

Office of the Bronx Borough President
Ruben Diaz Jr.

Unclogging, Strengthening and Insulating the
Bronx Educational Pipeline:

A Call to Action

March 2012

BRONX EDUCATION SUMMIT



FROM CRADLE TO CAREER

STUDENTS - PARENTS - EDUCATORS

Unclogging, Strengthening and Insulating the Bronx Educational Pipeline

Acknowledgements

We would like to thank all of the dedicated professionals, community partners, staff and volunteers for their contributions to the Education Summit. In particular, we'd like to highlight the following people:

Summit Steering Committee

Deputy Borough President Aurelia Greene, Chairperson
Tracy McDermott, Director, Community Services Department – Office of the Bronx Borough President
Elizabeth Holcombe, Director of School & Strategic partnership – Mercy College
Monica Major, Director of Education Policy and Youth Services – Office of the Bronx Borough President
Melissa Cebollero, Director of Health and Human Services - Office of the Bronx Borough President
Robert Spata, Co-founder/Advisor – Bronx Education Consortium
Stephen Rappaport, Co-founder/Advisor – Bronx Education Consortium
Dr. Betty Rosa, New York State Board of Regents
Dr. Harriet Fayne, Dean, School of Education – Lehman College/CUNY
Dr. Kimberly R. Cline, President – Mercy College
David C. Banks, President – Eagle Academy Foundation
Sandra E. Lerner, Deputy to the President for High Schools and Educational Initiatives Lehman College/CUNY
Jesse Mojica, Executive Director for Family and Community Engagement – NYCDOE
Anthony Lopez, President – Aprendes Foundation, and lead author of this paper.
Julette Sanchez, Office of the Dean, Division of Education - Lehman College - CUNY
Dina Mangiafridda, Director of Government & Community Relations - Mercy College

Committee Chairpersons

Early Childhood – Bonnie Mallonga, Ph.D., Chief Operating Officer – 1199/SEIU Childcare Corporation and Marilyn Runge, Program Manager – Manhattan/Bronx Office for Early Childhood Education - NYCDOE

Special Education – Mariko Sakita, Co-Director for the Bronx and Manhattan Parent Centers – Resources for Students with Special Needs and Lilliana Diaz-Pedrosa, Director, AFC Parent Center – Advocates for Children

English Language Learners – Dr. Anita Vazquez Batisti, Associate Dean – Center for Educational Partnerships – Fordham University, Graduate School of Education and Eva Garcia, Director – NYS Bronx BETAC at Fordham University

Higher Education – Kimberly Cline, President – Mercy College

Health – Melissa Cebollero, Director of Health and Human Services - Bronx Borough President's Office

Youth – Tiffany Otero, Coordinator - Sistas and Brothas United/Affiliate of the NWBCC and Maria C. Fernandez, Youth Organizer/ Academic Support Program Coordinator - Sistas and Brothas United/Affiliate of the NWBCC

Parents – Monica Major, Director of Education Policy and Youth Services – Office of the Bronx Borough President

Educators – Evelyn Edwards, UFT Teacher Center Field Liaison, José Vargas, UFT, Bronx Borough Representative and Nicholas Cruz, UFT Community and Parent Liaison

VIP Panel and Guest Speakers

Dr. Diane Ravitch, Research Professor of Education, New York University

Dr. Betty Rosa, New York State Board of Regents

Dr. Linda Michelle Baron, Assistant Professor /Teacher Education Department - York College (CUNY)

David C. Banks, President – Eagle Academy Foundation

Dennis Walcott, Chancellor -NYCDOE

Shael Polakow-Suransky, Chief Academic Officer/Deputy Chancellor - NYCDOE

Ernest Logan, President – Council of Supervisors and Administrators

Michael Mendel, Secretary – United Federation of Teachers

Unclogging, Strengthening and Insulating the Bronx Educational Pipeline

James Merriman, Chief Executive Officer – New York City Charter School Center

Monica Major, Director of Education Policy and Youth Services – Office of the Bronx Borough President

Sponsors, Partners and Vendors

JP Morgan Chase Foundation, Helmsley Trust Foundation, Mercy College, Monroe College, Berkley College, SUNY Maritime, Fordham University, Montefiore Hospital, Bronx Community College, Hostos Community College Barnes and Noble, Bronx Children’s Museum, Bronx Health Link, Coalition for Educational Justice, College Board, College of New Rochelle, Community, Playthings, Green Bronx Machine, Green Living Technologies, Kaplan, New Visions, New York Botanical Gardens, New York Public Library, New York Urban League, One on One Academic Tutoring, Parent-Child Home Program, Resources for Children with Special Needs, Advocates for Children, Scholastic, Start Strong Bronx, United Federation of Teachers, World Vision

Staff of the Office of the Bronx Borough President

Raymond Sanchez Jr., Policy Director

John DeSio, Communications Director.

Unclogging, Strengthening and Insulating the Bronx Educational Pipeline

Table of Contents

Introduction	5
The Case for Improving Education in the Bronx	6
The Bronx Wellness Survey and Education	7
The Role of Parents and Community	7
The Bronx Education Consortium	8
The Bronx Education Pipeline	8
Pipeline: Early Childhood-Pre K.....	9
Pipeline: Grades K-5.....	10
Pipeline: Middle School Grades 6-8.....	10
Comprehensive Education Plans.....	10
Pipeline: High School Grades 9-12.....	11
Pipeline: Higher Education.....	11
Other Promising Pipelines.....	13
Science, Technology, Engineering and Math.....	13
Career/Technical Education.....	14
Accelerated Learning Options.....	14
Implication for English-Language Learners.....	15
Current Condition of ELLs.....	16
Implication for Students with Special Needs.....	17
Implication of School Closings.....	18
Implication of Student Suspensions.....	19
Implication of Charter Schools.....	20
Conclusion.....	20

Unclogging, Strengthening and Insulating the Bronx Educational Pipeline

“The New York State Board of Regents ‘P-16 Education: A Plan for Action’ calls for all New Yorkers to be prepared for ‘citizenship, work and continued learning throughout their lives.’ In order to achieve this goal we must close the gaps in student academic achievement along the lines of income, race and ethnicity, language and disability; and keep up with the growing demands for still more knowledge and skill in the face of increasing competition in a changing economy.” (NYSED Website)

Introduction

On October 15, 2011, Bronx Borough President Ruben Diaz Jr. hosted the Bronx Education Summit: From Cradle to Career. It convened educators, parents, students, social service providers, policy makers and other stakeholders to begin a dialogue on creating an education agenda.

