

High School M560 City as School

FINAL REPORT



New York City Department of Education External School Curriculum Audit | August 2011

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Introduction

About This Report

This final report is the result of an external school curriculum audit (ESCA) of High School 560 City as School by Learning Point Associates, an affiliate of American Institutes for Research. This audit was conducted in response to the school being designated as in need of corrective action under the New York State Education Department 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 High School 560 City as School

High School 560 City as School describes itself as an alternative public high school for New York City's most interesting kids. City as School High School is the nation's leading external learning or experiential learning model for high school students. Founded as an independent alternative high school in 1972, City as School's primary objective is to offer students a multitude of learning experiences that encompass the depth and breadth of New York City's businesses or resources. The program has been continuously evolving, putting students—primarily students at risk of dropping out—in the field and revitalizing their interest in their own lives, in their education, and in the society around them. City as School students are eleventh and twelfth grade transfer students (entering City as School with a minimum of 20 credits), and come from any of the public, private, or parochial schools within the five boroughs. City as School maintains three campuses, located in Manhattan, Brooklyn, and the Bronx.

City as School offers a rigorous program that sets high expectations, both for students and the professionals in the community who work with them. They utilize the facilities of more than 500 New York City businesses, at which students participate in professional activities. These educational resources, along with classroom learning, form the basis of learning in math, history, English, science, and other academic areas. All student learning experiences are designed to provide background information and skill acquisition through the attainment of practical knowledge. City as School had a 2009–2010 enrollment of 728 students in Grades 10–12.

Located in Manhattan, City as School is comprised of 37 percent African-American, 40 percent Hispanic, 17 percent Caucasian, and 5 percent Asian students. The average attendance rate for the 2009–2010 school year was 88 percent. Forty-one percent of the students are eligible for free lunch, and 8 percent are eligible for reduced-price lunch.

The 2009–2010 New York State Accountability Report indicates that the African-American, Caucasian, and economically disadvantaged subgroups did not make adequate yearly progress (AYP) in English language arts (ELA). The school also did not make AYP for graduation rate. The failure to make AYP in ELA and graduation rate has resulted in the identification of the school as a School in Need of Improvement (Year 1) for ELA (Comprehensive), and a School in Need of Improvement (Year 1) for graduation rate (Basic).

Audit Process at High School 560 City as 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 extracurriculars. Data were collected at the school level through teacher surveys, administrator interviews, classroom observations, and an analysis of documents submitted by City as School, during March 2011. 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-interpretationSM meeting on May 27, 2011. During this meeting, seven stakeholders from the City as School 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 City as School.

Key Findings

After considerable thought and discussion, co-interpretation participants determined a set of key findings. These key findings are detailed in this section. The wording of the key findings below matches the wording developed and agreed upon by co-interpretation participants at the meeting. City as School participants prioritized findings based on areas needing improvement and areas in which the school would like to expand.

Critical Key Findings

CRITICAL KEY FINDING 1:

City as School facilitates internships for students (resources) that do the following: provide credits; provide career, vocational, and avocational choices; have varying schedules; may be apprenticeships; provide mentoring by professionals; and provide exposure to business, service, and nonprofit organizations.

Supported by data from the document review, this critical key finding is the top prioritized key finding identified by co-interpretation participants at High School 560 City as School. Documents reviewed substantiated that “students participate in carefully observed internships, attending school and internships on alternate days.” This provides the students great career and vocational support. This finding is universally positive; however, participants voted it as the top issue that, if further addressed, would provide the most direct impact on student achievement.

CRITICAL KEY FINDING 2:

At City as School, some teachers (38 percent) reported not receiving professional development on teaching students with disabilities and on using the individualized education programs (IEPs) to help teach students with disabilities. Some teachers reported that professional development was minimally helpful. Communication between regular and special education teachers occurs informally. About 31 percent of respondents do not use IEPs to inform instruction.

Supported by evidence from the teacher survey report, this key finding reveals that even though general education and special education teachers informally collaborate, there is a lack of effective professional development opportunities on teaching students with disabilities as well as using IEPs to inform instruction.

CRITICAL KEY FINDING 3:

City as School offers a variety of academic courses that do the following: provide credit, address state standards, address needs of students with lower academic abilities. City as School offers core and elective classes for those performing below grade level, addresses the skills needed for English language arts, and addresses a variety of student and school needs, such as student government, leadership, sewing class (guidance), school store, and yearbook.

Supported by data from the document review, this key finding specifies the numerous elective courses and extracurricular activities offered at City as School. These include, but are not limited to, Just Words, Regents preparation classes, student government, leadership classes, swing club, the school newspaper, the school store, and the yearbook committee. While these courses are offered, the school team determined that a deeper focus and examination of these areas would allow for the greatest gains in student achievement.

CRITICAL KEY FINDING 4:

Observed classrooms were rated in the mid or high range for content understanding (7 high, 12 mid), analysis and problem solving (6 high, 15 mid), and quality of feedback (15 high, 10 mid). Teachers frequently encouraged higher-order thinking and discussion. Students often were asked to expand on their ideas and comments. Teachers provided environments that help students make connections across subject areas.

Supported by data from observations, this key finding shows that behaviors indicating content understanding, analysis, and problem solving, as well as quality of feedback, were regularly or frequently observed in classes at High School 560 City as School. Each of these observation dimensions relates to instructional support. *Content understanding* refers to both the depth and lesson content and the approach used to help students comprehend the framework, key ideas, and procedures in an academic discipline. At a high level, *content understanding* refers to interactions between the teacher and students that lead to an integrated understanding of the facts, skills, concepts, and principles. In classrooms observed at City as School, teachers were not consistent in using instructional approaches or presenting content in a way that increased student understanding. *Analysis and problem solving* refers to the degree to which the teacher facilitates students' use of higher-order thinking skills. At the high level, the teacher consistently encourages students to analyze, create, and evaluate, while providing complex tasks for students to problem solve. This was not evident in all of the classes. Lastly, *quality of feedback* assesses the degree to which teachers respond to students and provide feedback that expands and extends learning and understanding and encourages student participation. At City as School, teachers inconsistently used extended feedback loops to encourage students to clarify and explain their thinking. The use of scaffolding, recognition of student efforts, and probing of student responses also lacked consistency.

Positive Key Finding

The following finding was identified as an area of strength in the school, and there is a wish to improve further in this area. To further that improvement, a recommendation was made around the following finding.

POSITIVE KEY FINDING 1:

City as School has numerous supports for incoming students, including a two- to three-day orientation twice a year, various diagnostic assessments, interviews, and analysis of previous records. This process is guided by many people, from both City as School and outside support agencies.

Documents reviewed show that in order to best support their transition, orientations are offered to incoming students at City as School. In addition, these students are guided by many people, including guidance counselors and staff members from residential services, who identify the nonacademic supports they need. Furthermore, a great deal of information regarding these students is collected in order to best identify their needs.

