INSTRUCTIONAL PARTNERSHIPS TO EXTEND LEARNING IN URBAN HIGH SCHOOLS

Lessons from New York City and Boston

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Executive Summary

Late in 2007 New Visions for Public Schools, a New York City reform organization, received a grant from the C.S. Mott Foundation to organize select high schools and community partners into delivery systems that could improve student achievement. New Visions asked Policy Studies Associates, Inc. to provide research support for this effort in the form of a concise, field-tested conceptual framework for inter-organizational instructional collaboration. The resulting model is presented in Chapter 3 of this report. In developing the model, PSA researchers reviewed pertinent literature and conducted field work in four New York City high schools and in two Boston high schools.

The professional literature features compelling arguments in favor of partnerships between schools and external organizations. The consensus view is that to be economically competitive young people need to be able to solve problems in socially and technically complex environments. Schools are urged, therefore, to embed in teachers' ordinary practice opportunities for joint work with colleagues in applied settings.

The snapshots below highlight extended-learning opportunities operating in the schools PSA researchers visited in New York City and Boston.

- Admissions officers at the University of Vermont (UVM) reviewed practice college applications and essays completed by students in ninth-grade English classes. UVM personnel evaluated students' work, provided feedback, and ultimately select 12 promising, albeit not previously college-bound, youngsters to spend a few days on campus, living in the dorms, talking with students and professors, and taking classes. Jet Blue Airlines covered transportation costs.
- In the wake of Hurricane Katrina, a Young Audience photographer and history teacher organized a school trip to New Orleans. Students were given cameras and asked to think critically about the images they captured and to relate those images to the themes they were studying in class.
- At the end of a *Facing History* course on genocide, 23 seniors traveled to Europe for a 13-day visit to Holocaust sites. Preparation for the trip included year-long study of European history and fundraising to cover travel costs.

The professional literature leaves no doubt that inter-organizational collaboration is difficult. Referenced challenges include clarifying organizational purposes, establishing governance structures, facilitating communication, developing staff, evaluating results, and raising funds. Study respondents shared concerns about the foregoing; their attention was focused on clarifying purposes, obtaining funding, and managing and developing human resources across organizations.

Respondents suggested assessment activities, work with intermediary organizations, and attention to project management as ways of addressing the challenges of joint work. Framed as

steps, their recommendations included the following: (a) pre-screen prospective partners to determine whether institutional values and capacities are aligned; (b) charge specific individuals within collaborating organizations with responsibility for managing program operations; and (c) bring teachers and program staff together to design activities that would effectively reinforce classroom lessons. Some partnerships dealt with the need for funding and logistical assistance by connecting their efforts with that of experienced third-party organizations offering financial and technical support.

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PSA obtained permission to conduct this study from the Institutional Review Boards of the New York City Department of Education and the Boston Public Schools and from the principals of case study schools. Our agreements with the Boston and New York City school systems require that participating schools and school respondents remain anonymous. We'd like to acknowledge our indebtedness to the generous principals, teachers, and students whose work made this research both possible and rewarding.

The school-linked partnerships described in this report took place with the cooperation and support of two intermediary organizations (Boston Private Industry Council, College for Every Student), two universities (University of Massachusetts, University of Vermont), one college (Vassar College), three cultural institutions (El Museo del Barrio, Roundabout Theater, Vivo Flamenco Carlota Santana), and several school service providers (Facing History and Ourselves, Global Kids, Road to Success, Safe Horizons, Young Audiences). We appreciate the opportunity these organizations gave us to see their work and to learn about their collaborations with Boston and New York City schools.

Within Policy Studies Associates, Inc. the project was carried out by a team led by Elizabeth Reisner. Eileen Foley framed the investigation, managed data analysis, and wrote the report. Sara Allender, North Cooc, Sara Edwards, and Derek Riley conducted field work and related data analysis. Derek Riley and North Cooc contributed to Chapter 3 of the report. Initial treatments of the case studies of New Transitions High School and City Tech Institute were prepared by Derek Riley. Initial treatments of the case studies of the Academy for Human Rights and the High School for Arts' Industries were prepared by North Cooc. And initial treatments of the case study of the Math and Science Preparatory Academy was prepared by Sara Edwards.

Glossary of Terms

This page defines terms used in this report to describe school partnerships and the external organizations that participate in and enable such work.

Capacity-building organizations. Capacity-building organizations help schools and other nonprofit clients build high-performance organizations, rather than just strong programs or individual professionals. The work of capacity building includes setting aspirations and strategy, institutionalizing sound management processes, and improving systems to work at scale.

Collaboration. In this process, individuals or groups come together to identify common interests and to seek solutions that reach beyond what any one of them could accomplish independently. Collaborations may be intra-organizational or inter-organizational. They may be formal and contractual, but often they are not.

External partner. An external partner is an individual or entity that collaborates with a public school on a project and is willing to make the relationship official in a formal service plan.

Intermediary organizations. These are groups that broker relationships between independent parties and provide a distinct value beyond what the parties could have achieved independently.

Partnership. As used here, a partnership is a voluntary arrangement entered into by schools and other organizations wherein the parties contribute funds, property, staff, and other items of value for the purpose of accomplishing mutually agreed upon objectives.

Third-party actors. See intermediary organizations.

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I. Introduction

Policy Context

How can America ensure that all of its children have opportunities to reach their full potential in a competitive world where thinking skills are among the most important assets of society? In its 2007 report, *A New Day for Learning*, the C.S. Mott Foundation addressed that question. It responded with a model of education that places schools at the center of systems in which separate organizations, aligned around shared understandings of college and career readiness, work seamlessly to provide professionals and students with diverse ways of learning throughout an enriched and expanded day.

New Visions for Public School, founded in 1989, shares the Mott Foundation's view of education reform as premised on collaboration between public and private institutions. New Visions works to bring educators, families, cultural and service organizations, and civic leaders together to help New York City children achieve their fullest potential through innovative and collaborative educational programming.

Between September 2001 and September 2008, with the New York City Department of Education, United Federation of Teachers, Council of Supervisors and Administrators, Carnegie Corporation of New York, Bill & Melinda Gates Foundation, and Open Society Institute, New Visions for Public Schools opened 88 small secondary schools in New York City. A distinguishing feature of the New Century High Schools Initiative (NCHSI), was the role that inter-organizational partners played in creating the schools. New Visions encouraged "lead organizations" to share responsibility for student learning with school personnel. Lead organizations often had a prime role in framing schools' institutional directions and in identifying principals.

The partnership strategy was challenging to implement. According to a 2007 evaluation by Policy Studies Associates (PSA), about one-third of partnerships fizzled; about one-third produced programming that was valued but not well integrated with school life, and about one-third influenced teaching and learning in ways participants viewed as fundamental.

Late in 2007, New Visions for Public Schools received a grant from the C.S. Mott Foundation to develop a select number of its successful school partnerships into delivery systems that could improve student achievement in important ways. New Visions asked Policy Studies Associates, Inc. to provide research support for this effort in the form of a concise, field-tested conceptual framework illuminating *how* partnerships that improve learning tend to operate.

In conducting this work, PSA researchers reviewed the professional literature and interviewed partners and pedagogues participating in joint work in four New York City high schools and in two Boston high schools. The literature review aimed to define key terms and concepts, to illuminate the role instructional partnerships can play in learning, and to identify factors that enable and hinder such work. The field work was designed to test, contextualize, and elaborate lessons extracted from the literature.

This report presents research results in three chapters. Chapter 1 introduces concepts and methods. Chapter 2 presents case studies of successful partnerships and summarizes practitioners' views about what does and does not work. Chapter 3 discusses study conclusions and implications. There are two appendixes; the first presents the literature in detail, and the second presents the methodological details of this investigation.