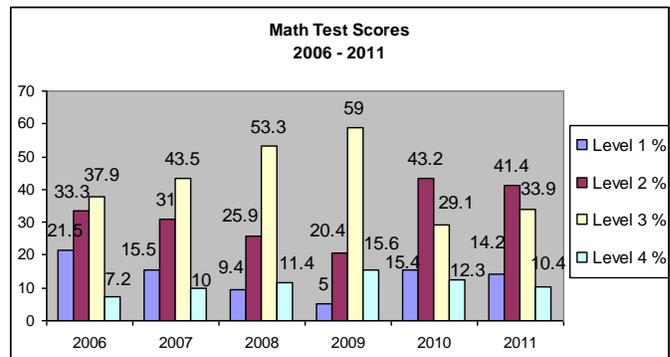
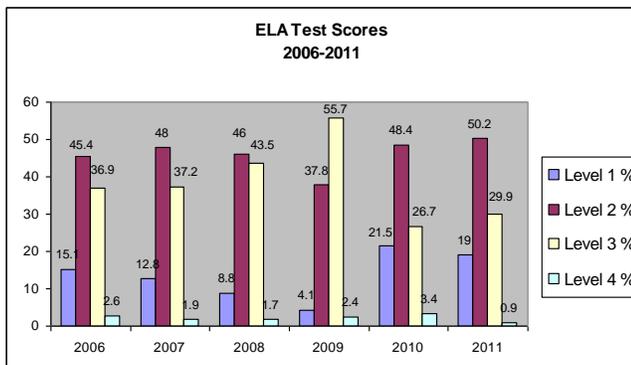
This policy paper is an outgrowth of that summit. It provides insight, data, recommendations and proposed strategies for the collective expertise and research of members of the Bronx Education Steering Committee, the 2011 Bronx Wellness Survey, and from other sources; including but not limited to, foundation reports and policy briefs.

Various reforms and innovations are necessary to unlock the capacity and talent of Bronx youth, which remains backlogged and underdeveloped. The recommendations contained within are designed to call attention to and action for improving student outcomes for all public school students, especially those that are English-Language Learners and students with special needs. These ideas will strategically position the Bronx as a model for the rest of the City, State and nation as it relates to successfully educating populations on the margins of the school reform debate: low-income, inner-city, first-generation and immigrants.

By 2012, New York City’s public education system will have experienced 10 years of direct mayoral control. During this period, New York City’s system for delivering public education was restructured three times, emphasizing school performance on standardized tests, the expansion of public charter schoolsⁱ as a means to increase choice for parents, and the closing/reorganization of low-performing and/or failing schools, among other changes.

With mayoral control came the dual promises of both accountability and exceptional student achievement. What has been delivered, instead are mixed reviews of school reform processes and outcomes, along with the disaffected voices of parents and students.

In our borough, the education landscape has seen negligible gains under mayoral control. Many of the schools that were failing Bronx families 10 years ago remain in a rut of underachievement, while new schools created to take the place of their poor performing predecessors also languish. This institutional disregard for satisfying the educational needs of our Bronx students must stop. Collaboration and strategic action are the appropriate response for tapping into the potential that every Bronx student possesses. The students and families residing in the Bronx have the capacity to excel in education, if they are given the opportunity to do so.



Research by the Ford Foundation has validated what we have long known in the Bronx: “The factors that improve school quality- *adequate school facilities and funding, qualified and well-trained teachers, comprehensive curricula and effective*

Unclogging, Strengthening and Insulating the Bronx Educational Pipeline

*leadership – are less prevalent in schools that predominantly serve students of color in poor neighborhoods.*ⁱⁱ The report concludes by noting that a broad public commitment is required to change conditions of the status quo.ⁱⁱⁱ

Consequently, the New York City Department of Education (“DOE”) cannot be expected to solve the problems of public education in the Bronx if it acts in a manner that is unilateral and exclusive. Moreover, community stakeholders must be given the ability to engage the DOE in a manner that is constructive. The Bronx is a microcosm for demographic changes happening nationally. It is the responsibility of our educators, parents, community leaders and organizations, social services and institutions of higher education to develop a borough-wide education agenda.

The Case for Improving Education in the Bronx

Education is the foundation for success in this increasingly integrated international marketplace for jobs. Our educational institutions bear the heavy burden of preparing students for this environment, likely the most challenging at any time in history. Solving the education performance gap in the Bronx is of national concern because of the increasing urbanization and diverse nature of the county’s population. The multiethnic and multilingual environment in the Bronx is an asset. Yet, we find ourselves in an environment where the DOE has been placed on corrective action by New York State for under-serving English Language Learners.^{iv}

Schools are a place where different cultures, races and ethnicities meet. It is paramount that educators and youth development professionals harness the opportunities that such an environment presents. In the long term, it will better prepare these students for the world they will ultimately compete in for jobs. In the short term, it’s vital to instruct and teach in a manner that celebrates cultural inclusion and the exchange of ideas for children, parents and teachers.

Poverty and Education

Children in poverty can and have overcome many obstacles in their schooling. Unfortunately, these stories are few and far between. Mitigating the effects of poverty on a child’s education is just as important as the quality of curriculum offered. Bronx policy makers and reformers must aggressively implement proven and comprehensive strategies that counteract the negative influences poverty has on the lives of disadvantaged children and their performance in school. Schools can be restructured and reshuffled; however, education policy will never be implemented effectively if we ignore the economic realities of our students.

Effective models that should be scaled up are already at work in the Bronx; experimental pilot programs are neither wanted nor needed. For example, M.S. 223 is in the heart of School District 7 and the 16th Congressional District:

“More than 90 percent of its students live in one of five housing projects. About 70 percent of its students are Latino, predominantly Puerto Rican and Dominican. The remainder are black, either African-American or recent immigrants from West African countries like Senegal. Accord¹ing to its latest progress report from the Department of Education, which judges a school’s growth against a peer group with similar demographics, 223 is the 10th-best middle school in the entire city. It is a traditional public school, which are prohibited from requiring students to be in school for more than six hours each day. Hence, its leadership has had to find creative ways to keep kids in the building, such as mandating that students attend math or English tutoring before participating in after-school sports, clubs and music programs.”^v

Moreover, the school has formed a 501(c)3 non-profit arm to facilitate fundraising and implemented a successful summer learning program.

The Bronx Wellness Survey and Education

In December 2011, the Borough President’s office released the results of the Bronx Wellness and Quality of Life Survey. The survey, collected information from respondents who live or work in the Bronx and compiled their overall views of the Borough and outlook on education, safety, transportation, health and lifestyle. Approximately 1,900 individuals took part in the survey, which was available both online and in print at a wide variety of locations across the borough. More than 90 percent of respondents self identified as Bronx residents.

Unclogging, Strengthening and Insulating the Bronx Educational Pipeline

75.9% of respondents in the 2011 Bronx Wellness Survey feel that the NYCDOE is not responsive to concerns of Bronx parents.

Under the Education section of the survey, Bronx schools were generally ranked “fair.” However, the second most popular rating for high school and middle schools was poor; specifically, 47 percent of the sample rated middle schools as “fair” and another 31 percent rated them as “poor.” Of particular note is that more than 75 percent of the sample stated that they felt the New York City Department of Education is not responsive to the concerns of Bronx parents. Given the significant foreign-born population of the borough, more than half of the respondents stated they were unsure whether there were sufficient programs for English-Language Learners. Likewise, for Gifted and Talented programs, 55 percent, of the respondents, stated there are not sufficient Gifted and Talented programs in the borough.

The Role of Parents and Community

In September 2011, our office released [A Vote for Change: A Blueprint for Reforming Community and City-Wide Education Councils in New York City](#), a report co-authored by the Borough Presidents and the Public Advocate. The report highlighted the failure of the Community and City-Wide Education Councils ability to provide parents with a meaningful voice in decision-making about the public schools and called for changes that bolster the independence from DOE and training support for these entities to increase parent engagement.

The New York State legislature established Community Education Councils in 2003 as part of the mayoral control law, for the express purpose of ensuring that parents have a meaningful voice in a public school system whose size can make it unwieldy, if not impossible, to navigate. The DOE is responsible for oversight of the CECs, and despite nine years of opportunity to build them through genuine support and training, the agency has instead crippled the ability of many to function, and allowed them to languish in relative obscurity in the broader school system.