Recommendations

Overview of Recommendations

During the City as School co-interpretation, school staff and faculty identified several critical key findings that pointed to issues for improvement at the school and one positive key finding that captures the school's successes that can be expanded upon. Prioritizing these key findings made several themes evident. These themes, as identified by co-interpretation participants, include: school structures (a positive finding on internships the school wishes to learn more about, as well as new ideas on credit recovery and orientation), collaboration (a need for more collaboration between general education and special education teachers), and instruction (higher-order thinking skills and analysis and problem solving) as priority areas for improvement.

THE FIVE RECOMMENDATIONS

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

1. Continue to create key internships for students.
2. Support collaboration between general and special education teachers.
3. Provide engaging and individualized credit recovery.
4. Implement instructional strategies that increase opportunities for higher-order thinking, analysis and problem solving, and deeper content understanding.
5. Continue to improve a successful orientation and transition program for all students.

The five recommendations are discussed on the following pages. Each recommendation provides a review of research, online resources for additional information, specific actions that 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 the report.

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

Recommendation 1: Internships

Continue to create key internships for students.

City as School offers a comprehensive internship program (more than 400 internships are available to students). In light of the success in this area, this recommendation was prioritized and is provided to help the school improve on an already successful program. By better integrating common core standards into experiential learning, the school can leverage these programs into student achievement gains.

LINK TO RESEARCH

Ensuring that students are “college- and career-ready” has become a critical issue as concerns rise about the success of the U.S. education system and, ultimately, the country’s economic competitiveness. The discussion surrounding college readiness is generally limited to academic skills, but actual career readiness requires an even more rigorous blend of academic, technical and employability skills, and the ability to apply these skills in authentic career situations (Association for Career and Technical Education [ACTE], 2011).

Career readiness involves three major skill areas: *core academic skills* and the ability to apply those skills to concrete situations in order to function in the workplace and in routine daily activities; *employability skills* (such as critical thinking and responsibility) that are essential in any career area; and technical, *job-specific skills* related to a specific career pathway. These skills allow students to enter true career pathways that offer family-sustaining wages and opportunities for advancement (ACTE, 2010).

Academic Skills. All students need foundational academic knowledge, especially in math and English language arts; however, to be career ready, students also need to be able to apply academics in context, and some academic skills need more attention and development. For example, employers often cite deficiencies in English and written communications such as memos, letters, and complex technical reports. This supports the idea that most of the written material that students will encounter in their careers is informational in nature, such as technical manuals and research articles, and they must be equipped academically to analyze and use these materials. Too often, these skills are not emphasized in traditional academic classrooms. Workplace deficiencies in math also are commonly noted, with more attention needed in areas such as data analysis and statistics, reasoning, and solving mathematical problems. Students also must be able to apply academic knowledge to authentic situations they may face in their careers, a skill that takes practice and intentional instruction that may need to be tailored to students’ specific career goals (Olsen, 2007).

Employability Skills. Employability skills have been cited often by employers as the skills most critical to workplace success in the 21st century economy. These skills include, but are not limited to, critical thinking, adaptability, problem solving, oral and written communications, collaboration and teamwork, creativity, responsibility, professionalism, ethics, and technology use. Numerous groups have worked with business and industry leaders to identify employability skills critical to employee success. Overall, employers placed the greatest weight on employee adaptability and critical thinking skills. Human resources professionals and employees both reported that adaptability, flexibility, and critical-thinking and problem-solving

QUICK LINKS: Online Sources for More Information

National Association of State
Directors of Career Technical
Education Consortium
(Website)

<http://www.careertech.org/>

Association for Career
and Technical Education
(Website)

[http://www.acteonline.org/
default.aspx](http://www.acteonline.org/default.aspx)

Partnership for 21st Century
Skills (Website)

[http://www.p21.org/index.
php](http://www.p21.org/index.php)

skills were of greatest importance now, as compared to two years ago. Students must be provided opportunities to gain these skills and to learn to apply them to real-world life and work situations (Society for Human Resource Management & Wall Street Journal, 2008).

Technical Skills. In order to be considered ready to enter a career, a student also must possess at least some level of job-specific knowledge and skills. In the 2005 Skills Gap Report (National Association of Manufacturers, The Manufacturing Institute, & Deloitte Consulting, 2005), *technical skills* was the top response to the question, “What types of skills will employees need more of over the next three years?”

IMPLEMENTATION CONSIDERATIONS

1. Expand experiential learning programs.

Educational leaders are constantly looking to expand the educational experiences that they offer their students during their tenure in high school, providing them with a foundation for success in their pursuits after graduation. Secondary schools offer a wide variety of educational opportunities to all students, promoting academic, social, and emotional growth. Innovative programs that provide students with learning experiences outside of the classroom are frequently overlooked due to the propensity of public educators to focus on academic achievement alone. Exposure to experiential learning develops certain qualities in adolescents that support the transition to life after high school (Steinberg, Cushman, & Riordan, 1999). The “inclusion of service or experiential learning is a powerful pedagogical strategy that encourages students to make meaningful connections between content in the classroom and real life experiences” (Engstrom & Tinto, 1997). One widespread initiative to change the high school experience is the implementation of internship and mentoring programs to provide the students with learning experiences outside of the traditional classroom (Steinberg, 1998).

There are many personal attributes of the learner that are enhanced through mentoring and internship programs. Experiential learning provides students with a certain level of autonomy, self-directed learning, exposure to the real world, and academic freedom. Experiential learning requires students to complete extensive coursework or relevant research relating to their project. One of the changes in pedagogical practice from secondary to postsecondary education is the increase in student autonomy and the requirement that students work independently. The students who participate in school-based mentoring programs are provided with an opportunity to be autonomous and responsible for their time management, and to work independently to meet deadlines. The function of the mentor in these programs is to monitor progress, advise students, and provide an opportunity for students to reflect on their progress. Another goal of these mentoring and internship programs is the need to develop positive working relationships between students and a mentor or adults involved in the program (Glading, 2007).

2. Provide comprehensive career guidance.

At College Board AP Conference in July 2010, Secretary of Education Arne Duncan made the following statement:

School counselors should “own the turf” when it comes to college and career readiness counseling. They should be leading advocates for students pursuing two-year and four-year college degrees. But the reality, as you know, could not be more different. Nationwide, there is roughly one guidance counselor for every 475 students... Because of impossible caseloads and antiquated conceptions of the role of counselors, many guidance counselors spend most of their day on non-guidance tasks, such as being hallway monitors, mailing deficiency notices, filling in as substitute teachers, and administering discipline.

The title of Secretary Duncan’s speech was “The Three Myths of High School Reform,” and the third myth he cited was “the idea that high school education and counselors cannot really prepare students for careers or college because the concept of college- and career-readiness is itself too elusive to evaluate meaningfully with assessments or to track with longitudinal data systems.” Duncan sees counselors as being among those helping to lead the transformation of high schools and changing the lives of disadvantaged students.