Important Concepts and Related Research

The literature describes four stages in partnership: connection, cooperation, coordination, and collaboration. The last or most developed stage (collaboration) refers to sustained work by two or more parties to achieve shared long-term goals (Florian, 1999). Collaborative partnerships are the subject of this study.

In examining the empirical literature, we first focused on identifying the relationship between inter-organizational collaboration and student achievement. The methodological literature on inter-organizational collaboration was "thin" to adopt Knapp's term (1995). Epstein (1996) called the evaluation of school-linked collaborations "an emerging field of study," and Chavkin (1998) concluded "...we do not yet have a strong research base supporting school partnerships."

PSA researchers found, however, strong agreement in the advice literature about the knowledge and skills needed for success in today's world and about the ways schools could become more effective in achieving important youth outcomes through collaboration. Furthermore, it was clear that that program models embraced by the C.S. Mott Foundation and New Visions for Public Schools were aligned with that literature.

The consensus view is that, in addition to mastering the traditional curriculum, young people need to be able to solve real world problems in socially and technically complex environments to be economically competitive (Conley, 2007; Deke & Haimson, 2006; Murnane & Levy, 1996; Rothstein, Jacobsen, & Wilder; 2008; The Partnership for 21st Century Skills, 2007). Toward that end, teachers are encouraged to demand critical thinking, disciplined inquiry, team work, and skillful applications of knowledge. Administrators are urged, in turn, to embed in teachers' ordinary practice opportunities for reflection and for joint work with colleagues, including colleagues in applied external settings who can provide students with "authentic" work (Dufour, 2003; Hargreaves, 2003; Louis & Kruse, 1995; McCombs, 2003a; McCombs, 2003b; McCombs & Whisler, 1997; McLaughlin & Talbert, 2001; Newmann & Wehlage, 1995; Rosenholtz, 1991; Warren-Little, 1982).

The literature is replete with evidence of the demands as well as the benefits of collaboration (Atkinson, Springate, Johnson, & Halsey, 2007; Briggs, 2001; Corcoran & Lawrence, 2003; Council of Chief State Officers, 1998; Foley, 2002; Hirota, 2005; Lee-Bayha & Harrison, 2002). Challenges associated with inter-organizational collaboration feature six: (a) clarifying shared organizational purposes; (b) establishing governance structures; (c) facilitating

communication; (d) developing staff; (e) evaluating results; and (f) raising funds. Appendix A presents an extended review of the literature.

Methods

This study uses interview and case study methods. The interview method is used to determine partnership participants' perspectives on what works. The case study method is used to investigate how partnerships operate within the context of schools (Yin, 1993).

Details regarding study instruments, school and respondent samples, and the methods of data analysis are presented in Appendix B. A brief summary follows.

Telephone and in-person interviews were conducted with school and partner staff in four New York City high schools and in two Boston high schools. Respondents included principals (N = 6), teachers engaged in partnership activities (N = 23), and staff of partner organizations (N = 31).

In five of six schools, we also conducted observations of program operations and focus groups (N = 8) with 43 students. Observations and focus groups did not take place in one school given the principal's concern about pressing end-of-year school business.

2. Findings

PSA researchers aimed in the course of field-based research and interviews to answer two questions: (a) were students in featured partnerships participating in learning activities in which they could actively constructing knowledge; and (b) how did these learning opportunities emerge and operate within the context of schools.

To summarize briefly, we found that students in featured programs were enjoying valuable opportunities to think critically and creatively and to apply their learning in real world situations. We found that that these learning opportunities were typically rooted in school-day classroom activities and the more deeply rooted, it seemed, the better.

In interviews directed at eliciting practitioners' views about best practices in interorganizational collaboration we garnered the following additional specific recommendations: (a) study potential partners' instructional values and assets closely before entering into a partnership, (b) engage third-party organizations as brokers and technical supports when possible, and (c) invest in program managers who can enable communication, staff development, and program evaluation.

Case Descriptions

In spring 2008, PSA researchers visited three types of partnership programs in five schools: (a) one university-linked partnership, (b) two arts collaborations, and (c) two partnerships that emphasized moral reasoning. The case summaries that follow describe the structure of those partnerships and the learning activities in which students were engaged. We assign pseudonyms to the schools, rather than use actual names, to shelter respondents' identities.

Academy for Human Rights

Global Kids, the co-founder of the Academy for Human Rights, a public high school serving grades 9-12, is a nonprofit organization dedicated to educating youth about international issues and preparing students to become community and global leaders. For more than 15 years, Global Kids has provided year-long after-school programs on global issues. The Academy for Human Rights is its flagship affiliation. Two youth development specialists from Global Kids work full time at the Academy; they are joined twice a week by two more specialists who work with freshman social studies classes and lead after-school programming. Global Kids staff members are treated as regular members of the Academy for Human Rights faculty. Although they are not school system employees, they participate in school meetings and administrative committees, and they take on roles beyond teaching, including student and teacher recruitment, freshmen orientation, staff development, and parent outreach.

The Academy for Human Rights concentrates much of its Global Kids' programming in students' freshman and sophomore years. Global Kids trainers co-teach ninth-grade social studies classes twice a week, supplementing the core curriculum with more interactive and student-centered activities like United Nations-style simulations. In the tenth grade, all students take a two-semester global citizenship seminar taught by Global Kids staff. The seminar explores human rights, colonialism, child soldiers, and genocide, and it aims to build students' understanding of justice, peace, diversity, tolerance, and civic participation. In their junior and senior years, students have opportunities to travel abroad. In summer 2008, students traveled to South America and to parts of Europe through the YMCA Teens Program and the Experiment in International Living. In the past students have traveled overseas with the Peace Boat, a non-profit organization that charters a passenger ship to carry out voyages to promote peace and cultural understanding.

The Academy for Human Rights emphasizes research and presentation skills in addition to its focus on global issues. In focusing on these skills, the Academy aims to build students' confidence in managing people and situations. During the spring semester of their sophomore year, Academy students conduct a school-wide conference with the support of Global Kids staff. This all-day event provides students with opportunities to co-facilitate 90-minute workshops.

One of many workshops from the 2008 conference explored the effect of rap music on listeners, asking whether violent lyrics influence the decisions of individuals. To debate this point, the class read a case study of a man convicted of aggravated assault who later sued the rapper Lil' Wayne, claiming the rapper's violent lyrics influenced his crimes. The class then split into three groups—the prosecution, defense, and jury—and organized their arguments accordingly before meeting as a court. The activity asked students to build logical and concise arguments and to respond to opponents.

City Tech Institute

City Tech Institute is a high school that specializes in interdisciplinary, project-based learning with an emphasis on technology. To support its social studies program, City Tech Institute has worked with *Facing History and Ourselves*, an international professional development organization active for over 30 years. The *Facing History* model challenges students to confront moral and ethical issues in history and to investigate the roles and responsibilities of individuals in those events. *Facing History* sponsors regional professional development events for teachers, including multi-day seminars and workshops, and provides affiliated schools like City Tech with instructional support and resources through its program associates.

City Tech Institute teachers and *Facing History* staff have collaborated with the Boston Public schools to fold *Facing History* lessons into the district's multi-year history curriculum. City Tech teachers have developed their own courses using *Facing History* principles. The instructional approach relies substantially on original sources available through the Facing History online library, including memoirs, academic articles, novels, documentary and narrative films, historical case studies, and news media.