Low parent interest in the CECs stems, in part, from lack of awareness about them. The agency overseeing CECs should conduct more extensive outreach, year-round and in multiple languages, to make parents and others in schools aware of the parent education councils’ work and upcoming elections.

Recommendation(s)

1. Conduct comprehensive, consistent outreach to parents and others in school communities regarding Community and Citywide Education Councils, so as to increase and foster parent interest and participation in council elections and service.
2. Improve day-to-day training and support for the Community and Citywide Education Councils.
3. More comprehensive training and support from agencies and/or organizations that understand their work. The agency overseeing CECs should be able to provide relevant information and guidance around council roles and responsibilities, and issues related to councils’ payroll, clerical, financial, logistical and legal needs.
4. Create an online portal that will enable members to share best practices, post information and resolutions and foster cross-borough communication and collaboration.

The Bronx Education Consortium

Promising Practices: Iridescent Family Science Program in Hunts Point

Engineers trained in the Engineers as Teachers Program, create lesson plans to share their knowledge and education with under-served elementary and middle school students and their families through the Family Science Program. Each Family Science Course consists of five sessions of two hours each. Topics are science or engineering based. Sessions are conducted once a week at the school or the Iridescent science studios. Families are invited (including younger brothers and sisters). A teacher or school administrator is usually present, and food is provided. A Spanish-speaking instructor is present to translate instruction for non-English speaking families. Formative assessments are conducted in every session, along with pre- and post- assessments conducted before and after the course, to ensure knowledge transfer.

Source: <http://iridescentlearning.org>

Unclogging, Strengthening and Insulating the Bronx Educational Pipeline

In order to address the complexity of issues that are intertwined with closing the educational achievement gap in the Bronx. The Office of the Bronx Borough President has organized stakeholders into affinity groups that together, make up the Bronx Education Consortium. Each group is charged with identifying promising practices, barriers to achievement, and resources to closing the education achievement gap in the Bronx. A brief description of each group is listed below.

Bronx Early Childhood Education Consortium (BECE)

The goal of the Bronx Early Childhood Education Consortium (BECE) is to serve as a venue for the exchange of ideas, research and teaching practices for professional development and a supporting body that reflects and acts on existing policies that affect early childhood programs. It also acts as the voice of the parents, teachers and directors of early childhood centers and stakeholders in the Bronx.

Principals' Consortium (K-12)

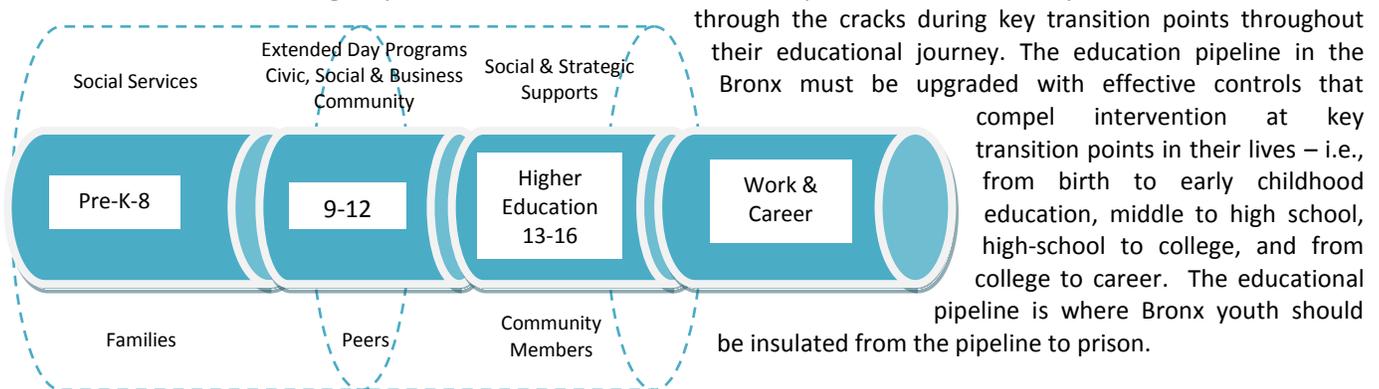
The Bronx Principals' Consortium is a coalition of Bronx-based elementary, middle and high school principals. Each group of principals meets monthly to share best practices, available free and inexpensive resources and discuss strategies for closing the achievement gap at their respective schools.

Institutions of Higher Education (IHE)

The IHE serves as a forum for Bronx-based colleges and universities to join together and collaborate around the common interest of providing affordable and accessible higher education to Bronx residents.

Bronx Educational Pipeline

The Bronx Education Pipeline is the object through which we propel students in an increasingly diverse, multi-ethnic, multilingual environment and navigate through the labyrinth of the New York City public school system while implementing effective measures to strategically boost educational attainment and performance. Too many children continue to fall



Source: Adapted from The Forum for Youth Investment: Issue Brief #1, September 2010

Premise #1: As the home to a growing number of immigrant communities, Bronx public schools, community based organizations and institutions of higher education are at the epicenter of change. Educators, youth development professionals and social service providers are on the frontline on how to figure out how best to respond.

Premise #2: The Bronx Education Consortium has the potential to build the infrastructure needed to support educational pipelines such as Gifted & Talented, International Baccalaureate, Science, Technology, Engineering & Math (STEM), and Career Technical Education (CTE).

Premise #3: The education policies enacted by the DOE needs to be implemented in a manner that reflect the communities they serve. They must provide supplemental resources that better takes into account the economic characteristics of the area (such as income, single parent households, access to home internet and language proficiency).

Premise #4: The Bronx schools should offer more and better options for the many different types of learners that are enrolled.

Unclogging, Strengthening and Insulating the Bronx Educational Pipeline

Pipeline: Early Childhood – Pre K

Universal Pre-K legislation^{vi} requires public schools and community-based early childhood programs to align with the K-12 system. A significant piece of legislation passed to provide non-stop services from Pre-K through the third grade. Research shows that a “birth-to-third-grade” strategy, prepares children for success in school. A strategy largely ignored in school reform efforts^{vii}.

In April 2011, the Ann E. Casey Foundation issued a report titled: Double Jeopardy, How Third Grade Reading Scores and Poverty Influence High School Graduation. The report’s findings concluded that children who lack reading proficiency by the third grade, are not likely to graduate from high school in a timely fashion. Low, and below-basic readers have the highest dropout rates.

Currently, the Bronx does not utilize all of our Pre-K allocations. Many seats are going empty because the seats are for half-day services and most Bronx working families need full-day services. Positive early childhood learning opportunities lead to more productive outcomes later in life. Children who attend quality early childhood programs are more likely to graduate from high school, less likely to be involved in crime, and less likely to become teen parents.^{viii}

Recommendation(s)

1. Revise the financing statute to ensure that full-day Pre-K options are funded.
2. Pre-K must be part of a continuum of services and must be available to all New Yorker.
3. Pre-K must be effectively and efficiently coordinated with community programs.
4. NYSED and the Office of Children and Family Services (OCFS) must strengthen support for English-Language learners in all early childhood settings.