In 2003, the Association for Career and Technical Education reported on the role of the guidance professional in a shifting education system, noting the impact these rapid and complex changes were having on both academic and career and technical education. As a result, students and parents needed more assistance than ever in navigating the school system and accessing information so they could make informed decisions about courses and programs that meet students’ individual needs (ACTE, 2003). In December 2008, the association’s Issue Brief on the role of career and technical education in career guidance noted that the lack of preparation to navigate the changing workplace can be tied specifically to a lack of career knowledge and awareness (ACTE, 2008). Without structured guidance activities, students also may be in danger of failing to continue on to postsecondary education, or even worse, of dropping out of high school (Reese, 2010).

Programs often cited by the Association for Career and Technical Education and others as successful are those that are described as comprehensive. According to Gysbers and Henderson (2005), the delivery system components of a comprehensive guidance program are as follows:

- A guidance curriculum that includes lessons on topics such as conflict mediation, career and educational planning, and alcohol or drug abuse prevention.
- Individual planning that helps students create meaningful career directions and organize their personal plans of study around their career goals.
- Responsive services that help students who are experiencing problems that interfere with their success in school.
- System support that allows guidance counselors and academic advisors sufficient time to carry out guidance program management and evaluation work, community collaboration, committee work, and required administrative tasks.

This model supports a school’s overall success by working with students on academic achievement, career planning, and personal or social development. Comprehensive

counseling and guidance programs include the components of individual student planning, guidance curriculum responsive services, and system support.

Model Programs for Comprehensive Counseling and Guidance

Utah

Utah developed its Comprehensive Counseling and Guidance Program in 1989, and the program is recognized for its success in four areas of student outcomes that its counselors help students achieve: academic and learning development, life and career development, multicultural and global citizen development, and personal and social development. A key feature of the Utah model is the individual planning component better known as the Student Education Occupation Plan, which allows students and counselors to organize and promote student accomplishments and help students, parents, teachers, and counselors plan, monitor, and manage educational and career development in middle and high school.

South Carolina

The Greenville Middle Academy in Greenville, South Carolina, employs standards and program elements of guidance curriculum, individual planning, responsive services, and system support. Most impressive is how guidance is integrated into the whole educational experience. The program deals with personal and social skills as well as life skills, employability, and career and life planning. The core of the guidance experience is found within the school's guidance career awareness and exploration curriculum, including a program called GoalMine. The community and faculty seem to all be involved in some way in the planning, delivery, and assessment of impact and effects of the program. In the Greenville Middle Academy program, students have job shadowing opportunities as well as a variety of career assessments, and they are involved in character education. In addition, they each have an educational and life plan before graduation.

Nebraska

Nebraska's standards are called Essential Learning, and they center on academic development, career development, and personal and social development. Nebraska Career Education includes what they call *structured developmental lessons*, which are designed to assist students in achieving the competencies of the Essential Learning domains. It is presented through the Nebraska Career Education delivery system in K-12 classrooms and group activities. Nebraska Career Education also includes Curriculum for Careers, a middle school curriculum for career exploration that aligns with the Nebraska Career Education model and teaches students to develop their own personal learning plans. Individual student planning is an important component of the Nebraska delivery system. It consists of school counselors coordinating ongoing systemic activities designed to assist students in establishing personal goals and academic and career planning. Among the other resources offered, Nebraska Career Education notes that it "provides individualized accounts valuable resources for determining career paths and necessary education to achieve career and life goals." The Nebraska Career Education delivery system also includes the term *Responsive Services*, which includes activities that meet the immediate needs of students and their families and that can be initiated through the school counselor or by the student, parent, teacher, or administrator. An Advisory Council also is part of the Nebraska Career Education management system, and its stated purpose is "to help program goals, provide support, offer advice, review activities and advocate for the school counseling program within the community." (Reese, 2010)

Examples of How Schools Seek to Make the Senior Year Meaningful Through Internship and Mentorship Opportunities

Glading (2007) describes three examples of high school internship and mentorship programs that are best practices.

Science Research Mentoring Programs

These programs are offered across the country in public high schools and provide the opportunity for students to participate in science competitions at the local, regional, and national level. Students enroll in the science research program in addition to their required core subjects in the area of science. The students receive credit for the course as elective credit toward their graduation requirement. Under a faculty advisor, the students develop an original research project and at the same time search for a mentor who is a specialist in that particular field of study. Their research is monitored under the supervision of their mentor. The students involved in science research programs of this nature are required to work independently, engage in a high level of academic rigor and research, work outside of their traditional high school setting, and develop relationships with adults who are experts in their field of study. Motivation, enthusiasm, and dedication are the essential prerequisites to be successful in these programs (Glading, 2007).

Woodlands Individualized Senior Experience Internship Program

The Woodlands Individualized Senior Experience Internship Program was founded by Vic Leviatin at Woodlands High School in Hartsdale, New York, during the 1972–73 school year. With the program's gain in popularity, many schools seek the assistance of what is now called WISE Services. The founder of the program travels to school districts to provide educational leaders, teachers, and students with assistance in the establishment of senior alternative programs in their school. One of the basic tenets of the Individualized Senior Experience Program is that each school must craft its own program. WISE Services merely makes suggestions and provides districts with information and establishes a critical timeline for the implementation of the various stages of the project. Schools are encouraged to involve members from each constituent group within the school community by engaging students, parents, teachers, community members, and administrators. Students who participate in the Individualized Senior Experience Program will receive high school credit for their work, which involves working on an individualized research project with a mentor. The students are introduced to the program at the beginning of their senior year of high school when they begin to research their project, meet a number of deadline dates for submission of their proposals, and secure a mentor. The objectives of the program are the promotion of personal and intellectual growth, the establishment of a relationship between the student and the teacher through a mentor relationship, and the improvement of the relationship between the student and the community (Abramson & Leviatin, 1980).

Community-Based Mentoring – Internship Programs

Local residents dedicate countless hours to their communities, providing municipalities with a vital service. Involvement in these service-based programs provides students with the opportunity to give back to their communities. In this program, students are not required to develop long-range, individualized projects. The students receive either civic internship or community service credit on their high school transcript (Glading, 2007).

DOING WHAT WORKS: Examples From Real Schools *(continued)*

Conley (2010) presents high schools that demand more of their students and achieve results that improve students' college and career readiness.

High Tech High School

All students at High Tech High School in San Diego, California, complete an academic internship as a condition of graduation. These internships extend for one semester, during which students work two afternoons per week. Students receive a grade for successfully completing their internship and simultaneously take course work related to the internship. They must write journals documenting their experiences and communicate with their employers, mentors, and the school internship coordinator in specified ways. Throughout the internship, each student pairs with a mentor who understands and supports High Tech High and its philosophies. The school expects the mentor to include the intern in meetings and events in order to provide a fuller picture of how the business operates. The mentor works with the student to plan a project that meets the company's needs and is possible for the student to complete successfully. Some projects last an entire semester, while others are short enough to give the student an opportunity to work on several things throughout the semester. High Tech High students work on a range of projects, including event and marketing support; Web design; recruitment and retention activities with the human resources department; networking, software, and hardware support; and public relations support. After students participate in these projects, they develop and present a report on their experience that they deliver in a public setting to teachers, students, and community members.