The seniors we spoke with at City Tech were, as sophomores, enrolled in a course where they met a concentration camp survivor named Sonia Weitz. Ms. Weitz spoke at the school about her personal Holocaust experiences. Two years later, in their senior year *Facing History* class, these students read her memoir, *I Promised I Would Tell*, and analyzed her story using skills and vocabulary developed in 12 Facing History lessons. At the end of the course, with the money they raised operating a daily coffee shop at the school, 23 of these students traveled to Europe for a 13-day visit of Holocaust sites. During their trip, the seniors visited Ms. Weitz's former Krakow home. The next day, they visited Auschwitz, one of several concentration camps that she endured. As they traveled, the students reported their experiences to parents, fellow students, and sponsors over a weblog. In blogging and using a webcam they helped expand the understandings and interests of their peers. Returning students spoke passionately about this as a life-changing event. They set up a scholarship fund to enable future classes to follow in their footsteps.

Math and Science Preparatory Academy

Math and Science Preparatory Academy offers a rigorous college preparatory curriculum and requires students to take four years of math, science, English, and social studies, and three years of Spanish. The school is involved in several partnerships designed to increase students' awareness of and readiness for college. Its main partner is the University of Vermont (UVM), a selective college located in the small city of Burlington that enrolls more than half of its students from outside the state. The cost for tuition, room, and board for out-of-state students at UVM averages approximately \$38,000 per year.¹

The partnership between Math and Science and UVM is rooted in mutual need. UVM is eager to enroll exemplary students of color, and Math and Science is eager to expand its students' college awareness and preparation. JetBlue Airlines bridges the geographical distance between the two campuses by providing 200 free roundtrip tickets each year for UVM staff and Math and Science staff, students, and parents. The former principal of Math and Science manages the partnership working two to three days per week. He is supported by the schools' guidance team; several teachers, and six UVM admissions officers who visit Math and Science monthly to conduct college preparatory activities in grades 9-12. The framework of UVM activities is as follows:

- Academy students complete practice college applications and essays in their ninth-grade English classes, and UVM admissions officers provide feedback to these students in small groups. Next, they conduct practice college interviews with students and review their transcripts. Ultimately they select 12 promising if unmotivated ninth-grade students to visit UVM.
- For tenth-grade students, the UVM admissions officers conduct a time-management workshop.

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¹ Source: http://www.uvm.edu/

- For eleventh-grade students, UVM admissions officers conduct a workshop on college applications, and they offer select students with high grade-point averages the opportunity to visit the UVM campus. The aim is to give students an in-depth experience of UVM. Students attend classes, use food cards to eat in the cafeteria, visit the library, meet with professors, stay in the dorms with student hosts, and are free to ask questions of a specially-assembled panel of college students.
- UVM admissions officers conduct a financial aid workshop in the fall of students' senior year and walk parents through the process of filling out important forms. Typically, twelfth-grade students who will be attending UVM in the fall have already visited the campus at least twice by that point. One of the twelfth-graders confidently stated, "I know the campus" and another said, "I don't need a map." A parent of each student accepted to UVM is flown in to visit the college campus to help them in their decision-making.

Each year, about 15 to 20 Math and Science Preparatory Academy students attend UVM on full scholarships. Some Math and Science teachers are in attendance when their alumni graduate from UVM. UVM staff said that "[Teachers'] continuous interest in students is very important to the collaboration." One of the first Math and Science Preparatory Academy students to graduate from UVM now works in the university admissions office and returns to visit Math and Science Preparatory Academy with the admissions team.

New Transitions High School

New Transitions is a small bilingual high school for Spanish-speaking students in grades 9-12. The school features a portfolio of arts opportunities supporting dual language development and cultural enrichment. These opportunities were developed in partnership with several prominent local organizations,

Roundabout Theatre Company, a professional, non-profit theatre that has won 25 Tony Awards, is one of New Transitions' distinguished partners. As part of its mission, Roundabout works to enhance "teacher practice and ...student learning." It partners professional artists with teachers, and it offers schools after-school programs, internships, teacher professional development workshops, and curricular materials such as study guides.

In 2006-07 and 2007-08, six theatre professionals from Roundabout have worked with several drama students and their teachers at New Transitions. In 2007-08, one bilingual teaching artist visited two drama classes on 10 occasions to help approximately 35 students write and produce a play and thereby develop their English-language skills. Prior to each visit, the teaching artist planned the lesson with the classroom teacher. To initiate the writing process, the artist asked students to develop dialogue based on a photo tableau. Students were next asked to sound out the script out in acting exercises, and ultimately to revise the dialogue. Once the script was nearly final, the teacher, teaching artist, and students met with a team of six Roundabout theater professionals with expertise in set design, costumes, lighting, sound, acting, and

publicity. Together they worked over 35 hours to bring the play from "page to stage." To expand their horizons, in the course of that collaboration, students attended major Broadway productions including Roundabout's own *Sunday in the Park with George*, during which a second-year student was given a seat directly next to the light control booth so he could watch technical operations behind the scenes.

School for Arts and Related Industries

School for Arts and Related Industries seeks to develop "independent, self-reliant thinkers" through a high-school curriculum focused on music, theater, dance, and visual arts, including the business aspects of these endeavors. Students at the school may choose among electives such as steel pan drumming and photography, entrepreneurship, marketing, and accounting. Internships in arts and business are available to seniors. Young Audiences New York is the main partner of School for Arts and Industries. Young Audiences brings 50 years of experience to arts programming in New York City schools.

Young Audiences has created a residency program at the School for Arts and Related Industries in which four artists work on campus throughout the day. For the first two years of the program, a Young Audiences site coordinator managed logistics, particularly the matching of artists with interested teachers. Today the partnership relies for coordination on a monthly meeting between Young Audiences staff members and the school faculty.

Young Audiences' four professional artists bring a variety of backgrounds to the school. One teaches a steel pan class. Another leads courses on African percussion music and directs an advanced jazz combo group after school. A third is a photographer, and the fourth is a video artist.

The photographer and video artist promote self expression in students and train them in technical areas such as lighting, camera angles, and editing. The video artist and students in a culinary class produced a series of cooking lessons for the local television station, Brooklyn Public Access. Much of the work, however, involves students in thinking about their communities. A former site coordinator explains, "One of our students took the video camera home and ... took footage of the housing project, the graffiti, the bullet holes, the broken glass, guys walking around. He provided commentary on what Brooklyn meant to him. There aren't a lot of kids in this socioeconomic group who have the technology to reflect [on their lives] in this way."

This past spring, to bridge the gap between academic learning and civic engagement, a social studies teacher coordinated a trip to New Orleans with 15 students to help residents in that city's Ninth Ward. The video and photography artists helped students document and analyze their experiences while volunteering in the hurricane-devastated area. Artists asked students to think critically about the images and stories that they wanted to capture. One noted, "Throughout the day, working with cameras forces them to ask questions about what they are seeing.... If they were taking pictures they had to ask, 'Why am I doing this? What am I seeing that is worth photographing? What part of the experience is this picture framing?" Students using video had, as well, to learn how to interview and engage people in front of the camera.

What Works

We asked practitioners participating in featured partnerships to describe the challenges they faced in collaborating and their ways of addressing those challenges. *Appendix B: Methods* describes the methodology for this aspect of the inquiry.

The responses of school and partner staff are summarized in four exhibits. Each exhibit presents data in three columns. The first column lists themes raised by respondents. The second column presents illustrative comments within themes. The last column presents the number of schools in which respondents offered comments like the one highlighted.

In all, respondents identified three sets of challenges: (a) aligning competing priorities, (b) obtaining funding, and (c) managing and developing human resources. They described three sets of strategies for addressing these challenges: (a) assessment strategies, (b) working with intermediary organizations, and (c) leadership and management strategies. Details follow.