Pipeline: Grades K-5

Improvement in Pre-K services produces more children ready to enter kindergarten. However, to strengthen the education pipeline during the K-5 years, emphasis on increasing student placement in Gifted and Talented (G & T) programs, as well as the number of science and math programs and improving literacy rates by the third grade are crucial to achieving positive outcomes further down the pipeline.

In the Bronx, for example, 5,010 students tested for placement in grades K-3 for G&T in 2011.^{ix} Nevertheless, there are approximately 710 students enrolled in G&T classes in grades K-5 in the Bronx, which is less than one percent of the total Bronx K-5 enrollment (95,381 students).^x These classes would be filled if more students sat for the exam. We believe the Bronx has adequate numbers of students who may qualify for G&T classes and the issue is the DOE is failing to identify them. Canceling these classes, as a response to low test participation, is unfair punishment to the students that do qualify. Qualified students are required to travel to another district for G&T classes. This policy is regressive and inadequate and fails to take into account the needs of the community school district residents.

Recommendation(s)

1. District and School Leadership Teams along with Principals should implement definitive outreach initiatives and programs to improve the quality of science and math education at the K-5 level.
2. Improve Gifted and Talented outreach to Bronx families.
3. Provide appropriate test prep opportunities for G&T applicants.

Scaling Up Programs that Work: The Eagle Academy

The Eagle Academy Foundation has had success in the South Bronx by not accepting business as usual. They have managed to outperform many Bronx schools in their short existence by developing and supporting a network of all male, grades 6-12, college preparatory schools in challenged, urban communities that educate and mentor young men into future leaders committed to excellence in character, scholastic achievement and community service, and promotes these principles nationally. Achievements for the school include an 87% graduation rate for the Bronx class of 2011, \$275,000 in college scholarships and fellowships and 84% overall college retention rate.

Source: Eagle Academy Foundation, 2011 Annual Report

Unclogging, Strengthening and Insulating the Bronx Educational Pipeline

Pipeline: Middle School Grades 6-8

Respondents indicated in the Bronx Wellness Survey, a major concern for the state of middle schools in the Bronx. Under the city's current promotion policies,^{xi} revised November 2009, students who score at least a Level 2 out of 4 on their math and English exams are promoted. It also requires that each school's Comprehensive Education Plan (CEP), identify strategies for individual students who are achieving below performance standards and to include parents as integral partners in their child's learning. Oddly enough, the current policy no longer requires a 90% student attendance in order to be promoted even though studies have indicated there is a correlation between low student attendance (less than 90%) and poor academic performance. However, it's not clear how many 6th-8th grade Bronx students are being promoted with less than 90% school attendance. Parents need to know this so they can do something about it.

Comprehensive Education Plans

Every school in New York City is required to develop a Comprehensive Education Plan (CEP) that outlines the educational goals, objectives, and strategies for student academic improvement. Additionally, school budgets are supposed to be aligned with CEP goals and the School Leadership Team (SLT) is responsible for reviewing and approving the CEP before it is submitted to the Community School District where the District Leadership Team (DLT) uses it to inform the development of the District Comprehensive Education Plan (DCEP) to be approved by the State Education Department.

The problem is that most parents do not know what the CEP is, what it look like or what's in it and many school's view it only as a document that's removed from the shelf once a year and updated for compliance purposes instead of the planning tool its designed to be. Effective non-profit organizations have and use strategic plans to determine organizational priorities and long-term strategic position, small businesses use business plans to decide how and when to grow. It's time that Bronx schools take their CEPs off the shelves, share what's in them with all parents and make them a true living document to engage parents as integral partners in their child's education.

Taking a closer look on how parent become integral partners in this stage of the pipeline should be the first line of defense to ensuring that middle school students stay on track.

Recommendation(s)

1. At the beginning of each new school year, each parent should receive a reader-friendly summary of their school's CEP goals, objectives and strategies for parents.
2. Parents and school administrators should work together to develop appropriate strategies to improve school attendance.
3. Ensure that students entering middle school have the capacity to complete the work.
4. Introduce challenging curriculum so that middle school students are prepared to take the Specialized High School exam.
5. Increase opportunities for Bronx middle-school student to enroll into the Bronx High School of Science.

Pipeline: High School Grades 9-12

An examination of DOE 9-12 Grade Regents Exam Scores (2006 Cohort / 2010 Graduates), showed that almost 40 percent, (39.2%) of Bronx high school students did not perform to a level three on the NYS Regents exam. The graduation rates of Bronx ELLs for the 2009-10 school year by district showed that, on average, only 43% of ELL high school students graduated and 23% dropped out.^{xii} We must do a significantly better job at increasing the number of English-Language Learners (ELLs) who graduate from Bronx high schools.

There has been much discussion and writing about reducing the Bronx's high school dropout rate and improving college completion rates for quite some time. However, little attention is being given to making the appropriate connections between the two and how they fit together. **Standards-based education in the Bronx must take a hard**

look at how these connections are made, and develop ways to improve weaknesses in the system for achieving a greater impact.

Scaling Up Programs that Work: International Schools

Internationals schools have a 4-year graduation rate of 68% while NYC students have an average of 63% and NYC ELLs have an average of 44%. Internationals schools' 6-year graduation rate is 82%, while NYC's 6-year rate is 66% overall and 42% for NYC ELLs.

Source: International Network for Public Schools Proven Innovative Solutions for English Language Learners, January 2011

Unclogging, Strengthening and Insulating the Bronx Educational Pipeline

Recommendation(s)

1. Create funding that accounts for additional school resources to provide tutoring and mentoring for ELL students.
2. Create appropriate timeline and course curriculum that takes into account the students' English Language skills.
3. Replicate successful Bronx high schools, and ensure that students of the Bronx have priority status in enrollment.

Pipeline: Higher Education

In regards to adequate access to information available to families on financial-aid options for students entering college, 82.4 percent of respondents to the 2011 Bronx Wellness Survey are unsure or feel that there is not enough information available.

In the fall of 2011, 80 percent of applicants failed the CUNY entrance exam.^{xiii} There is a disturbing trend among the six CUNY Community Colleges (Kingsborough, Borough of Manhattan, Queensborough, LaGuardia, and Bronx), only 28 percent of students graduate with a degree over six years.^{xiv} Together they serve more than 91,000 students, of which 82,000 are pursuing an associate degree or are trying to transfer to a senior college.^{xv} Data shows that of the 10,185 students that started at the community colleges in 2004, 63 percent dropped out within six years, nine percent were still enrolled, and 28 percent received a degree.^{xvi}

Our objective is to increase the educational capital in the Bronx by enhancing control mechanisms at transition points in both secondary and postsecondary education. Therefore, the following recommendations and strategies are proposed to strengthen the Bronx's higher education pipeline.