Fenway High School

Fenway High School in Boston, Massachusetts, has a series of requirements for its internships that include: (1) work at least 30 hours per week at the internship site; (2) return to school on Monday for an early afternoon seminar; (3) work on a large project that is assigned by the student's internship supervisor and takes place at the internship site; (4) maintain a weekly hours log, which must be signed by internship supervisor; and (5) complete a senior portfolio that documents and presents work done during the internship. Along with the required internship, the school requires seniors to take a class that allows them to practice professional skills. This class helps students learn multimedia skills, engage in a process to project what their life will look like in 20 years, and assess their time management skills. The class causes students to examine how their career interests align with college majors and to participate in skills assessments that provide additional information about career options. Students prepare cover letters and resumes, and they participate in role-play interviews. They also learn financial planning and other life skills.

YES Prep

As students at YES Prep in Houston, Texas, near graduation, they engage in a series of structured and cumulative self-actualization activities that are embedded within the curriculum. For example, seniors participate in an ethics seminar that focuses on key cognitive strategies. Students analyze and find evidence within work samples they have accumulated throughout middle and high school, including internships, to show skills such as the ability to write clearly, support arguments with evidence, and interpret and analyze information. As they engage in this self-reflection, they are taught to focus not only on positive examples, but also to include material that demonstrates where they fell short of achieving a desired level of performance in an area. This exercise helps ready them to take greater control of their learning once they go on to postsecondary programs, get a better picture of their own growth over time, and be prepared to accept more direct criticism and feedback on work in the future.

Corporate Internship Program

The Chicago Public Schools' Corporate Internship Program was designed to make private education affordable to at-risk youth living in economically challenged areas of Chicago. The program combines job sharing and employee leasing. Four

students share each position. They spend four extended days at school and one day at work each week. As part of the freshman orientation, the school provides comprehensive training to prepare students for the experience. Topics include everything from professional attire to operating office equipment, Microsoft Office skills, team building, and relevant terminology. Fewer than 2 percent of the students have their internships terminated during the year. When this happens, students must complete a reemployment process during which they read *The Seven Habits of Highly Effective Teens* and complete a report and PowerPoint presentation on its concepts. They also must write a letter to their parents, the school, and the employer to describe the circumstances that led to their dismissal and how the situation could be prevented in the future. Additional technology training also may be required. This process helps students develop self-awareness as well as resilience. All students and their sponsoring companies complete an exit survey at the end of the year to determine which students will return to the same location; 20 percent of students stay with the same company all four years. The Chicago Internship Program cultivates independence, self-advocacy, strong communication, and time management skills, as well as the ability to relate to people from outside their immediate community. Students learn to become a professional; they must do well in high school and earn a college degree.

Recommendation 2: Collaboration Between General Education and Special Education Teachers

Support collaboration among all teachers, including general education teachers and special education teachers through common planning time and shared professional development. This will foster a partnership whereby all teachers work together to enable students to master grade-level objectives.

LINK TO RESEARCH

Many general education teachers have not received staff development in how to instruct students with a variety of learning styles and needs, nor are they typically aware of how to choose “scientifically validated curricula and academic programs that address at-risk students’ needs” (Fuchs et al., p. 58). However, special educators and other specialized instructors have more specific training on working with diverse learners and selecting valid instructional programs with integrity. Herein lies the need for collaboration.

Teacher collaboration is a type of job-embedded professional development. Collaboration among teachers and other school professionals may be defined as the manner in which, and extent to which, members of the school interact in their approach their work; it is characterized by authentic interactions that are professional in nature (Marzano, 2003). These behaviors may include but are not necessarily limited to openly sharing failures and mistakes, demonstrating respect for one another, and constructively analyzing and criticizing practices and procedures in an effort to improve teaching and learning in a school (Hargreaves & Fullan, 1998). Marzano cites the need for a number of school norms that will enable teachers and other staff to work effectively to improve their schools; norms such as deciding how staff will resolve conflicts, how staff will address and solve professional problems, how staff will communicate to third parties about other staff members, and how staff will behave during professional meetings (e.g., staff meetings and professional development). Lambert (2003) identifies teachers who have a high degree of skill in this area as possessing a shared vision resulting in program coherence, inquiry-based use of data to inform decisions and practice, broad involvement, collaboration, and collective responsibility reflected in roles and actions. Such reflective practice leads consistently to innovation, and high or steadily improving student achievement.

IMPLEMENTATION CONSIDERATIONS

The overarching goal of this recommendation is to provide a rationale and suggested action steps for increased collaboration among general education and special education teachers at City as School. There is a need to find times for teachers to meet, plan instruction, and discuss specific students and their needs. City as School’s unique physical setting, with shared spaces for teachers of differing departments, lends itself to this sort of planning. However, the inclusive nature of these spaces (students often use them to talk with teachers) may mean City as School either will need to find additional space or restrict student use of such space during specified times.

Special education teachers can collaborate with their colleagues by assisting general educators in their planning for instruction (Murawski & Dieker, 2004). Planning for a class

QUICK LINKS: Online Sources for More Information

Access Center (Website)
<http://www.k8accesscenter.org>

TQ Connection (Website)
<http://www.tqsource.org/connection/>

collaboratively allows special educators to have input in the lesson proactively, even if they might not be there physically (Murawski, 2005). This enables special educators to coach their general education counterparts on instructional strategies that can be used with a variety of students to enable them to access the general education curriculum effectively.

1. Provide multiple avenues for structured teacher communication and feedback loops, such as:

- Shared planning time during the school day that will enable content area teachers to share information with special education teachers about content to be covered and to share ideas that will benefit all students.
- An electronic mailing list or other electronic method for teachers to relay information to one another quickly.
- A system of easy communication among staff, so that teachers can note any concerns or issues related to specific students
- Creation of a joint general education/special education team that plans together regularly to ensure coverage across content areas and pacing that benefits all students.
- Creation of feedback loops whereby teachers have the opportunity to voice at regular intervals what is working and not working for them in terms of formal collaborative opportunities, and also to provide feedback on the other types of professional development they are learning that they may need as they continue to work together and learn from one another.