Challenges

Competing priorities. Exhibit 1 highlights challenges referenced by respondents. Squaring purposes across institutions was a fundamental challenge. Without regular interorganizational discussions of priorities, teachers and external staff could fail in important ways to reinforce each other's work. In all five case study schools, we spoke with at least one teacher who experienced some discomfort with partner activities. One teacher noted differences in assessment priorities, "[The partner] gives us so little to grade the students on." Another teacher noted difference in instructional priorities: "I want...the kids to know something about Guatemala...and to...understand what happened when Europe was colonizing Africa." A principal concluded, "We need to be more concrete regarding the skills and content knowledge we want the partnership to support."

Funding/logistics. A second challenge was obtaining funding to offset costs associated with planning and implementing applied learning activities. Personnel costs included the salaries of staff who worked directly with students and the salaries of project management staff that had responsibility for developing contracts, arranging meetings, etc. Other costs were purchasing instructional materials, travel, food, and lodging.

Exhibit 1

Collaborators Face Multiple Challenges

Themes	Related Responses	Number of Schools	
Competing Organizational Priorities	 Teachers' instructional priorities periodically conflict with partnership activities. 		
	■ Some teachers don't understand their partners' expectations.		
	 District policy conflicts with the partner's mission. 		
	Our partner is unfamiliar with Regents exam requirements.	1	
Funding/Logistics	We need funding to hire a point person and to pay for travel, food, materials.	5	
	■ Schools have limited space for partnership activities.	2	
	■ It is difficult to plan partnership activities when funding is uncertain.		
	■ Grants that support partnerships can be too rigid.	1	
	■ The geographic distance between the partner and the school is a challenge.	1	
	 Getting insurance, dealing with union contracts, and managing billing can be a challenge 	1	
Leadership/	Communication		
Management	 Demands on school staff interfere with their planning/conducting partnership activities; managers who can 	4	
	The school schedule was an obstacle to students' working in applied settings.	3	
	Multi-school partnerships present a special challenge for effective communication across all organizations.	1	
	Training		
	 Working with groups of high school students can be challenging for partners not experienced in managing classrooms/instruction. 	4	
	Finding the right people to staff partnerships can be a challenge.	3	
	Turnover		
	■ Turnover undermines partnership activities and sustainability.	4	
	Buy-In		
	 A lack of trust or buy-in impedes partnerships. 	3	
	■ Parents may not ready for some partnership activities.	1	

Exhibit reads: At least one teacher in each of five schools reported that his or her instructional priorities periodically conflicted with partnership activities.

Management. A third challenge was implementing sound management practices. Given the demands on teachers' time, partnerships needed administrators to structure communication and training and to respond to staff turnover.

- Communication. A teacher remarked, "In any relationship it's hard to know who is supposed to push. Partnerships need to be a little more formalized to figure these things out." A partner observed, "At the end of the semester, partnership activities compete with testing, finals, and the academic curriculum. Informal and brief meetings occur over lunch breaks and sometimes not at all. Someone need to structure communication." A teacher added, "If we had more formal time built in to collaborate that would be helpful." A partner noted, "Schools are doing so much all the time that it becomes hard to build a relationship without someone managing it."
- Training. Not surprisingly, some teachers and some partners lacked the skills and experience needed to work effectively with each other and with students. A teacher explained, "We have such specific ways of approaching a classroom situation; it is sometimes difficult when people aren't trained teachers. Some students are less likely to respect non-teachers' authority." A partner explained that some school staff members were inclined to transfer obligations to partners wholesale rather than to co-teach. "The best situation," according to one partner, "was for "the teacher...to be...really involved...not just grading papers in the back."
- Buy-in/turnover. Partnerships had difficulty managing changes in personnel. An intermediary organization official noted, "[When] there is turnover...the process must begin again." The director of a partner organization explained: "The longevity of principals and teachers helps [partnerships] succeed. It takes years to build capacity in a school." Changes in leadership may cause a partnership to dissolve all together: "There is always a fear when leadership changes that they may not continue the partnership."

Facilitators

Respondents had preferred ways of addressing each of the foregoing challenges. They recommended assessment strategies in response to the problem of competing institutional priorities. They recommended collaborating with intermediary organizations in response to financial and logistical challenges. And they recommended investments in program management in response to organizational challenges

Assessment Strategies

Exhibit 2 presents respondents' strategies for developing shared institutional approaches. These strategies include screening out incompatible partners, engaging in regular program monitoring, and keeping an eye on the indirect benefits of joint work.

Pre-screening. One of the primary strategies partners had for ensuring smooth working relationships was selecting appropriate matches. As seen in Exhibit 2, all school principals reported using a pre-screening process to select potential partners based on school and student needs. One principal explained, "There is a pretty extensive conversation on the front end to try to determine what the organization offers and where that fits with our mission, vision, and needs." Principals looked for partners who were flexible and possessed valued skills and knowledge. Not infrequently principals were interested in partners' with a broad professional bandwidth. A principal interested in the arts, for example, selected a partner who worked in a variety of arts, rather than a local museum that focused only on visual arts. Partners and principals were also looking for "personal chemistry."

Monitoring program processes, outputs, and outcomes. To steer program activities toward greater coherence, partners interacted informally on a regular basis. They also tracked program outputs. The second panel of Exhibit 2 presents some of the outputs partners monitored in judging the merits of joint work. One school tracked the number of students and faculty members who participated in partnership activities. In another school, the principal observed changes in the quality of student work: "You don't need to be an artist to see the quality of the work. You can hear the quality of the work." In another school, staff reported watching improvements in the emotional climate of the school.

Partners also monitored individual student outcomes. In one school, teachers paid attention to students' confidence as group leaders and to their comfort speaking in public. Teachers in another school were interested in students' willingness to complete long applications. They believed students were increasing their stamina in this regard in part because of the experience they had applying for partnership activities like internships and school trips. A principal commented, "We notice that kids are getting pretty good at presenting themselves during application and interview processes." Among the most important changes school staff tracked was students' interest in completing college and job applications. A partner liaison at one school explained, "We can see that our students are applying to and attending more selective colleges."

Monitoring indirect benefits. Some school leaders and partners believed that successful joint ventures provided their institutions with significant competitive advantages. They monitored the flow of these benefits, and they acknowledged that success enhanced their resolve to be effective partners. One school principal remarked that the partnership had increased the school's ability to attract new staff members. He said, "[This school] offers prospective teachers a culture that is saturated with the arts and so they want to come here." A partner explained, "The reputation of the partnership is excellent, and its visibility and success has enabled us to get into a lot of other schools... The common perception is that if these students from the Bronx can make it to [college], kids from Harlem can make it, and kids from Brooklyn can make it."

Exhibit 2 Assessment Facilitates Partnership Activities

Themes	Related Responses	Number of Schools (out of 6)	
	 Principals vet potential partners according to school and student needs. 	6	
	Partner organizations should		
	■ Flexibly tailor services to the needs of the schools		
	Have something to gain from the partnership.		
	 Effectively communicate organizations' needs and goals upfront. 	2	
	Have deep commitments: first priority should be the students.	2	
	 Have specific skills and knowledge. 	1	
	Have a broad focus within a subject area.	1	
	Have the capacity for growth and long-term collaboration.	1	
Pre-Screening	Have a clear point person who has time dedicated to the partnership.	1	
	■ Be accessible.	1	
	School and partner staff should		
	Trust and respect each other.	3	
	Have personal rapport and some similarities.	2	
	Work well with each other and within the other's organization.	2	
	■ Learn from each other.	2	
	Understand each other's style of organizing and management.	1	
	Demonstrate commitment and preparation when working together.	1	
	 Understands what everyone can offer. 	1	
	Share strategies from other partnerships.	1	
Monitoring Program Processes, Outputs, and Outcomes	Professional interaction: principal, teachers, and partners drop by each other's offices and classrooms to track progress. Indicators of progress include student participation in activities, improvements in quality of student work and confidence, improvements in school atmosphere, and the quality professional development for staff.	3	
Outcomes	 Formal review: the school and/or partner track/s student outcomes including college applications and admissions. 	1	
Monitoring Indirect	■ The partnership's success and visibility enhance the school's ability to attract new staff members.	3	
Benefits	■ The partnership enhances the partner organization's reputation.	1	

Exhibit reads: Six schools reported pre-screening partners.