Stages in the Higher Education Pipeline

The educational pipeline can be achieved by a series of successive transitions:

- **Graduation from High School:** Although most Bronx children attend school through the middle grades, increasing numbers do not complete high school by the time they are nineteen. A first key transition measure is therefore the proportion of ninth graders who are still on pace to graduate at the end of tenth grade. DOE should release this data over the summer.
- **Entry into Postsecondary Education:** Unlike secondary school attendance, attending college is an elective decision. A second key transition measure is the proportion of recent high school graduates who enter postsecondary education. The DOE needs to release college enrollment data from all of its high schools.
- **Retention and persistence in Postsecondary Education:** Sixty-four percent full-time/first-time college freshmen entered the CUNY system in the fall of 2008. Forty-two percent made it to their sophomore year.^{xvii} Fewer than half of those entering postsecondary education as first-time, full-time students in the United States complete a baccalaureate at the institution they entered within six years. A third key transition measure is therefore the proportion of entering first-year postsecondary students who enroll for a second year of study.
- **Completing Postsecondary Education:** Improved credit transferring processes from within the CUNY system as well as improved academic advising to better map out a path to graduation are needed. Thus, a fourth key transition measure is the proportion of students enrolled in college who promptly earn a degree.
- **Entering the Workforce:** The principle policy objective in building an educational pipeline is to prepare students to enter the work force. Hence, CUNY and SUNY curricula need to reflect employer and industry need. CUNY recently opened a new facility for its Schools of Public Health.^{xviii} This investment needs to be better aligned with Bronx middle and high schools so more students are identified earlier in their academic careers. Increased strategic partnerships with New York City's Workforce 1 services can serve as a vehicle for linking college graduates to workforce opportunities in specific industries like health care.^{xix}

Recommendation(s)

1. Build partnerships between P-12 and IHE to promote high school graduation and college readiness
 - a. Schools of education will work with practitioners in P-12 to both provide resources and be responsive to needs of schools and principals regarding teacher preparation.
 - b. The IHE Consortium can promote research on STEM Education. Preparing the next generation of competent, caring, and effective STEM teachers for urban schools requires a deep understanding of student learning and effective pedagogy. Future efforts should include applications for external support of research on STEM education.

Unclogging, Strengthening and Insulating the Bronx Educational Pipeline

- c. Ensure that college readiness programs like TRIO, STEP, GEAR-UP, and College Now are funded to serve more students than they currently serve. Each high school in the Bronx should be affiliated with at least two of these programs which should be expanded to begin at the 9th grade if they do not already.

Unclogging, Strengthening and Insulating the Bronx Educational Pipeline

2. New York City Department of Education should sponsor college readiness resources for recent high school graduates by
 - a. Creating opportunities for high school graduates (hereafter “post graduate” schools) and GED students to receive additional assistance in math and English skill development needed to perform college-level work.
 - b. Initiate a program to suspend the use of public tuition to pay for remedial work. This will prevent students from burning through their state and federal tuition support. The New York City DOE has an obligation to these students who, though they receive high school diplomas, are not college ready.
 - c. Enlist the IHE Consortium in the creation of the “post graduate” schools. Many IHEs already have in place evidence-based practices that have a positive impact on adult student learning. IHE should leverage resources from the District 79 Alternative Education schools.
3. Promote college retention and graduation.
 - a. Create a database of Bronx internships in a variety of areas to help college students connect their studies to career options.
 - b. Facilitate partnerships between various community organizations and colleges to provide tutoring, mentoring, financial and career advice to college students.
 - c. Maximize the use of technological and human resources to enhance advisement on college campuses.

Other Promising Pipelines

Science, Technology, Engineering and Math (STEM)

STEM careers are an opportunity to address the high level of unemployment in the Bronx. According to the Georgetown University Center on Education and the Workforce, 63% of those with only Associate’s degrees in STEM earn more than those with Bachelor’s degrees in non-STEM occupations.^{xx} Students who perform well in science are generally found at the top percentile of their class in academics and are served well by amazing organizations like Intel, science museums, colleges, universities and NASA. Many students however, begin getting disengaged in science and math as early as grade six.^{xxi} Research by the National Center on Time and Learning and the New York State Afterschool Network/TASC promote the need for increasing learning time in science, starting in elementary school, in addition to exposing students to science beyond the classroom.^{xxii} We concur with these findings and make the following recommendations:

Recommendation(s)

1. Establish and support model programs that identify students with STEM potential and interest and expose them to STEM opportunities.
2. Include parents, teachers, and counselors in outreach programs that help them learn about STEM professions so they can encourage students to go into those fields.
3. Encourage the Community Education and Presidents’ Councils to promote the recommendations from the current research and monitor the school district’s plan for implementing them.

Career/Technical Education (CTE)

Unclogging, Strengthening and Insulating the Bronx Educational Pipeline

What we used to call vocational education now falls under the category of Career/Technical Education. Of the 21 CTE schools in New York City, four of them are in the Bronx: Alfred E. Smith, Samuel Gompers, Jane Addams and Grace Dodge. These schools graduated many young people who were certified or licensed and prepared to work in the automotive, nursing, information technology or cosmetology fields. In 1998, they were also required to prepare students for the Regents exams and given the choice of college or entering the workforce. CTE schools have traditionally been instrumental in helping many Bronx students move up the economic ladder through internships, apprenticeships and eventually, long-term employment opportunities. CTE schools still hold incredible possibilities for Bronx families and students.

In last few years, CTE schools have been under-resourced and challenged to keep up with 21st century industry standards, and the rapid pace of innovation. We now have the opportunity to participate in economic development by participating in the various emerging industry trends and prepare our young people for employment in these sectors.

Green jobs encompass a range of skills, educational backgrounds and occupational profiles. The green industry has been recognized as a high-growth workforce sector because of the demand for sustainability products and services, in addition to government initiatives. Despite the exploding interest in green jobs and the real potential for their development, a lack of a trained workforce hinders the development of green industries.

To make good on the promise and potential of CTE we make the following recommendations:

Recommendation(s)

1. Create long-term commitments from the DOE to create adequate CTE pathways in emerging industries as early as 6th grade.
2. Provide adequate funding or financing for schools to make the necessary capital improvements to provide up-to-date training programs that are aligned to industry standards.
3. Form a Bronx-based CTE Advisory Group with business and industry groups to engage the private sector in a comprehensive way.

Accelerated Learning Options

The idea behind accelerated learning is that challenge is a greater motivator than remediation. Remediation carries a negative message—that of repeating or doing over something at which one has failed. Students who participate in a long-term college readiness system, including accelerated learning options, like Early College high school programs^{xxiii}, are significantly more likely to earn higher grades, take a college-prep core curriculum in high school, be ready for credit-bearing college work, enroll in college and return for their second year.^{xxiv}

Recommendation (s)

1. Accelerated programs like Early College or the International Baccalaureate^{xxv} that are aligned with the new Common Core Standards should be replicated at a larger scale for Bronx students.

Implications for English-Language Learners

According to the Bronx Wellness Survey, 79.4 percent of respondents are unsure or feel that there are not a sufficient number of programs for English-Language learners in Bronx public schools.

Scaling Up Programs that Work: Pathways into Technology Early College High School

Early College models, like the Pathways into Technology Early College High School (P-TECH), enables students to accelerate their college and professional career. As the first school in the nation that connects high school, college, and the world of work through dynamic partnerships, P-TECH is pioneering a new vision for college and career readiness. With a unique 9-14 model, their goal is 100% completion of an associate degree within a six year time frame.