2. Offer formal and regularly scheduled opportunities for collaboration around specific areas of need related to students with disabilities:

- Conduct a data-driven needs assessment to determine topics for collaborative sessions (e.g., progress of students, differentiated instructional approaches, team teaching strategies). Be sure to include teacher input through informal surveys or opportunities to vote on needed topics.
- Train staff regarding effective communication and collaboration skills (e.g., active listening, establishing appropriate agendas, effective use of meeting time). Use reflective questions or protocols to guide collaborative discussions and ensure optimal use of collaborative meetings.
- Offer sessions during times when general education and special education teachers are available to participate after school.
- Ensure that sessions are interactive and allow teachers opportunities to learn from one another.
- Provide opportunities for teachers to give feedback on the sessions so that adjustments can be made to better address the needs of students.
- Have an administrator participate to show the school's support for collaboration.

3. Develop and implement effective professional learning communities using the following structures and steps:

- **Provide sufficient time.** Provide sufficient time for teachers to discuss student learning needs and share, review, and provide feedback on instructional practices that address student learning needs. Embed these opportunities into the school's instructional calendar. *For example, a school may build the schedule so that classroom or subject-area teachers are freed up by "specials" (e.g., music, art, physical education).*
- **Align teacher work with school goals and priorities.** Teamwork should mirror and seek to enhance schoolwide student achievement goals and objectives. Agendas, activities, and outcomes are reflective of schoolwide priorities. Once collaboration time is identified and embedded into the school's instructional calendar, create a plan to address school improvement topics during collaboration time. Consider in which order school improvement needs and topics will be addressed. *For example, if a school goal is to foster prosocial skills, collaboration time may be spent examining behavior and academic data to identify student strengths and weaknesses, sharing effective strategies for behavior with each other, or collaborative problem solving.*
- **Ensure that collaboration is data driven.**
 - Use student performance data in collaborative groups. This will be the focus with which to improve teaching and learning. Data can help identify areas of concern and aid the development of strategies and solutions.
 - Create a schedule in which data analysis is embedded in collaborative time. The use of protocols can provide structure for the collection, review, and analysis.
- **Structure collaboration time.**
 - Structure collaboration time with clearly mapped goals, objectives, and accountability.
 - Create a long-term plan, calendar, and/or schedule of topics and activities for common planning time.
 - Establish guidelines related to the use of protocols. The use of a protocol can be a powerful tool in creating a formalized process for collaboration. It helps establish ground rules for participation, interaction, and potential distractions. The use of a discussion (or any other) protocol can help structure conversations by specifying how time will be allotted to achieve certain goals such as presenting context, asking clarifying questions, providing and reflecting on feedback, brainstorming, or decision making. *For example, protocols can provide structures for ways in which to examine student work, tune and align curricular documents, provide feedback on lesson plans and teaching, develop common assessments, and identify students for remediation.*
- **Provide leadership and support.**
 - Focus the work of collaborative groups by helping them align their priorities with achievement goals.
 - Provide resources needed to support the work of collaborative teams.
 - Allow teachers to hold key leadership positions during collaboration time by facilitating group work. Identify subject area chairpersons or grade team leads. Work with these teacher leaders to create goals, objectives, and structures for collaboration time.

Jacob Hiatt Magnet School

Jacob Hiatt Magnet School provides a good example of effective teacher collaboration.

Jacob Hiatt Magnet School, located in Worcester, Massachusetts, serves 456 students with 71 percent of students eligible for free or reduced-price lunch. Students with disabilities make up 15 percent of the student population and 30 percent of the students are limited English proficient. The school has developed a model of teacher collaboration that includes a comprehensive set of meetings woven into teachers' schedules. Collaboration time is driven by student achievement data and is deeply focused on improving instruction.

Collaboration time is structured to support identified instructional focuses with opportunities for teachers to meet in vertical teams to review student work and examine student data. Collaboration time includes regular and ongoing weekly and monthly grade-level team meetings and full staff meetings two–three times per month, after school. Teams receive guidance from the instructional leadership team and use protocols and other strategies to ensure optimal use of time. Coverage is provided by the principal, assistant principal, and specialist teachers to allow teacher teams to have at least 60–90 minutes of uninterrupted collaboration time.

SCHOOLWIDE INSTRUCTIONAL FOCUS

Teacher collaboration at Jacob Hiatt Magnet School is intentional in its support of the instructional focus on helping students read critically, interpret text, and answer questions completely and intelligently based on text.

THREE SCHOOLWIDE BEST PRACTICES

The instructional focus led to the identification and adoption of three best practices to be used by all teachers in support of student learning: *time dedicated to open response daily in every classroom, modeling, and use of T-charts*. Teacher collaboration is focused on supporting the refinement of these best practices.

USE OF DATA

Data are used routinely to understand how student achievement is impacted by changes to instructional practice. This information is then used to inform the school's continuous instructional improvement efforts.

ROUNDS

The collaboration model at Jacob Hiatt Magnet School also includes a process referred to as *Rounds*. This process consists of small groups of teachers who collaborate to better understand the teaching-learning process within individual classrooms via pre-arranged Rounds visits. Teachers participate as either observers or host teachers, and the professional learning process is facilitated by well-defined roles for each participant, preround orientation meetings, and postround opportunities for reflection and discussion.

From *The Effective Use of Teacher Collaboration Time to Advance Student Achievement. A Living Case Study* (Massachusetts 2020, 2010).

QUICK LINKS:
**Online Sources
for More Information**

NYCDOE: Summer School
(Website) (Website)

[http://schools.nyc.gov/
ChoicesEnrollment/
SummerSchool/default.htm](http://schools.nyc.gov/ChoicesEnrollment/SummerSchool/default.htm)

NYCDOE: Flexible Scheduling
Options (Website)

[http://schools.nyc.gov/
NR/rdonlyres/9EF23CC9-
8520-4C55-BE46-
8BFD468F0E28/0/
FlexibleSchedulingOptions.
pdf](http://schools.nyc.gov/NR/rdonlyres/9EF23CC9-8520-4C55-BE46-8BFD468F0E28/0/FlexibleSchedulingOptions.pdf)

Afterschool in New York
(Website)

[http://www.
afterschoolalliance.org/
policyStateFacts.cfm?state_
abbr=NY](http://www.afterschoolalliance.org/policyStateFacts.cfm?state_abbr=NY)

*Research Review for School
Leaders, Vol. III* (Publication)
(See the section on
*scheduling options,
including trimesters.*)

[http://books.google.com/
books/about/Research_
Review_for_School_Leaders.
html?id=TxtzewY8aDYC](http://books.google.com/books/about/Research_Review_for_School_Leaders.html?id=TxtzewY8aDYC)

*Evaluation of Evidence-
Based Practices in Online
Learning* (Publication)

[http://www2.ed.gov/
rschstat/eval/tech/
evidence-based-practices/
finalreport.pdf](http://www2.ed.gov/rschstat/eval/tech/evidence-based-practices/finalreport.pdf)

Doing What Works: Increased
Learning Time (Website)

[http://dww.ed.gov/
Increased-Learning-Time/
Maximize-Attendance/
practice/?T_ID=29&P_
ID=76](http://dww.ed.gov/Increased-Learning-Time/Maximize-Attendance/practice/?T_ID=29&P_ID=76)

Recommendation 3: Credit Recovery

Provide engaging and individualized credit recovery to flexibly meet students' needs, motivate students, monitor their progress, and include a college/career-oriented community.