Intermediary Organizations

Intermediary organizations played a significant role in developing and sustaining virtually all of the partnerships reviewed in this study. As highlighted in Exhibit 3, intermediary organizations were identified as providing financial support for three partnerships and identified as brokering relationships and providing evaluation services for two.

Exhibit 3 Intermediary Organizations Facilitate Partnerships

Themes	Related Responses	Number of Schools (out of 6)
Financial	 An intermediary helps pay for a part-time liaison and counselor and offsets some transportation and food costs. 	1
Support	 An intermediary grant pays for expanded services for students 	1
	■ The intermediary leverages wages to pay for student job	1
Brokering	■ The school is a member of the intermediary's network and consults the intermediary when they are looking for new partnerships. The intermediary views itself as a broker of the good activities a business partner can do.	1
Relationships	The intermediary brought together school administrators and partner representatives to start the partnership. The intermediary has a process for vetting partnership possibilities and filtering out inappropriate candidates.	1
	Consultation and advice with problems in collaboration	2
Technical Assistance	Support for evaluation	2
Assistance	 Hosts meetings and events with partner 	1
	■ Toolkit, handbook, other materials	1

Exhibit reads: Three schools reported that an intermediary organization helped pay for partnership costs.

Leadership and Management Strategies

Strong leadership and management were perceived as critical to the success of each of the partnerships examined in this study. Exhibit 4 presents respondents' views about the role of leadership in setting the tone for joint work, ensuring resources, and clarifying goals and professional roles. It also describes the role of managers in establishing systems for interorganizational planning, communication, and professional development.

Organizational leadership. Partnerships begin, according to several respondents, with leaders articulating a vision for student success that their organizations cannot achieve alone. This causes them to look for organizations that can help them realize their goals. A principal noted, "If you don't have buy-in all partnering organizations, you won't have success. As a

leader, you have to make sure your vision is shared by everyone." Describing another partnership, a liaison confirmed, "Leaders need to establish a vision before you even get to the operations part. You can't overestimate the importance of early conversations about goals." What makes buy-in possible, according to one principal, is the reality of shared benefits: "If the school has something to offer to the partner, it is more likely to work. Otherwise, it won't be long term or result in a real change in capacity." Principals demonstrate commits to partners by providing resources for joint work and by inviting partners to play a leadership role in the school. According to one partner: "In making us a regular part of the leadership and including us in all the faculty meetings, the principal helps [make us] part of the school culture."

Project leadership. Principals and the leaders of partner organizations can't be everywhere. It is critical for them to find liaisons or point-persons to manage operations. One principal explained, "I think the strength of communication depends on having a lead person to make contact with. There must be a clear point person on the partner end. I want to know at the beginning if this person has x amount of hours to dedicate to the partnership."

Communication. The grand design for partnership activities was typically conceptualized in meetings before and during the school year and resulted in documents of agreement. Thereafter project leaders were generally responsible for establishing communication systems. Respondents indicated that having clear roles at the beginning of a partnership facilitated joint work. One principal advised, "I think a clear organization structure is important, [otherwise] responsibility is all anecdotal. There isn't a clear sense of responsibility. If there is a problem, you can't identify who to go to." According to the leader of a partner organization, "Email and phone conversations facilitate the partnership on a day-to-day basis, but partnerships depend on some face-to-face interaction, and you need to have someone in charge of ensuring that this occurs. Partnership members need to know with whom to speak to address concerns and problems."

Professional support. Both school and partner staff typically received some form of professional support while collaborating. A teacher explained his role as follows: "It is my job to facilitate what [the partner] is doing, keeping control of the classroom management issues. Their job [is to] teach their craft. It is my job to make that easier for them." Partners working in some schools for the first time received professional development on classroom management. One program provided professional development in the summer for new teachers so they could meet partnership staff.

Management tools. Four schools reported using some type of management tool in coordinating partnership activities. These tools ranged from specific memos of understanding outlining responsibilities to protocols and handouts for facilitating meetings. Annual reports of partnership activities also informed stakeholders in the partnership.

Exhibit 4 Strong Leadership and Management Facilitate Partnerships

Themes	Related Responses	Number of Schools (out of 6)		
Organizational Leadership	Leaders in schools and community organizations			
	■ Establish a common vision with partner and set clear expectations.			
	Show commitment to work by allotting appropriate resources.			
	 Select partners who will also enjoy benefits from the relationship. 	4		
	 Monitor partnerships to determine if they are healthy. 	4		
	■ Establish roles before partnership begins (e.g., assign point person).	4		
	 Ensure organizational readiness and buy-in before partnering. 	3		
	 Include partners in administrative decisions. 	1		
	 Have knowledge and experience in the partner's industry. 	1		
Project Leadership	Schools/community organizations both employ a point person to			
	 Lead the partnership on a daily basis and handle logistics. 	3		
	Introduce new staff to partner organizations.	2		
	 Align partnership resources and collect data. 	1		
	The point person should be			
	 Given adequate time and responsibility to manage the partnership. 	4		
	 Detailed and committed to the partnership. 	2		
	 Respected within and across organizations. 	1		
	■ Partners communicate via regular email, phone, or face-to-face.	6		
Communication	Meetings are held before and during the year with key individuals to plan/assess partnership commitments, create schedules, etc.	5		
	■ Principals communicate concerns openly with partners.	4		
	 Principals know with whom to speak to address problems. 	3		
	■ The school and partner know who is accountable for deliverables.	2		
	■ Teachers play a classroom management role with partners.	2		
Drefessional	 A staff member supports project delivery by handling logistical 	2		
Professional Support	 Partners receive professional development on classroom 	2		
	 Partners lead professional development to introduce themselves 	1		
	A team in the partnering organization is designated to work with the school.	1		
Management Tools	 Schools and partners use a range of planning and management tools including: MOUs, protocols for meetings, Microsoft Project, handouts, and annual reports of partner activities 	1		

Exhibit reads: Six schools reported that organizational leadership facilitates collaboration. Of these six, five reported that leaders from all parties needed to form a common vision of the partnership.

3. Conclusions

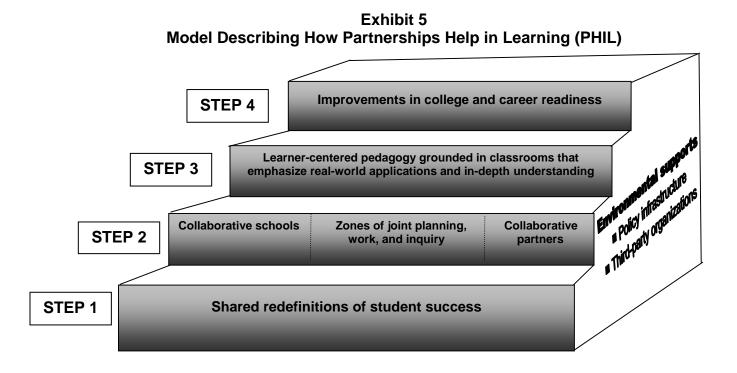
Exhibit 5 telescopes factors PSA identified as relevant to the success of instructional partnerships. The model, pictorially a staircase with four risers, incorporates lessons distilled from the literature and from field work in selected high schools in New York City and in Boston.