Source: www.ptechnyc.org

Unclogging, Strengthening and Insulating the Bronx Educational Pipeline

Moreover, educational performance seems to decline for the Latino populations that have been in New York the longest:

“Puerto Ricans, particularly males, emerge as the most disadvantaged youth group in New York City, with rates of school enrollment, educational attainment, and employment lower than any other comparable group, including young black males. Similarly, Puerto Rican women show more challenges than other female youth. In the past, this finding may have been obscured by research that groups Latino youth into one broad category. It is time to pay specific attention to the plight of Puerto Rican youth in New York City.”^{xxvi}

School Enrollment of all 16–24 Year-Olds in NYC ^{xxvii}				
School Enrollment	White	Black	Asian	All Latino
Foreign Born	68.3 percent	59.4 percent	69.1 percent	34.9 percent
Native	66.9 percent	60.9 percent	79.1 percent	61.9 percent

School Enrollment of Latinos, Ages 16–24 in NYC ^{xxviii}				
School Enrollment	Puerto Rican	Dominican	Mexican	Other Latino
Foreign Born	84.8 percent*	50.0 percent	13.4 percent	36.1 percent
Native	55.1 percent	68.2 percent	66.8 percent	65.0 percent

*The foreign-born Puerto Rican youth population (i.e., those born outside the 50 states and Puerto Rico) is extremely small (n=1,600). In these and other tables, foreign born includes only those individuals born outside any U.S. state or territory. This report does not examine or discuss issues relating to immigration policy. As our data shows, an overwhelming majority of Latino youth in New York City was born here, and has full citizenship benefits.

The Census estimated almost half a million Bronxites were born outside the United States.^{xxix} It is unacceptable that within our city’s fastest growing immigrant population, 41 percent of those between ages 16 and 19, have dropped out of school.^{xxx} This is not just a problem in any one single community. When we look at school enrollment data for foreign born youth between the ages of 16 to 24 in New York City, less than 35 percent of Latinos are enrolled in school. Similarly, less than 60 percent of black foreign born youth are enrolled.

Latino youth now represent the largest minority group in K–12 Bronx schools, followed by African-Americans, and are the fastest-growing segment of students. And while multiple generations of Latinos reside in the Bronx and are largely American born, the majority of Latino students in the K–12 system (52 percent in 2006) have at least one parent who is an immigrant.^{xxxi}

Fifty-two percent of Bronx residents are Latinos.^{xxxii} However, a limited proportion of Latinos are accessing colleges and universities, and even fewer are completing their two-year and four-year degrees. In 2009, 19.2 percent of Latino 25- to 34-year-olds had attained an associate degree or higher — less than half the national rate. The national average is 41.1 percent, with 69.1 percent of Asian, 48.7 percent of white and 29.4 percent of African American 25- to 34-year-olds attaining an associate degree or higher as of 2009.^{xxxiii}

The DOE must do more to implement its policies effectively in immigrant communities and expand access to GED PLUS programs. They must also open more District 79 Alternative Education facilities in heart of our immigrant communities. Often, we lose these children because they erroneously believe they will be unable to pay for college. The Board of Trustees of SUNY have taken a great first step by passing a resolution supporting the expansion of the state's Tuition Assistance Program to all students, regardless of immigration status. This is must be followed up with a New York State Dream Act! We must continue to advance college enrollment.

Current Condition of ELLs in the Bronx

There are approximately 56,127 ELLs in our public schools. Within this population, 14,463 are new immigrants, 9,978 are ELLs with disabilities and 6,804 are considered long-term ELLs (6 or more years). The Bronx has the second highest number of ELLs and the highest number of long-term ELLs when compared to other Boroughs in the City. Lastly and of particular interest, is that the Bronx has the highest rate for referrals of ELLs to special education.^{xxxiv}

Unclogging, Strengthening and Insulating the Bronx Educational Pipeline

Languages Spoken in Bronx School Communities

Prepared by Graduate School of Education, Center for Educational Partnerships at Fordham University

District	# of ELLs	Language % of students				
7	3696	Spanish(90.2)	French(2.2)	Arabic(1.9)	Soninke(1.1)	Fulani(0.8)
8	3816	Spanish(86.4)	Bengali(4.9)	Arabic(1.9)	French(1.3)	Chinese(0.9)
9	9061	Spanish(89)	French((2.5)	Soninke(1.6)	Mandinka(1.2)	Bengali(0.9)
10	12,603	Spanish(89.6)	Bengali(2.5)	Arabic(1.1)	French(1.0)	Albanian(0.8)
11	4140	Spanish(71.7)	Arabic(5.8)	Bengali(5.2)	Albanian(4.6)	French(2.2)
12	4666	Spanish(91.7)	French(1.6)	Bengali(1.5)	Arabic(1.0)	Fulani(1.0)

Source: 2011 Demographics of New York City’s English Language Learners, Spring 2011

Challenges Facing ELL Students

- ELL students receive content area instruction in English if Bilingual Education programs are not offered. This means that students will not always learn the content until they acquire an advance or proficiency level in English.
- ELL students begin to take New York State assessments after one year of being exposed to English instruction. This means that ELL students are evaluated in the same manner as students who have been in the US for many years.
- ELL students are sometimes referred to special education services when the student is still learning the second language.
- ELL students who enter high school must begin to meet course requirements immediately upon entering an English-language school system. This means that some ELL students may not understand the coursework requirements in order to receive a high school diploma which may differ greatly from what is required in the countries where they come from.

Complicating this scenario are schools that (1) determine their own language policy for emergent bilingual students, (2) have a poor understanding of bilingual education methods and practices, (3) do not comply with legal requirements, and (4) have weak organizational capacity. This has resulted in poor achievement outcomes city-wide and in the Bronx specifically, which has led to the New York City Department of Education being placed on Corrective Action by the New York State Education Department in September 2011 for failing to comply with state law mandating the identification of emergent bilingual students and properly serving English-Language learners. We concur with the recommendations from the NYS Department of Education with the additional following recommendations on its Corrective Action Plan implementation in the Bronx:

Recommendations

1. DOE’s Office of English Language Learners (OELL), should make public the number of Bronx students identified as ELLs in accordance with their performance on the Language Assessment Battery-Revised (LAB-R) test no later than mid-November of every school year.
2. Each school should make their Language Allocation Policy available to the school community, and in reader-friendly language.
3. DOE should work with the Bronx Education Consortium’s Institution of Higher Education (IHE) group to create a candidate pool of certified Bilingual Education teachers for networks serving Bronx schools and streamline the process for placing them.
4. Make the process for how school leaders access and deliver ELL services and related funding stream transparent.
5. Partner with the Bronx’s Regional Bilingual Education Resource Network at Fordham University to use data to inform Bilingual Education advocates on regulation compliance and training needs of Bronx schools.
6. NYCDOE should consider creating incentives for Bronx networks that complete the LAB-R test process on schedule.
7. DOE should work with the Bronx Consortium’s Institution of Higher Education (IHE) to create a candidate pool of certified Bilingual Education teachers for networks serving Bronx schools and streamline the process for placing them.

Unclogging, Strengthening and Insulating the Bronx Educational Pipeline

Implication for Students with Special Needs

According to the Bronx Wellness Survey, 83.1 percent of respondents to the 2011 are unsure or feel that there is an insufficient number of special education programs and services in Bronx public schools.

In New York City, there is radical inequality in public school graduation rates and in college-readiness across schools, neighborhoods, language minorities and students with disabilities. Nowhere is this inequality more evident than within the Bronx.

There is a persistent racial achievement gap: only 13 percent of African Americans students and 15 percent of Hispanic students statewide were deemed college-ready after four years of high school, compared with 51 percent of white graduates and 56 percent of Asian-Americans. The four-year graduation rates are 46.1 percent for English language learners and 30.7 percent for students with disabilities. In the poorest school districts within the Bronx, the four-year graduation rate with a Regents or Local diploma for students with disabilities were as low as 22 percent.