City as School employs a major academic intervention support: designing courses and schedules that meet individual student credit needs. In light of their success in this area, this recommendation is provided to help the school improve on a program reported by teachers to be successful.

LINK TO RESEARCH

“Credit recovery options should be rigorous yet flexible, and should allow students to build their skills and credits at an accelerated pace toward on-time graduation” (Almeida, Steinberg, Santos, & Le, 2010, p. 18).

The recommendation identifies four key aspects of a successful credit recovery program: flexibility, student motivation, community, and data tracking. Each of these is rooted in research and practice. Together, the four work as a system in which strength in one area strengthens the other three, just as weakness weakens them.

The Importance of Flexibility. The program should be flexible so that it meets the each student’s schedule, learning pace, and needs. The population of students requiring credit recovery include both the student who has missed one credit and the one who has missed several. The credit recovery program should be able to serve each of those students, despite their disparate needs (Watson & Gemin, 2008, p. 6). The students who also are considered “at-risk” likely have home and work concerns that affect their ability to attend and focus on school. “Effective programs take a comprehensive approach, not only addressing ... school credits, but also addressing other factors that prevent students from succeeding” (p. 15). These factors may include having a child, being a runaway, having already dropped out, rarely attending class, and using drugs or drinking alcohol. The student’s learning style— for example if the student is a visual or tactile kinesthetic learner—also may affect the ability to succeed in traditional classes (Trautman & Lawrence, 2004, p. 9). Flexibility, the ability to adapt to fit the students, is also an important part of ensuring that students are motivated to succeed in their credit recovery programs. City as School excels at being flexible to meet the needs of its students.

Student Motivation. “Motivating students who have failed in the traditional classroom setting is a key to success for credit recovery programs” (Watson & Gemin, 2008, p. 14). Unfortunately, ensuring motivation can be a difficult task. According to motivational theory, students require two beliefs in order to be motivated. They must believe that the goal is both worthwhile and attainable (Ames, 1992 as quoted in Roderick & Engel, 2001, p. 200). After failing once, students may not see that they can succeed. Additionally, they may not see the value of earning credits or of graduating. Unless students have a high level of self-efficacy, their inability to see the relevance of high school may result in a lack of effort (Surland, 2010).

The Need for Community. A college/career-oriented community allows students more time with their teachers and provides a clear goal for students in which their credits matter: life after high school. Learning communities positively affect “student achievement, school climate, school attendance, and graduation rates” (Dynarski et al., 2008, p. 30). The smaller communities provide students with more opportunities to interact with their teachers on a one-to-one basis, which is something students desire. During an evaluation of an online course, a group of students was asked how the program could be improved. Sixty percent said that they wanted “more direction and communication from the teacher” (Oliver, Osbourne, Kleiman, & Patel, 2009, p. 42). The community also needs to guide students toward college and career options. This way, students may more easily visualize the relevance of a high school diploma. According to a What Works Clearinghouse panel, “a focus on learning and high expectations for student achievement” enhanced the learning community’s efforts (Dynarski et al., 2008, p. 30).

Data Tracking and Analysis. A good data tracking system allows the school to identify the students who are in need of credit recovery and track them toward completion. The data system, providing it is comprehensive, also can allow for early interventions, lowering the need for intense credit recovery programs (Almeida et al., 2010, p. 12; Gewertz, 2009). For example, the school could target students with low attendance and provide academic intervention services before the habitual truancy caused them to lose a credit. Data also could inform the pacing of the credit recovery programs, enabling higher levels of flexibility and personalization.

IMPLEMENTATION CONSIDERATIONS

The best credit recovery program(s) will vary by school. Each school will have its own need and capacity. The first step in optimizing or implementing a credit recovery program is to *identify the school’s need, resources, and capacity*. Then, based on this information, the school will need to *select a model*. The model has two main components, most easily summarized in the questions when and what. Finally, the school must *monitor its chosen program(s), evaluate the effectiveness, and make adjustments as necessary*. At each step, the school should focus on maximizing flexibility and student motivation while maintaining a college/career-oriented community and including data tracking and analysis. City as School already functions within a model specific to the school that maximizes flexibility, stresses college and career (through college visits, application process, and internships), and uses data to arrange the following quarter’s schedule.

1. Identify needs.

The identification process is two-fold: First, the school must examine its student data and determine which students are in need of the greatest number of credits. This will allow the school to target its efforts where the need is greatest. In addition, the school should determine what it can and cannot offer in-house. For example, if the school does not have many computers available, an on-site, computer-based credit recovery program would be ill advised. Second, the school should determine student preferences regarding credit recovery programs. One of the easier ways would be to give students and their guardians a short survey, asking when the students could and would prefer to attend credit recovery programs, and about students’ interests. If most students have work after school, an afterschool program would not be the best option for the school. The questions about student interests would allow the school to tailor programs and

develop alternative credit-bearing courses that fit student needs and interests (Beckett et al., 2009, p. 21). For example, if several students express interest in automobiles, the school could structure a science or math class around automobile mechanics and design.

2. Select a model.

Selecting a model first requires deciding *when* the program will take place, and then determining *what* that program will be. Not all of these options will be immediately feasible for every school. For example, if a school does not have an afterschool program in place, it would require a school-based option vote in order to offer one. As school-based option discussion and voting typically take place in the spring, the afterschool program may not be possible for the 2011–12 school year. The school could, however, discuss the program in spring 2012 and ratify it for the 2012–13 school year.

Credit Recovery Programs

Options Based on When the Program Will Take Place

Afterschool, Evening/PM School, and Saturday School

This option lengthens the school day or week. Classes during these times may be particularly engaging for students when they incorporate preparation for college/careers (Afterschool Alliance, 2009; Pennington, 2006). These options do not take away from and are more flexible than the regular school day. However, students may not attend due to other commitments or a lack of engagement. The school also would need access to the facilities and staff during these times. Finally, these options would require a school-based option vote to implement, as well as an extended use permit.

Summer School

Another option is lengthening the school year. Summer school may take place on campus—a matter that would require a school-based option vote—or at another school with a program. A summer program does not take time from and may be more flexible than classes during the regular school year. In addition, summer programs can make learning more continuous over the long holiday, possibly increasing knowledge retention. However, ensuring staffing and facilities can be difficult for the schools, given concerns such as budgeting and air conditioning. While students can attend off-campus programs, they may not know how to enroll or—having enrolled—they may not attend. If the school opts to use off-site programs, it should provide support during enrollment and check in with students once the summer programs begin.

