to determine students' needs, preferences, and interests prior to implementing interventions, as well as to monitor student engagement during implementation (Becket et al., 2009).
- **Monitoring behavioral outcomes:** Many schools use office disciplinary data to monitor student behavior through systems such as the School-Wide Information System (SWIS). Additional behavior screeners include the Student Risk Screening Scale (SRSS), a no-cost seven-item behavior screening scale used to identify students with antisocial behaviors and rank them according to three risk categories ranging from low to high (Kalberg et al., 2010).

Components of Effective School-Based Intervention Programs That Promote Student Engagement

- Promoting a positive interpersonal climate by fostering supportive relationships between students and teachers
- Offering coursework that is relevant to students' lives and future goals
- Providing support to address any serious personal problems
- Intervening early to address students' academic and behavior problems
- Supporting and rewarding positive social, health, and academic behavior using systematic school-family-community approaches.

Source: Archambault, I., Janosz, M., Morizot, J., & Pagani, L. (2009). Adolescent behavioral, affective, and cognitive engagement in school: Relationship to dropout. *Journal of School Health, 79*(9), 408-415.

The Check & Connect School Dropout Prevention Program: A Case Study

The Check & Connect intervention model has been implemented successfully in a number of settings, including one that examined the effectiveness of this model in the context of fostering engagement for urban high school students who have emotional or behavioral disabilities. The study took place from 1996 to 2000 in an urban school district that served a diverse population. All of the students participating in the study were from the 9th grade and were enrolled in special education services for an emotional or behavioral disability. African Americans (67 percent) and males (82 percent) made up the majority of the sample.

The model consists of the following two components:

- **Check:** Continuous and systematic monitoring of student engagement with school, using indicators such as attendance, suspensions, grades, and credits.
- **Connect:** Implementing timely and individualized interventions that focus on a student's academic progress, guided by the check indicators. These interventions are provided by Check & Connect monitors who coordinate with school staff, family members, and community members and who evaluate program implementation.

During the study, baseline data were collected related to student engagement through the Social Skills Rating System (SSRS). The SSRS provides information related to social behavior, academic and social competence, and behavioral problems. Data from this instrument were used to make comparisons between the academic, social, and problem-behavior competence of the control and treatment groups. Each student's core academic teacher or special education case manager provided the ratings. Students were randomly assigned to treatment (i.e., Check & Connect intervention) or control groups. The connect component of the intervention consisted of a basic intervention and a more frequent and individualized intensive intervention based on individual needs, guided by results from student engagement indicators.

Study results indicated that levels of engagement with school were higher for students who received the Check & Connect intervention, compared to those who did not. Students who participated in the Check & Connect intervention were more likely to attend school with greater persistence, and thus less likely to drop out of school. In addition, these students showed evidence of more active IEP transition plans, such as an updated IEP that had clear transition goals in the areas of postsecondary education and community activities. Thus, these results indicate that the Check & Connect program has the potential holistically to address the social, emotional, and academic needs of students who are at risk of academic failure.

According to the What Works Clearinghouse, the implementation cost for the Check & Connect intervention is estimated to be \$1,400 per student per year (http://ies.ed.gov/ncee/wwc/reports/dropout/check_conn/info.asp). Please note that this case study is meant to be an example. Learning Point Associates, an affiliate of American Institutes for Research, is not implying that the school should spend money to implement the Check & Connect intervention.

Description excerpted from Sinclair, M. F., Christenson, S. L., & Thurlow, M. L. (2005). Promoting school completion of urban secondary youth with emotional or behavioral disabilities. *Exceptional Children*, 71(4), 465-482.

LEARNING TOOLS ON THE INTERNET

Below is a list of some online educational resources that may help schools engage underperforming students in enrichment or additional academic supports. The links are provided as examples of tools available to schools and students on the Internet. Learning Point Associates recommends that schools take advantage of the myriad websites and learning tools available to them, but we neither recommend nor endorse resources included in the following list any more or less than other similar services. This list represents a small sample of the online tools and resources available; it is not intended as a comprehensive library.

+ free with paid options; * free for individuals, paid for a group

Online Flashcards

Students may create their own deck of flashcards or download a precreated deck. Teachers also can create decks for student use. Several services allow syncing between computers and cell phones. The decks all use some form of a spaced-repetition system to track students' progress, ensuring that they review cards they struggle with more frequently than those they do not.

