

Harlem Preparatory Charter School
 For
 Science, Technology, Engineering
 &
 Mathematics

Full Application submitted in response
 to the *2011 New York State Education Department Request for Proposals to Establish Charter Schools*
 Authorized by the Board of Regents

| | |
|---|---|
| Proposed name of school | Harlem Preparatory Charter School For Science, Technology, Engineering, and Mathematics |
| Name of Lead Applicant (Media Contact) | Milagros Garcia |
| Contact phone number | ██████████ |
| E-mail address | ██ |
| Initial grade levels | 6 |
| Initial enrollment | 125 |
| Grade levels at full capacity by the end of 5 years | 5 Years 6-10 7years 11-12 |
| Total projected maximum enrollment by end of five year, and when the school is fully developed | Maximum enrollment by end of 5Years 574 Full developed in 7years 764 |
| District or Community School District (CSD) in which the school will be located | CSD District 3, 4 and open to 5 |

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Charter School Application Statement of Assurances:

- ✓ We intend to apply for a Charter School Planning and Implementation Grant (CSP). We understand that if the **Harlem Preparatory Charter School For Science, Technology, Engineering, and Mathematics** application is approved by the NYS Board of Regents and issued a charter, the school is qualified to receive a federal CSP grant, pending available funding and final approval of budget materials by the NYSED Charter School Office and the New York State Comptroller. We agree to complete all required budget information and assurances (Exhibit A) according to forthcoming instructions and a revised timeframe to be issued by NYSED.
- ✓ In accordance with New York Education Law Section 2851(2) (t), in the case of the closure or dissolution of the **Harlem Preparatory Charter School For Science, Technology, Engineering, and Mathematics**, we agree to abide by and implement the forthcoming Closing Procedures for New York State Charter Schools Authorized by the Board of Regents to be issued by NYSED.
- ✓ We understand that if we intend to request waivers from a federal, state, or local regulation or rule that is generally applicable to public schools that we believe are necessary for the successful operation of the charter school, we propose be waived, or otherwise not apply to the charter school, we will include such requests along with justification where appropriate in the application narrative.
- ✓ I attest that all information included in this New York State Education Department 2011 Charter School Application for the proposed [name of charter school] is accurate and correct.

X

Milagros Garcia
Lead Applicant

Date: March 31, 2011

I. EDUCATION PLAN

Alignment to Mission and Goals:

Through our curriculum framework, our teaching methods and instructional strategies, a longer instructional day and year, and the services delivered to our students by a professional and dedicated team, HPCS will provide a robust active-learning, inquiry-based, and college-bound educational experience that focuses on intellectual, social and affective development of all its students. Careful attention to these components in the development of our educational plan will support HPCS' attainment of its vision of fully preparing students to embrace higher education, become leaders in their communities, attain their career of choice, and remain inquisitive, engaged, life-long learners.

These student achievement goals will be realized through our earnest application of a well-tested, exemplary curricula program, our nurture of a vibrant, inquisitive, consistent and caring school culture, and our continuous application, evaluation and improvement of teaching instruction, learning methods and support services best aligned to meet the educational needs of our students. Harlem Preparatory Charter School will accommodate a broad array of students with varying academic strengths and weaknesses, English language abilities, and socio-environmental challenges to learning.¹ The primary goal of our design team was to craft a curriculum framework compatible with our school's mission and vision that would provide a dynamic, nurturing and effective teaching and learning model at HPCS, which would also be optimally aligned to New York State standards, and meet the specific needs of the students we will serve.

English Language Literacy: HPCS has identified English fluency as a priority goal for our school. The college-bound, rigorous, active learning based program at Harlem Prep and our mission to provide an educational experience that focuses on intellectual, social and affective development of all our students necessitates fluent literacy for all students across all domains—listening, speaking, reading and writing. Limited Language Proficiency (LLP) is a significant barrier for many students in HPCS' target population. In District 3, 10% of the students fit into this category, while in District 4, 13% are classified as LLP. NYSESLAT failure Benchmarks are 43% for Middle Level entry students and 47% for entry-level Diploma students in our target population.