Trimesters

New York allows schools to restructure their school days and year in several ways, including dividing the year into three terms rather than two. The basic trimester system is three cycles of 60 days. The other system, which the NYCDOE refers to as the 75-75-30 Plan, divides the school year into two long terms and one short term. The short term also may be divided into two 15-day terms. These systems provide time for credit recovery as well as enrichment programs, short electives, and compressed courses (NYCDOE, n.d.).

Credit Recovery Programs

Options Based on What the Program Will Offer

Credit-Bearing Alternatives

Rather than require students to recover their credits by retaking a class, the school may repackage the credit-essential elements of the class within an elective course. This is an area in which knowing student interests and goals would be helpful. The school also may offer credit for community service or internships supplemented with a project, essay, or other form of assessment. While students may find these alternatives more engaging, designing the courses and, in the case of community service and internships, finding opportunities may be difficult. This credit recovery option requires that the school make opportunities for its students, although programs such as Learning to Work and relationships with other community organizations can help.

Virtual Schools and Online Courses

The use of computer-based learning, both off and online, is growing and spreading. New York has recognized the potential of such programming through its creation of the School of One and Innovation Zone (iZone), which piloted iLearnNYC—an online credit recovery and elective program—during the 2010-11 school year. Courses may take place within a single program, in conjunction with online elements (e.g., message boards, video chat), or blended with face-to-face classroom instruction. They also may take place on campus or wherever a computer and Internet connection are available. The most effective courses, however, are those that include student-instructor interaction and individualization, both in program adaptability and student control of content (Means, Toyama, Murphy, Bakia, & Jones, 2010; Oliver, Osborne, Kleiman, & Patel, 2009; Watson & Gemin, 2008; Witta & Witta, 1999). If the school already has a computer-based credit recovery program in place, then it may wish to increase the student-instructor interaction through a blended face-to-face approach or a message board or other form of online communication. The school also may seek ways to individualize the program through better pacing and differentiation, or by giving the students more control over their programming and, if possible, course content.

Wichita Falls High School

For its credit recovery system, Wichita Falls High School uses the Continuous Achievement Placement System.

The “[Continuous Achievement Placement System (CAPS)] is an intensive credit recovery program that relies on technology delivered curriculum content” (Trautman & Lawrence, 2006, p. 1).

In order to combat its dropout rate, Wichita Falls High School decided to provide credit recovery through the Continuous Achievement Placement Center. Rather than just provide students with online content, in this case the American Education Corporation’s A+dvanced Learning Systems (A+LS), the Continuous Achievement Placement Center builds a community and culture around the online programming. It operates out of two classrooms at Wichita Falls High School, maintaining a 20–1 student-to-teacher ratio. Each of these classrooms contains 18–24 computers. The program is a morning-to-afternoon (7:45-2:45) “school within a school” (Trautman & Lawrence, p. 9) in which students learn at their own pace within a collegial atmosphere and receive personal attention and guidance. While “students primarily work independently,” new students to the program are paired with successful peers. Students enter the program by counselor referral, although the school study team may suggest students to the counselors. The program is not targeted for students with behavioral problems. An in-house evaluation found that students in the program had better attendance rates than their peers outside the program, and that they earned credits at a swifter pace. Standard education students earned an average of 4.47 credits per student, while students in the program earned an average of 10 credits. As for attendance, students in the program outperformed the standard education students by almost three percentage points (Trautman & Lawrence, p. 14). The study also found that the program “appears to be exceptionally effective for limited-English-proficient and economically disadvantaged students” (Trautman & Lawrence, p. 21). The study compared pass rates on the Texas Assessment of Knowledge and Skills between limited-English-proficient students within the program and limited-English-proficient students in the whole state. For mathematics, limited-English-proficient students in the program had a 92 percent pass rate. Texas limited-English-proficient students had a 59 percent pass rate. The difference for the ELA pass rate is nearly as great. Continuous Achievement Placement Center limited-English-proficient students had a 68 percent pass rate, while Texas limited-English-proficient students had a 42 percent pass rate (Trautman & Lawrence, p. 16). Wichita Falls High School blended computer-based credit recovery with a personalized community and data tracking and analysis to create a program that fit their school and worked for their students.

Learning Tools on the Internet

Following is a sample of some online educational resources that can be used to build or provide additional means for schools to provide enrichment and/or additional academic support to students in need. 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 any other similar services. Additionally, this list is not intended as a comprehensive library of online tools and resources available but rather as a small sample.
+ free with paid options; * free for individuals, paid for a group

Online Flashcards

Students may create their own deck of flashcards or download a previously created deck. Teachers can create decks for student use. Several services also allow syncing between computers and cell phones. The decks all use some form of a spaced-repetition system. This system tracks student progress with the cards, 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 would allow teachers to share visual notes with students who are unable to be physically present and 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 share presentations with students who are not able to be physically present and supplement classroom lectures. Students also could use the presentations to revisit class topics near test time.

+Glogster – Create interactive, online posters (<http://www.edu.glogster.com/>)

+Prezi – A creative alternative to PowerPoint (<http://prezi.com/>)

+Slideshare – Host and share presentations online (www.slideshare.net)

Brainstorming and Collaboration

The Internet has many options for facilitating cooperative thinking and creativity. 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 – Collaborative, visual storytelling (<http://storybird.com/teachers>)

Web Conferencing

Web conferencing allows a group of people to share materials, talk together, 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 resources.

Wolfram Demonstrations (<http://demonstrations.wolfram.com/>)

Vialogues – Allows real-time commenting on a video (<https://vialogues.com>)

*Voice Thread – Allows various forms of commenting on online media (<http://voicethread.com/>)

Khan Academy – Videos and practice exercises on a variety of topics (<http://www.khanacademy.org/>)

Youtube (<http://www.youtube.com/education?b=400>)

Videolectures.net (<http://videolectures.net/>)

Blogging

Blogs are online journals. Teachers may check for updates regularly and leave comments on student posts. A Rich Site Summary (RSS) feed would allow the teacher to check one page for updates, rather than visit 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 together to facilitate additional learning.

Edmodo – Social networking site created for teachers and students (<http://www.edmodo.com/>)

Open Study – A place to connect with others studying similar topics (<http://openstudy.com/>)

Livemocha – A place to study foreign languages with native speakers (<http://www.livemocha.com/>)

+Yammer – Private social networks (<https://www.yammer.com/>)

Miscellaneous

Moodle – Open source Course Management System (<http://moodle.org/>)

Wallwisher – Online notice board (<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 notetaking, notebooks may be shared (<https://www.evernote.com>)

Google Art Project – Virtually visit several famous museums (<http://www.googleartproject.com/>)

+Dropbox – Online flash drive for easy file sharing (<http://www.dropbox.com/>)

+SpiderOak – Similar to Dropbox (<https://spideroak.com/>)

Recommendation 4: Instructional Strategies

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

LINK TO RESEARCH

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

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

Teachers need to provide structured opportunities and time for students to take on higher-level cognitive work (Tomlinson, 2003). In discussing the gradual release of responsibility model, Fisher and Frey (2008) state “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 allows students to become what Graves and Fitzgerald (2003) call “competent, independent learners” (p. 98).