Step 1 identifies *a* if not *the* precondition for successful joint work: organizations with shared interests. In the successful partnerships we observed, interests were expectations for student outcomes that partners believed they could better realize collectively.

Step 2 identifies the organizational context for successful collaboration on instruction: regular opportunities for leaders and staff to plan, practice, and review the results of practice collectively. Intermediary organizations have a big role to play in jump starting these initiatives with funding and technical assistance.

Step 3 identifies the home base—although not necessarily the locale—of successful partnerships for improved learning: classrooms. In the successful partnerships we observed, the work of teachers and partners became congruent in the preparation of joint lessons although those lessons could be executed miles and days apart.

Step 4 identifies the fruits of joint work: palpable improvements in students' college and career readiness. In the successful partnerships we observed, results were conspicuous, which was, no doubt, a factor in the sustainability of activities given the challenges and countervailing pressures partners' experienced.



Recommendations

We found important differences in the extent to which programs exemplified elements in the foregoing model. In some cases, participants deeply understood each other's organizational priorities and demands; in other cases, there was inadequate understanding. In some cases, joint work was well supported by administrators; in other cases, administrative support was modest. What does this unevenness suggest regarding the work of advocates like the Mott Foundation and New Visions for Public Schools?

- External partners need to understand more fully the instructional contexts in which schools operate. User-friendly documents describing local curriculum standards and subject area assessments may help.
- School leaders would likely benefit from information about the range of organizations working to provide students with applied learning opportunities.
- A guidebook outlining the steps to follow in assessing institutional needs, vetting potential partners, structuring joint programs, and reviewing students' work might help partners navigate the demands of collaboration.
- Does student achievement improve beyond expectation when teachers collaborate with external partners in creating applied learning opportunities? There is little empirical confirmation of this hypothesis. Opportunities to study the value added by *well-established* programs would be helpful.
- Influential third parties may have a special role in pushing for policies that offer collaborative schools opportunities to engage external organizations in joint programming as a matter of course.

Limitations

In conducting this study, we reviewed a substantial, but largely theoretical literature, and we studied conditions in six schools in two school districts. The schools and the districts studied were urban, high functioning, and boldly innovative. Is it reasonable to expect that the conclusions drawn here regarding the likely merits of joint work would apply to most district and schools? We doubt it. Joint work can result in enriched programming, but it makes significant organizational demands. In some schools and districts, a greater emphasis may need to be placed on establishing readiness, which is to say, on promoting collaboration among pedagogues within schools and on growing third-party or intermediary organizations that can help schools broker relationships with capable external providers. These appear to be important precursors.

References

- American Psychological Association. (1997). Learner-centered psychological principles: A framework for school reform and design. Washington, DC.
- Atkinson, M., Springate, I., Johnson, F., & Halsey, K. (2007). *Inter-school collaboration: A literature review*. Slough: NFER.
- Author. (2007). *A New Day for Learning*. Flint, MI: The Time, Learning, and Afterschool Task Force of the C.S. Mott Foundation.
- Blank, M.J., & Langford, B.H. (2000). *Strengthening partnerships: Community school assessment checklist*. Washington DC: The Finance Project.
- Bodilly, S., Chun, J., Ikemoto, G., & Stockly, S. (2004). *Challenges and potential of a collaborative approach to education reform.* Santa Monica, CA: Rand Corporation.
- Brewer, J., & Hunter, A. (1989). *Multimethod research: A synthesis of styles*. Newbury Park, CA: Sage Publications, Inc.
- Briggs, D. (2001). Education partnerships: Strategies for success. San Francisco, CA: WestEd.
- Chavkin, N.F. (1998, Spring/Summer). Recommendations for research on the effectiveness of school, family, and community partnerships. *School Community Journal*, 8(1), pp. 83-96.
- Conley, D.T. (2007) *Toward a More Comprehensive Conception of College Readiness*. Eugene, OR: Educational Policy Improvement Center.
- Corcoran, T., & Lawrence, N. (2003). Changing district culture and capacity: The impact of the Merck Institute for Science Education Partnership. Philadelphia, PA: Consortium for Policy Research in Education.
- Council of Chief State School Officers. (1998). State education agency support for school-community collaboration in the mid-Atlantic states. Washington, DC.
- Deke, J., & Haimson, J. (2006). Valuing student competencies: Which ones predict postsecondary educational attainment and earning and for whom? Princeton, NJ: Mathematica Policy Research, Inc.
- Dufour, R. (2003). Building a professional learning community. *School Administrator*, 60(5), 13-18.
- Engeln, J.T. (2003). Guiding school/business partnerships. *The Education Digest*, 68(7), 36-40.

- Epstein, J.L. (1996). Perspectives and previews on research and policy for school, family, and community partnerships. In A. Booth & J.F. Dunn (Eds.), *Family-school links: How do they affect educational outcomes?* Mahwah, NJ: Lawrence Erlbaum Associates.
- Florian, J, (1999). Addressing evaluation of collaborations: Capacity building by school districts. Paper presented at the Annual Meeting of the American Evaluation Association Orlando, FL, November 2-6, 1999.
- Foley, E. (2002). *Developing effective partnership to support local education*. School Communities that Work: A National Task Force on the Future of Urban Districts. Providence, RI: Annenberg Institute for School Reform.
- Foley, E., Klinge, A., & Reisner, E. (2007). Evaluation of New Century High Schools: Profile of an initiative to create and sustain small, successful high schools. Policy Studies Associates, Inc.: Washington, D.C.
- Gajda, R. (2004). Utilizing collaboration theory to evaluate strategic alliances. *American Journal of Evaluation*, 25(1), 65-77.
- Gray, B. (1989). *Collaborating: Finding common ground for multiparty problems*. San Francisco, CA: Jossey-Bass.
- Hargreaves, A. (2003). *Teaching in the knowledge society: Education in the age of insecurity*. New York, NY: Teachers College Press.
- Hirota, J.M. (2005). *Reframing Education: The Partnership Strategy and Public Schools*. New York, NY: Carnegie Corporation of New York. Retrieved February 26, 2008, from: http://www.newvisions.org/schools/downloads/hirotalores.pdf
- Kahne, J.E., Sporte, S.E., & Easton, J.Q. (2008). Small high schools on a larger scale: The impact of school conversions in Chicago. *Educational Evaluation and Policy Analysis*, 30(3), 281-315.
- Knapp, M.S. (1995). How shall we study comprehensive, collaborative services for children and families? *Educational Researcher*, 24(4), 5-16.
- Lawson, H.A. (2003). Pursuing and securing collaboration to improve results. In M. Brabeck, M. Walsh. & R. Latta (Eds.), *Meeting at the hyphen: Schools universities communities professions in collaboration for student achievement and well being* (179-120). 102nd Yearbook of the National Society for the Study of Education, Part II. Chicago, IL: University of Chicago Press.
- Lawson, H.A. (2004). The logic of collaboration in education and the human services. *Journal of Interprofessional Care*, 18(3), 225-237.