- Anki (<http://ankisrs.net/>)
- Mnemosyne (<http://www.mnemosyne-proj.org/>)
- Study Stack (<http://www.studystack.com/>)
- Head Magnet (<http://headmagnet.com/>)

Online Whiteboards

Teachers can use online whiteboards much as they would the ones in their classrooms. This tool allows teachers to share visual notes with students who are unable to be physically present and to tutor students at a distance. Students also may use the whiteboards to work on projects together.

- +Dabbleboard (<http://www.dabbleboard.com/>)
- ScribLink (<http://www.scriblink.com/>)
- +Twiddla (<http://www.twiddla.com/>)
- Stixy (<http://www.stixy.com/>)

Wikis

A wiki is an easy way for one or more people to collect and link notes. Students may build a wiki together, creating a potentially useful study tool. A wiki could facilitate discussion of class materials and help students organize class concepts.

- +Wikispaces (<http://www.wikispaces.com>)
- +PBWorks (<http://pbworks.com/content/edu+overview>)

Presentations

The Internet offers several means of creating and sharing presentations online. Teachers could supplement classroom lectures or share presentations with students who are not able to be physically present. Students also could use the presentations to revisit class topics near test time.

- +Glogster (<http://www.edu.glogster.com/>)
- +Prezi (<http://prezi.com/>)
- +Slideshare (<http://www.slideshare.net>)

Brainstorming and Collaboration

The Internet has many options for facilitating cooperative thinking and creation. Students may create mind maps together or edit a document together in real time.

- Bubbl.us (<https://bubbl.us/>)
- +Mind Meister (<http://www.mindmeister.com/>)
- Google Docs (<https://docs.google.com/>)
- Storybird (<http://storybird.com/teachers>)

Web Conferencing

Web conferencing allows a group of people to share materials, talk, comment on a presentation, and more. Each service has its own strengths and weaknesses. If students are unable to attend an academic intervention service, a teacher could offer long-distance tutoring through a web conference.

Wiggio (<http://wiggio.com/>)

+Skype (<http://www.skype.com/intl/en-us/home>)

Mikogo (<http://www.mikogo.com/>)

+Yugma (<https://www.yugma.com/>)

Video Lectures and Demonstrations

Many professors share lectures and lecture series online. Other websites include demonstrations on a variety of topics. Teachers may pull from these resources or use them as inspiration in creating their own.

- Wolfram Demonstrations (<http://demonstrations.wolfram.com/>)
- Vialogues (<https://vialogues.com>)
- *Voice Thread (<http://voicethread.com/>)
- Khan Academy (<http://www.khanacademy.org/>)
- Youtube (<http://www.youtube.com/education?b=400>)
- Videlectures.net (<http://videlectures.net/>)

Blogs

Blogs are online journals. Teachers may check for updates regularly and leave comments on students' posts. An RSS feed would allow the teacher to check one page for updates, rather than visiting each blog individually. Students could keep an online journal of their study progress. They also could share where they are having difficulties, allowing teachers or fellow students to provide help in the comments.

- Wordpress (<http://wordpress.com/>)
- Blogger (<http://www.blogger.com/>)
- Google Reader (RSS) (<http://www.google.com/reader/>)

Study Groups and Social Networks

Students may connect with others who are studying similar material. The groups are especially useful for foreign language study. A social network is an easy way to connect students with similar needs to facilitate additional learning.

- Edmodo (<http://www.edmodo.com/>)
- Open Study (<http://openstudy.com/>)
- Livemocha (<http://www.livemocha.com/>)
- +Yammer (<https://www.yammer.com/>)

Miscellaneous

- Moodle – Open source course management system (<http://moodle.org/>)
- Wallwisher – Online noticeboard (<http://www.wallwisher.com/>)
- Connexions – Course management system (<http://www.cnx.org>)
- Livebinders – Online three-ring binders (<http://livebinders.com/welcome/home>)
- +Evernote – Facilitates online note-taking; notebooks may be shared (<https://www.evernote.com>)
- Google Art Project – Virtually visit several famous museums (<http://www.googleartproject.com/>)
- +Dropbox – An online flash drive for easy file sharing (<http://www.dropbox.com/>)
- +SpiderOak – Similar to Dropbox (<https://spideroak.com/>)

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