There are several steps to ensure that students are being asked to complete this type of intellectually challenging work, which increases test scores and improves performance on authentic assessment measures as well. Newmann et al. (2001) define *authentically challenging intellectual work* as the “construction of knowledge, through the use of disciplined inquiry, to produce discourse, products, or performances that have value beyond school” (p. 14). Daggett (2005) agrees, stating all students should be pushed “to achieve academic excellence, which ultimately boils down to applying rigorous knowledge to unpredictable, real-world situations, such as those that drive our rapidly changing world” (p. 5). Disciplined inquiry, which occurs in the classroom, requires that students “(1) use a prior knowledge base; (2) strive for in-depth understanding rather than superficial awareness; and (3) express their ideas and findings with elaborated communication” (Newmann et al., 2001, p. 15).

QUICK LINKS: Online Sources for More Information

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

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

*Organizing Instruction and
Study to Improve Student
Learning* (Publication)

[http://ies.ed.gov/
ncee/wwc/pdf/
practiceguides/20072004.
pdf](http://ies.ed.gov/ncee/wwc/pdf/practiceguides/20072004.pdf)

IMPLEMENTATION CONSIDERATIONS

1. Cultivate schoolwide high expectations for students.

- Align instruction with the New York State 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 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 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.

3. Develop examples of authentic intellectual work.

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

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

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

High-Scoring Writing Assignment

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

Commentary

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

Low-Scoring Writing Assignment

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

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

Commentary

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

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

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 29, 2011, from <http://centerforaiw.com/sites/centerforaiw.com/files/Authentic-Instruction-Assessment-BlueBook.pdf>

Perrysburg High School

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

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

Recommendation 5: Transition and Orientation Programs

Continue to improve a successful orientation and transition program for all students.

City as School offers a comprehensive orientation program. In light of its success in this area, this recommendation is provided to help the school improve on an already successful program.

LINK TO RESEARCH

The following information is provided as information only, as City as School does not have freshmen. However, the ideas within can be expanded to include students new to the City as School model.

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

In a survey of 320 ninth grade students, researchers Akos and Galassi (2004) shared that students seemed “to identify three primary categories of school transition concerns—academic, procedural, and social” (p. 218). In a later report focusing on the transition for African-American students, Holcomb-McCoy (2007) divided struggling students into three categories: those who had academic problems, those who had social problems, and those who were disconnected. Then, in 2009, Oakes and Waite drew from the a 2006 research summary by the National Middle School Association and wrote that for “many students ... social matters and peer relationships overshadow academic concerns in ninth grade.” Although the survey that Akos and Galassi used may have been limited to a small number of primarily white (76%) students in the south, the “three primary categories” they listed receive attention in other studies and analyses of different populations. However, the emphases may vary. These three areas, then, are a useful way to consider the transition process, and a successful transition system will address all three.

In a research brief from the Council of Great City Schools, Horwitz and Snipes (2008) cautioned that “structural reforms,” such as those that create ninth grade academies, “are insufficient to improve student outcomes.” The structural reforms address some of the social and procedural concerns (i.e., anything that involves “navigating around and dealing with the complexities of a larger school environment including multiple classes taught by different teachers”; Akos & Galassi, 2004, p. 218) that students have by providing them with a home base, a stable group of classmates, and a teacher who can answer questions about the school. However, the reforms do not necessarily address academic problems that students may be facing. In a book about high school transitions, Queen (2002) wrote that, while advisory periods are an option, often “many of the activities that occur during these periods are mechanical tasks, such as taking attendance or distributing notices” (p. 58). Herlihy (2007) noted that structural reforms may help, but the reforms gave students a

QUICK LINKS: Online Sources for More Information

Student Transitions from Middle to High School: Improving Achievement and Creating a Safer Environment (Publication)
Partially available through Google Books at
<http://books.google.com>

Easing the Transition to High School: Research and Best Practices Designed to Support High School Learning (Publication)
http://www.betterhighschools.org/docs/NHSC_TransitionsReport.pdf

Middle-to-High School Transition: Practical Strategies to Consider (Publication)
<http://www.eric.ed.gov/PDFS/ED506363.pdf>

stronger chance for high school success when they were combined with “specific instructional and curricular reforms” (p. 25). Repeatedly, research shows that a single approach to the high school transition is not enough; schools must approach the transition process through multiple channels.

IMPLEMENTATION CONSIDERATIONS

City as School’s transition process has the following four key characteristics present. The information included here should help to improve the transition process.

Elements of a Successful Transition Program

First, the transition should be *ongoing*. This means that the transition should not end with an orientation at the start of the year, but should continue during the full first year. This way the school can assure that students are fully adjusted and that their needs are met.

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

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

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

1. Designate a transition team.

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

2. Have the team evaluate the current transition program(s).

The transition team would ask questions such as, but not limited to, the following:

- Is the current transition/orientation program continuous?

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

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

3. Have the transition team evaluate the probable needs of the incoming class.

The team could base this evaluation on information about the incoming class gathered from computer data systems and students' previous schools, as well as from data about past freshman classes and their needs. This way, the school knows which academic supports to develop and implement.

4. Redesign, create, and augment the school's present transition program(s).

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

After the programs have been chosen, all persons involved with the school should be given an explicit description of their role within the system. Staff members should know their responsibilities, what they entail, and how they will be held accountable (Queen, 2002, p. 56).

5. Monitor the transition system to ensure that it is working smoothly and optimally.

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

Talent Development High School

The Talent Development High School model, developed by the Center for Research on Students Placed at Risk, focuses on providing students with a smoother and better supported transition into high school. The model is both structural and programmatic. The model separates new students into a separate academy, which may even be physically separated from other students (Herlihy, 2007, p. 21). Within the academy, interdisciplinary teams team-teach students using a special curricula to help students catch up academically (Herlihy, 2007; Neild, 2009, pp. 65-69). The school also created a special Twilight Academy that operated in the afternoon for students with persistent behavioral problems, as well as another special academy for students who were unable to continue on to tenth grade. The school encouraged attendance and academic achievement through various incentives and supports (Herlihy, 2007, p. 21). The teachers received common planning times within their teams, as well as ongoing coaching and professional development (p. 21).

The academy limited the number of teachers with whom students frequently interacted, allowing them to build relationships. The limitation also decreased the amount of physical space the students occupied during the day, shrinking the school. Additionally, this containment likely facilitated the creation of friendships. The catch-up curriculum and double-dosing of reading and math (Neild, 2009) helped ease academic-based anxieties and helped keep students from falling behind. One study of the Talent Development High School model found that students within the model outperformed their peers in “attendance, total credits earned, credits earned in algebra, and ontime promotion” (Neild, 2009, p. 67). These gains persisted into the third year. However, Neild warns that ongoing academic success requires more than a smoother transition for ninth grade students.

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