- Lee-Bayha, J., & Harrison, T. (2002). *Using school-community partnerships to bolster student learning*. San Francisco, CA: WestEd.
- Louis, K. S., & Kruse, S.D. (1995). *Professionalism and community: Perspectives on reforming urban schools.* Thousand Oaks, CA: Corwin Press
- Marsh, J., Kerr, K., Ikemoto, G., Darilek, H., Suttorp, M., Zimmer, R., et al. (2004). *Advancing systemwide instructional reform: Lessons from three urban districts partnered with the institute for learning.* Santa Monica, CA: Rand Corporation.
- Mastro, E., & Jalloh, M.G. (2005). *Enhancing service through effective school/community collaboration*. Ithaca, NY: ACT for Youth Center of Excellence.
- McCombs, B.L. (2003). Framework for the redesign of K-12 education in the context of current educational reform. *Theory into Practice*, 42(2), 93-101.
- McCombs, B.L., & Whisler, J.S. (1997). The learner-centered classroom and school: Strategies for increasing student motivation and achievement. San Francisco, CA: Jossey-Bass.
- McLaughlin, M.W., & Talbert, J. (2001). *Professional communities and the work of high school teaching*. Chicago, IL: University of Chicago Press.
- Murnane, R.J., & Levy, F. (1996). *Teaching the new basic skills: Principles for educating children to thrive in a changing economy.* New York, NY: Free Press.
- Murray, J., & Weissbourd, R. (2003). Focusing on core academic outcomes: A key to successful school-community partnerships. In M. Brabeck, M. Walsh. & R. Latta (Eds.), *Meeting at the hyphen: Schools universities communities professions in collaboration for student achievement and well being* (179-120). 102nd Yearbook of the National Society for the Study of Education, Part II. Chicago, IL: University of Chicago Press.
- Newmann, F.M., & Wehlage, G.G. (1995). *Successful school restructuring*. Madison, WI: Center on Organization and Restructuring of Schools, School of Education, University of Wisconsin-Madison.
- Partnership for 21st Century Skills. (2007). *The intellectual and policy foundations of the 21st century skills framework*. Tucson, AZ. Retrieved February 26, 2008, from: http://www.21stcenturyskills.org/route21/images/stories/epapers/skills_foundations_final.pdf
- Partnership for After-school Success. (2004). *Sample Memorandum of Understanding*. Washington, DC: Author.
- Rosenholtz, S.J. (1991). *Teacher's workplace: The social organization of schools*. New York, NY: Teachers College Press.

- Rothstein, R., Jacobsen, R., & Wilder, T. (2008). A report card on comprehensive equity: racial gaps in the nation's youth outcomes. New York: The Campaign for Educational Equity, Teachers College, Columbia University and The Economic Policy Institute.
- Sanders, M.G. (2003). Community involvement in public schools: From concept to practice. *Education and Urban Society*, *35*(2), 161-180.
- Scheie, D.M. (2000). Strengthening schools and communities through collaboration: Final evaluation report on school/community collaboration in the Center for School Change's Phase II grant sites 1997-2000. Minneapolis, MN: Rainbow Research, Inc.
- Tashakkori, A., & Teddlie, C. (1998). *Mixed methodology: Combining qualitative and quantitative approaches*. Thousand Oaks CA: Sage Publications, Inc.
- Thomson, A.M., & Perry, J.L. (2006). Collaboration processes: Inside the black box. *Public Administration Review*, 66(6), 20-32.
- Warren-Little, J. (1982). Norms of collegiality and experimentation: Workplace conditions of school success. *American Educational Research Journal*, 19(3), 325-340.
- Wood, D.J., & Gray, B. (1991). Toward a comprehensive theory of collaboration. *Journal of Applied Behavioral Science*, 27(2), 139-162.
- Yin, Robert K. (1993). *Applications of Case Study Research*. Newbury Park, CA: Sage Publications, Inc.

Appendix A

Literature Review

Methodological Literature

Knapp (1995) outlines five challenges in studying the costs and benefits of collaborative work: balancing the divergent perspectives of different stakeholders; addressing the elusive nature of interventions in flexible and changing programs; examining multiple outcomes; identifying the role of *partnership* in causing improvement (attribution); and managing study processes that can be intrusive and make provider-participant relationships more complex.

Others have commented in a similar vein. Epstein (1996) calls the evaluation of school-linked collaborations "an emerging field of study," and Chavkin (1998) concludes "...we do not yet have a strong research base supporting school partnerships." To address challenges, Chavkin recommends that researchers begin with multiple, detailed case studies wherein they flexibly deal with complex relationships and examine what Epstein (1996) called "overlapping spheres of influence" and the "points of transition" between spheres of influence.

The preponderance of the literature we encountered argued in favor of school-linked collaboration on logical as compared to empirical grounds. The consensus view is that, in addition to mastering the traditional curriculum, young people need to know how to solve problems in socially and technically complex environments. Teachers are, therefore, encouraged to demand critical thinking, disciplined inquiry and team work, plus real-world, socially skillful applications of knowledge. In supporting teachers, schools are urged to embed opportunities for shared reflection and collective problem solving in ordinary practice and routinely to engage external partners as colleagues and collaborators. We elaborate on these themes below.

Redefining Student Success

College readiness and career readiness share more commonalities than differences. Looking for predictors of college completion, Mathematica researchers (Deke & Haimson, 2006) found a rough equivalence in the predictive value of competencies in academic and applied domains (math skills, work habits, leadership skills, team work, and dispositions toward luck and effort). Conley (2007) found that specific cognitive and meta-cognitive capabilities were viewed by college teachers as more important than the content taught in high schools. These capabilities included competencies in analysis, interpretation, precision and accuracy, problem solving, and reasoning. Conley placed content knowledge close behind in importance, with writing the most important academic skill for college success. Other important capabilities were study skills, time management, awareness of one's performance, persistence, and the ability to utilize study groups, along with knowledge about how to apply to college and manage financial aid and the capacity to adjust to college life.

Literature reviews from the mid-1990s through the present support the view that college-readiness requires applied as well as strictly academic competencies and content knowledge. Murnane and Levy (1996) define seven new basic skills: the ability to read and do math at the ninth-grade level, the ability to solve problems where hypotheses must be tested, the ability to work with persons of different backgrounds, the ability to communicate orally and in writing, and the ability to use and understand how computers work. The Partnership for 21st Century Skills (2007) lists six capacities as critical: information and communication skills, thinking and problem solving skills, interpersonal and self-direction skills, global awareness, financial and economic literacy, and civic literacy. Rothstein, Jacobsen, and Wilder (2008) highlight eight competencies: basic academic skills, critical thinking and problem solving, social skills and work ethic, readiness for citizenship and community responsibility, foundation for lifelong physical health, foundation for lifelong emotional health, appreciation of the arts and literature, and preparation for skilled work (for youths not pursuing higher education).

Learner-Centered Pedagogy

What kind of pedagogy is associated with 21st Century learning outcomes? In 1990, the American Psychological Association appointed a task force to identify principles for learning that have stood the test of time and provide a possible framework for 21st Century pedagogy. After integrating the best available knowledge, preliminary findings were verified in a five-year study with over 25,000 students and teachers across all grade levels (McCombs, 2003; McCombs & Whisler, 1997). The resulting document *Learner-Centered Psychological Principles* (American Psychological Association, 1997) describes 14 relevant factors. The core findings are that people are motivated toward higher and deeper levels of achievement when they are immersed in trustworthy and safe environments in which they can learn from one another, voice preferences, participate actively in constructing knowledge and in building relationships. McCombs (2003) contends that a focus on learners' needs is the key to unlocking the natural learning and motivation "for even the most disenfranchised and alienated...." (p. 96).

Intra-School Collaboration

The foregoing psychological principles have been applied to professional learning communities as well as individual students. In 1982, Warren-Little wrote about a model of education that she called the collaborative school. Warren-Little described it as a place where teachers plan and evaluate their work and teaching materials together, engage in regular talk about practice, and frequently observe each other and provide feedback. Louis and Kruse (1995) identified five characteristics of collaborative schools, which they called professional learning communities: reflective dialogue, collective focus, de-privatization, collaboration, and shared norms and values. Evidence suggests that increased learning may be achieved through professional learning communities (Newmann & Wehlage, 1995). Many theorists and researchers believe that it is *the* most promising strategy for serious school improvement (Dufour, 2003; Hargreaves, 2003; McLaughlin & Talbert, 2001; Rosenholtz, 1991). But intraschool collaboration is not a panacea; schools likely also need access to external expertise (Kahne et al, 2008).