Over all, the Bronx district graduation rate for the 2010 class of students with disabilities was 29 percent - well behind the already low 60 percent overall graduation rate for the Bronx. As these percentages suggest, students with disabilities continue to be the most at risk for academic failure. Drop out rates for students with disabilities equaled nearly a quarter (23 percent) of the class of 2010 Bronx students and one-third (32 percent) of them were still enrolled after four years of high school.^{xxxv}

The aggressive implementation of education reforms in New York City has compelled families and young people to guide their education by competing for admission to public or charter schools. Throughout the Bronx, students with disabilities are underrepresented in the best community high schools and overrepresented in the lowest performing schools. The high school application process is notoriously complex. Families and students with disabilities are at tremendous risk for placement within the City's lowest performing schools.

Applying for high school in New York City is, in some ways, like applying for college. There is a need for research, critical thinking, and persistence that may be beyond the knowledge, skills and experience of many parents and families, especially those challenged by language, cultural or other barriers or who are working multiple jobs. A May 6, 2011, article in *The New York Times*, "Lost in the School Choice Maze," outlines the elaborate process needed to successfully match students and schools. The process includes strict timelines and a myriad of choices, including those that are competitive, geographic, based on attendance, or based on other variables. Students with disabilities must balance an honest assessment of their interests and strengths balanced with their needs for academic, clinical, or social support in making these choices, and strategically apply for schools where success is most likely. It is essential for students with disabilities, who often do not have strong family advocates, to participate in the high school application process proactively.

Training parents and students to successfully navigate a complicated special education system is a vital service to Bronx families. **In the Bronx Wellness Survey, only 17 percent respondents felt that there are a sufficient number of special education programs and services in Bronx public schools. The survey also found that 44 percent of respondents were unsure of the sufficiency of special education services and programs in Bronx public schools. Similarly, 43 percent of respondents were unsure of whether there is sufficient access to Special Education Service Providers in the Bronx.** These numbers reflect a lack of understanding of services available to students with disabilities.

Promising Practice: **Resources for Children with Special Needs**

Resources for Children with Special Needs trains in excess of 700 parents and providers through over 50 trainings in the Bronx annually on a range of special education topics. Through the Bronx Education Consortium, key school districts, schools, and parent coordinators, work with the three federally-funded parent training and information centers in the City as well as the New York State Education Funded Bronx Special Education Parent Center to coordinate and maximize opportunities for parents to understand and participate effectively in the special education process.

Source: www.resourcesnyc.org

Unclogging, Strengthening and Insulating the Bronx Educational Pipeline

Research shows that students with disabilities with informed and engaged parents tend to have greater academic success in school, are involved in more activities, and display stronger social engagement.^{xxxvi} With nearly half of respondents unsure about special education services, it is critical to inform and train parents and students in the Bronx to increase parent advocacy and engagement. There are many community-based organizations in the Bronx that have been successful in both engaging the community and collaborating with other organizations.

Given the complexity involved in navigating the special educational system, the following recommendations should be considered:

Recommendations

1. Improve parent engagement in special education programs and services.
2. Promote partnerships through the school to bring specialized services to families through the school, such as mental health, developmental disabilities, and support.

Implication of School Closings

For the past ten years, the DOE has been implementing focused its school reform efforts on a key strategy -- closing low- performing schools. The DOE needs to make sure that students in school scheduled for closure are not policy casualties. Investing efforts to ensure that students in the final years of a closing high school continue to receive academically rigorous and college-preparatory instruction must be a priority.^{xxxvii}

Students who would have attended the closed high schools are not admitted to the small schools that replaced them. Instead, most of these students are enrolled in other large comprehensive high schools like DeWitt Clinton, which consequently become academically overwhelmed, making them additional targets for closure.

High schools targeted for closure fail because they enroll large numbers of students who are overage and under-credited. In addition these schools have higher percentages of Special Education and English Language Learner (ELL) students. Making matters worse, these schools are under-resourced and are challenged to meet the needs of their students.

Recommendations

1. Restart struggling schools instead of closing them.
2. If schools must be closed, guarantee seats to the previous school's ELLs and special education students in restarted schools.
3. Provide schools that take in students from closing schools additional resources and funds to serve these students properly.

Implication of Student Suspensions

Suspension rates have gone up considerably due to strict adherence of the DOE Discipline Code—a discipline manual used by the school administrators. The efficacy of zero tolerance discipline is not supported by educational research and is a waste of valuable educational time. “Between 1999 and 2008, New York City students spent more than 16 million hours serving suspensions. Instead of being in supportive, familiar school environments, New York City youth spent these hours away from their teachers and peers, often in alternative schools where age-appropriate schoolwork and special education services can be difficult to come by.”^{xxxviii}

There is also an increasing concern about the role of the School Safety Officer and whether there is increased aggressive behavior toward students for what many deem as “minor offences.” Safety officers receive 14 weeks of training that does

Promising Practice: **Bronx Community Solutions**

Bronx Community Solutions is an initiative that seeks to apply a problem-solving approach to non-violent cases in the Bronx. Its goal is to provide judges with increased sentencing options for non-violent offenses such as drug possession, prostitution and shoplifting. By combining punishment with help, Bronx Community Solutions seeks to reduce the Bronx’s reliance on expensive and ineffective short-term jail sentences, and build public confidence that the system is holding offenders accountable and offering them the assistance they need to avoid further criminal conduct. The project, the largest of its kind, is the nation’s most ambitious experiment in going to scale with problem-solving justice.

Source:<http://www.courtinnovation.org/project/bronx-community-solutions>

Unclogging, Strengthening and Insulating the Bronx Educational Pipeline

not include learning about adolescent development, constructive discipline techniques, educational psychology, school culture, special education or bias-based harassment and bullying. The lack of training in these areas manifest itself in their reactions and overreactions to routine misbehavior that lead to students being removed from classrooms, suspended, physically restrained, or arrested. As a result, Bronx students are being exposed to heavy-handed street policing tactics in their schools.^{xxxix}

Recommendation(s)

1. Eliminate the use of Zero-Tolerance discipline policies for infractions that are not of a criminal or non-violent nature.
2. Mandate the use of positive alternatives to suspension, such as restorative justice^{xl} practices when appropriate.

Implication for Charter Schools

Of the 136 public charter schools in New York City, 37 of them are in the Bronx. Of that number, 23 are independent or community-grown and the others are affiliated with a charter management organization or network.^{xli} To reduce fragmentation and move beyond isolated impact, a successful borough-wide charter strategy requires strong facilitation to develop meaningful collaborations between charter and non-charters schools that share the same building.^{xlii}

The DOE District Charter Collaboration Compact encourages collaboration between public charter schools and traditional public schools to provide high quality education to all students. It's time to stop the divisive energy spent on demonizing our public schools-charter **and** traditional. Instead, schools sharing space in the same building must figure out how they can work together to help all students succeed.

New York State's Charter School Law allows charter school planners and operators a way to serve as the laboratories of innovation they were intended to be. Given the urgency of the problem, working in partnership with traditional public schools, Bronx charter schools can demonstrate where they fit in the solution to strengthen the education pipeline for Bronx students.