Instructional Partnerships

Does the collaborative school model extend to inter-organizational work? Constructive skeptics often doubt that partnerships will accomplish what they set out to do (Knapp, 1995). This is due to the challenges involved in managing autonomous stakeholders with separate organizational intentions and processes. To be effective, partners must negotiate rules and structures governing relationships (Thomson & Perry, 2006) and decision-making (Wood & Gray, 1991), exchange resources, and synchronize operations (Lawson, 2004). The literature provided the following guidelines for inter-organizational work.

- **Purpose**. Partnerships need goals that are concrete, clearly written, consistent, and attainable, and members must be in agreement on how to attain goals (Briggs, 2001). From these agreements, partners can map backwards to their individual responsibilities (Foley, 2002).
- Governance. Leaders of organizations participating in partnerships need to be involved in establishing goals and identifying indicators of success (Corcoran & Lawrence, 2003). Within the partnership, it is important for participants' roles to be clear and for leadership and accountability to be distributed so all are responsible for successes and failures (Atkinson, Springate, Johnson, & Halsey, 2007; Foley, 2002). There should be a clear management structure and communication plan (Engeln, 2003) and a supportive culture (Atkinson et al., 2007; Foley, 2002). Developing positive and trusting relationships is fundamental to a sustainable partnership (Atkinson et al., 2007).
- Resources. Inter-organizational collaborations take time and cost money to plan and execute (Atkinson et al., 2007). It is advisable for organizations to have clearly delineated financial responsibilities and designated funding streams for collaboration (Briggs 2001; Foley, 2002; Lee-Bayha & Harrison, 2002). Collaborators also need to tap into the logistical resources of partner organizations, including resources for scheduling and hosting meetings.
- Professional development and facilitation. Collaboration typically requires partners to undertake new roles and responsibilities (Hirota, 2005). Participants may need training in running meetings and engaging in joint work (Briggs, 2001; Corcoran & Lawrence, 2003; Lee-Bayha & Harrison, 2002) to help them develop a shared language, shared understandings, and common procedures (Atkinson et al., 2007). Given staff turnover, partnership rarely becomes easier or more effective over time without ongoing monitoring and staff development (Council of Chief State Officers, 1998).
- **Evaluation.** Collaborations need mechanisms and pathways for measuring the strengths and weaknesses of their relationships and activities and for identifying what still needs to be done (Briggs, 2001). It is best if partners define measures of success prior to implementation (Atkinson et al., 2007). Using data to drive decisions can provide welcomed impartiality to partnerships plagued by the subjective forces of local politics or personality conflicts (Corcoran & Lawrence, 2003; Foley, 2002).

Appendix B

Methods

Our purpose in undertaking this study was to create a framework for inter-organizational instructional collaboration in New Visions schools. The study uses the interview method and the case study method. Cases studies are a useful method when researchers must investigate both a particular phenomenon and the context within which the phenomenon occurs either because the boundaries of the phenomena are not evident or because the context contains important explanatory variables. Very importantly, comparative (or multiple) case studies—as we have here—allow the researcher not only to describe a situation but to explore and to attribute causal relationships (Yin, 1993).

Instruments

We developed structured protocols to guide individual telephone and in-person interviews with principals, school staff, and staff of external organizations in working partnerships. Interview protocols asked for the following: (a) examples of partnered work; (b) evaluations of the merits of partnered work; (c) descriptions of organizational practices and external champions that enabled joint work; (d) descriptions of challenges participants faced in collaborating; and (e) tools that enabled collaboration. Semi-structured focus group guides were developed to frame conversations with groups of students participating in partnership programs. Focus group guides concentrated on the merits and challenges of partnered work. Program observations were conducted without formal instrumentation. Researchers were asked to participate in classroom and external learning activities to confirm the presence of the joint work or when schedules make that impossible to identify and examine artifacts that confirmed the footprint of such work.

Sampling

We collected complete observation, focus group, and interview data in four New York City high schools and in one Boston high school. In the second Boston high school, we collected only interview data, because the principal withdrew permission for on-site visits given the press of end-of-year school business.

We selected the four New York City high schools from among all high schools served by New Visions for Public Schools *both* in its role as the sponsor of New Century High Schools and in its role as a Partnership Support Organization. From among this group of high schools, we distilled the subset that were both non-selective (i.e. they did not employ academic admissions criteria) and successful. We used three criteria to judge success:

- Stakeholders gave schools better than average ratings (as assessed through the *New York City Department of Education Learning Environment Survey*).²
- External observers rated schools as proficient or well-developed (as assessed/reported in the *New York City Department of Education Quality Reviews*).³
- (c) The school system assigned a letter grade of A or B to the school in its annual *Progress Report*.⁴

We asked knowledgeable New Visions' leaders to identify from this list of schools those with strong external partnerships. The four schools selected were small. They each had an enrollment under 450 students. At least 85 percent of students were African American or Latino, and at least 70 percent were eligible for free or reduced-price lunch.

We selected Boston high schools in two steps. First, we used publicly available (online) school profile data to identify Boston high schools with low-income populations that were non-selective (i.e. the schools did not employ academic admissions criteria) and were not in "Corrective Action" or "Restructuring." We used 2007 Massachusetts Department of Education Adequate Yearly Progress Data to determine schools' accountability status. We presented that list to two key informants familiar with Boston schools (although not employed by the school system) and asked them to identify the subgroup of schools with strong instructional partnerships. Two schools were selected. One had an enrollment in 2007-08 of 375 students. The other had an enrollment of 1,305 students. Both schools enrolled at least 85 percent African American or Latino students, and at least 70 percent of students in both schools were eligible for free or reduced-price lunch.

Across the six target schools that formed our case study sample, we conducted telephone interviews with principals (N = 6), with other school staff engaged in partnership programs (N = 23), and with external staff engaged in partnership programs (N = 31). We conducted eight onsite focus groups with a total of 43 students in five of six target schools. As noted, one Boston

² The mean score for city high schools with survey scores in 2006-07 is 6.3 and the standard deviation is 0.6 (n=327).

³ The *New York City Department of Education Quality Reviews* "provide more in-depth profiles of each school, based on 2-3-day visits by experienced educators who talk to parents, students, and staff, observe classrooms, and review how schools use information and set goals to improve learning for all students." The five areas of rating are how schools gather data, plan and set goals, align instruction, build and align capacity, and monitor and revise. The distribution of ratings for city high schools with ratings in 2006-07 is 25 percent Well-developed, 66 percent Proficient, and 9 percent Undeveloped (n=326).

⁴ The *New York City Department of Education Progress Reports* "grade each school with an A, B, C, D, or F to help you understand how well your school is doing — and compare it to other, similar schools." The grades are based on indicators of school environment, student performance, and student progress. The distribution of grades in city high schools with grades in 2006-07 is 24 percent A, 41 percent B, 26 percent C, 5 percent D, and 4 percent F (n=236).

⁵ http://profiles.doe.mass.edu/ayp/ayp_report/glossary2007.html

principal ultimately wasn't able to follow through on his plan for us to conduct on-site focus groups, given the press of end-of-year school business.

Data Analysis Procedures

The data analysis team consisted of the team leader and four researchers, who gathered data in spring 2008. After each school visit, researchers transcribed notes from interviews and observations and applied à priori codes. Next, they prepared school-level display tables, with data organized by respondent group and by code within major research questions. School-level tables were debriefed by the full research team over several meetings to create a framework for displaying data in multi-case matrices. Each team member prepared several across-site matrix displays.