Recommendation(s)

1. Increase the number of District/Charter collaboration in the Bronx.
2. Include charter school representation in the Bronx Education Consortium

Conclusion

Throughout the Bronx we have heard from the community that we must improve communication, increase collaboration and instill creativity. We need to improve our communications among our parents, teachers and school leaders that feed students into each other's schools or share space in a building. Also, we must make sure that parents are aware of all the options available for their child. In addition, we want to increase collaboration with service providers, community based organizations and health care providers to provide options for all English Language Learners and students with special needs. We need to develop creative ideas to create smooth transitions of students between local schools to meet today's needs of Bronx youth. We must do what is necessary to graduate every student who remains connected to school **before** they become disconnected. We need to identify new funding sources to increase our capacity to serve youth. It is our responsibility to be an active and equal partner with the Department of Education and also hold them accountable for educating all children.

Insulating the education pipeline requires **engaging** new partners that include but is not limited to: community-based parent leaders and advocates, Community Education Councils, the Community Board Youth & Education Committees, Community School District Superintendents, youth development professionals and the business community, in the student success conversation and to implement a broad range of strategies that address academic and other developmental competencies from the ground up. It also has implications for how we think about education policy. Sealing gaps in the Bronx education pipeline means preventing students from falling through its cracks during critical transitions under the current K-16 system. If

Promising Practice: New Visions Charter High Schools

New Visions Charter High Schools are designed to provide all students with a relevant and meaningful education that prepares them for the rigors of college and beyond. Our teachers and staff work in partnership with parents and the community to support students' academic, creative and personal development.

Source: www.newvisions.org

Unclogging, Strengthening and Insulating the Bronx Educational Pipeline

we expect to prepare every Bronx student to compete and succeed well into the future, where a pipeline exist, it must be strengthen and insulated; where there is none, it must be created.

The first ever Bronx Education Summit has given us the opportunity to collaborate with many education academics and has led to the creation of a blueprint for a new educational future for the borough of the Bronx. We encourage all of our stakeholders- the Department of Education, parents, community leadership, and institutions of higher learning – to join together to create and insulate the Bronx educational pipeline. Our future depends on it.

ⁱ Serving approximately 5 percent of all NYC public school students.

ⁱⁱ Petrovitch, Janice, A Foundation Returns to School: Strategies for Improving Public Education, Ford Foundation (2008).

ⁱⁱⁱ Id.

^{iv} State Education Commissioner King And City Schools Chancellor Walcott Announce Comprehensive Plan To Support English Language Learners, Press Release (October 12, 2011).

^v Jonathan Mahler, The Fragile Success of School Reform in the Bronx, New York Times (April 6, 2011).

^{vi} NYS Regulation Subpart 151-1 Universal Pre-Kindergarten.

^{vii} Strengthening the Pre-K Investment Next Steps, Winning Beginning for Every Child in New York State, Winning Beginning NY, (March 2010).

^{viii} Children’s Defense Fund, School-Age Child Care: Keeping Children Safe and Helping Them Learn While Their Families Work, (2003).

^{ix} 4th & 5th grade placements are based on New York State test scores

^x NYCDOE Released Data June 2011

^{xi} <http://docs.nycenet.edu/docushare/dsweb/Get/Document-24/A-501.pdf>

^{xii} NYSED Public School District total Cohort Graduation Rate by Diploma Awarded – 2009-10 by Limited English Proficiency (LEP) status

^{xiii} Susan Edelman, 'Remedial class' nightmare at CUNY, New York Post, (October 22, 2001).

^{xiv} Mohammad Hossain, Graduation Rates for CUNY's community colleges reach an all time low, The Ticker, Student Newspaper of Baruch College, (December 6, 2011).

^{xv} Id.

^{xvi} Id.

^{xvii} CUNY Office of Institutional Research and Assessment, (May 2011).

^{xviii} “In November 2009, Hunter College and City University of New York broke ground for a new building for the School of Public Health in East Harlem. The school will share the new, eight-story, 147,000-square-foot green building on Third Avenue between East 118th and 119th Streets with the Hunter College School of Social Work. . . . CUNY School of Public Health at Hunter College took occupancy Fall 2011. Classes will continue to be offered on all four participating campuses.” <http://www.cuny.edu/site/sph/about-us.html>

^{xix} <http://www.nyc.gov/html/sbs/wf1/html/about.shtml>

^{xx} Anthony Carnelvale, Nicole Smith, Michelle Month, STEM: Science Technology Engineering Math, Georgetown University, Center on Education and the Workforce, (October 20, 2011) 33.

^{xxi} New York Academy of Sciences

^{xxii} Strengthening Science Education: The Power of More Time...National Center on Time and Learning Fall 2011. Science Beyond the Classroom, NYSAN/TASC Policy Brief 2012.

^{xxiii} Early college high school is a bold approach, based on the principle that academic rigor, combined with the opportunity to save time and money, is a powerful motivator for students to work hard and meet serious intellectual challenges. Early college high schools blend high school and college in a rigorous yet supportive program, compressing the time it takes to complete a high school diploma and the first two years of college.

^{xxiv} Developing the STEM Education Pipeline, ACT 2005.

^{xxv} The International Baccalaureate (IB) Program is a demanding college preparatory curriculum in the classical liberal arts.

^{xxvi} Community Service Society, Latino Youth in New York City, School, Work, and Income Trends for New York’s Largest Group of Young People, (October 2010).

^{xxvii} Id.

^{xxviii} Id.

^{xxix} Census 2010 American Community Survey estimated 1,386,657 people in Bronx County, of that number 475,734 are identified as “Foreign Born” or 34%.

^{xxx} Kirk Semple, In New York, Mexicans Lag In Education, The New York Times, (November 25, 2011).

Unclogging, Strengthening and Insulating the Bronx Educational Pipeline

^{xxx} Aud, S., Fox, M., and KewalRamani, A., *Status and Trends in the Education of Racial and Ethnic Groups* (NCES 2010-015). (Washington, DC: U.S. Department of Education, National Center for Education Statistics, U.S. Government Printing Office, 2010).

^{xxxii} Mario A. González-Corzo, Ph.D, The Bronx in 2010: A Socioeconomic Profile, Department of Economics and Business, Lehman College (2010).

^{xxxiii} The College Completion Agenda, 2011 Progress Report, The College Board

^{xxxiv} Bronx Bilingual Education Resource Network, Fordham University

^{xxxv} New York State Department of Education (2011) Graduation Rate Data. Retrieved on January 4, 2012 from <http://www.p12.nysed.gov/irs/pressRelease/20110614/home.html>.

^{xxxvi} Newman, L. (2005). Family Involvement in the Educational Development of Youth with Disabilities. A Special Topic Report of Findings from the National Longitudinal Transition Study-2 (NLTS2). Menlo Park, CA: SRI International. Available at www.nlts2.org/reports/2005_03/nlts2_report_2005_03_complete.pdf.

^{xxxvii} No Closer to College: NYC High School Students Call for Real School Transformation, Not School Closings, Urban Youth Collaborative (April 2011).

^{xxxviii} Education Interrupted: The Growing Use of Suspensions in NYC Public Schools, New York Civil Liberties Union and Student Safety Coalition, (2010).

^{xxxix} Id.

^{xl} Restorative justice is a theory of justice that emphasizes repairing the harm caused or revealed by criminal behavior. It is best accomplished through cooperative processes that include all stakeholders.

^{xli} NYC Charter School Center

^{xlii} The Promise of Citywide Charter Strategies, National Alliance for Public Charter Schools (May 2011).