We plan on raising achievement through three key processes. The first is our implementation of IB curriculum program's "Language A" and "Language B" subject courses, which will provide flexibility crossing this literacy barrier. A recent study administered to 48,000 students worldwide by the Australian Council for Educational Research (ACER) found that students using the IB Middle Years core curriculum outperformed their peers in reading and writing on the International Student Assessment (ISA).² All students will take our Language "A" (English Language Arts) courses each year, throughout the Middle Years and Diploma Program. ELL students will take a "Language A" ESL course designed to provide additional learning support for as long as needed. Secondly, we will also implement a Structured English Immersion (SEI) model for our classrooms that has achieved better Benchmarks for the development of English proficiency and for the support of academic achievement than traditional bilingual programs in a broad range of charter and public schools.³ The inclusive SEI approach will incorporate specialized curriculum materials, additional time, multiple forms of assessments, tutoring, in-class interpreters and one-on-one bilingual coaching as needed for our ELL students. Third, in our After-School "IB Boot Camp," we will provide bilingual supplementary instructional and test preparation strategies and supports for core content areas.

¹ See Section I.B. Target Population for more details.

³ Clark, Kevin. *The Case for Structured English Immersion: Three States and Many School Districts are Finding that Emphasizing English Language Instruction Offers ELLs an Accelerated Path to Success.* (Educational Leadership, Apr 2009), pp. 42-46. Taken from <http://sde.state.nm.us/QualityAssuranceSystemsIntegration/dl09%20/ELL%20Summit/The%20Case%20for%20Structured%20English%20Immersion.pdf>; New York City, Bronx Prep, Democracy Prep, and KIPP Infinity also report favorable literacy outcomes through SEI.

Math Literacy: Achievement results for students in Harlem Neighborhood Community Districts #3 and #4 on the Mathematics portion of the New York State Regents Exam demonstrate that between 65-68 % fail to meet passing levels. Thus, a key HPCS goal is to provide all of our students with the understanding—and not just the basic knowledge—of the mathematics needed to function in both today and tomorrow’s world. We plan on improving math literacy through four key strategies. First, components essential to our students’ success will be integrated and supported not only in our math program, but throughout our curriculum in the cross-curricular areas of (1) Conceptual Understanding; (2) Procedural Fluency; and (2) Problem Solving. This is a strategy that is working, worldwide. In an international study, IB Middle Year Program study students outperformed their peers in mathematics assessments in nearly every year level on the International Student Assessment (ISA).⁴ The National Center for Education Statistics finds that when curriculum is aligned to state assessments and standards, there is a marked improvement in mathematics test scores. Thus, a second critical strategy for us is the strong alignment of our Math Program to the ten strands of the New York State Learning Standards for Mathematics. Third, to build a strong structure for the development of mathematical proficiency, we have linked student content and process performance outcomes to established course benchmarks. Finally, our students will only become literate in this field if they see mathematics as an integrated whole and not as isolated skills and facts that they cannot apply to real life settings. Thus, in addition to the IB core curriculum provided, we will improve math literacy through our infusion of Science, Technology, Engineering and Mathematics (STEM) to classroom applications and through our adherence to Universal Design for Learning (UDL) instructional strategies that help students capitalize on how they best learn. Collectively, these measures will increase mathematics literacy for students in our target population.

Sample Promotion Standards for ELL and Mathematics in Two Non-Consecutive Grades:

English Language Arts Promotion

| |
|---|
| 6 th Grade |
| Students must score at least Proficiency Level 2 on the ELA standardized test |
| Students must meet 90% attendance requirements |
| Students must achieve a 70% grade average in English courses |
| Student work, teacher observation, and grades in 6th grade English courses must demonstrate that the student is ready for 7 th grade. |
| 8 th Grade |
| Students must achieve a score at or above Proficiency Level 2 on the State Language Arts assessment |
| Students must meet 90% attendance requirements |
| Students must achieve a 70% grade average in 8 th grade English courses. |
| Student work, teacher observation, and grades in sixth grade academic courses must demonstrate that a student has met grade level state Mathematics standards and is ready for 9 th grade English. |

Math Promotion Standards

| |
|---|
| 6 th Grade |
| Students must score at least Proficiency Level 2 on the standardized Math assessment |
| Students must meet 90% attendance requirements |
| Students must achieve a 70% grade average in Mathematics courses |
| Student work, teacher observation, and grades in sixth grade math courses must demonstrate that the student is ready for 7 th grade. |
| 8 th Grade |

⁴ Education Trust, *Gaining traction, gaining ground: How some high schools accelerate learning for struggling students.*(Washington, DC: Education Trust), 2005

| |
|---|
| Students must achieve a score at or above Proficiency Level 2 on the State Mathematics assessment |
| Students must meet 90% attendance requirements |
| Students must achieve 70% in 8 th grade Mathematics courses. |

We will support learning goals and continuous student progression toward the next grade level through a variety of structures and policies, including voluntary after-school and Saturday “IB Boot Camps” for struggling students and compulsory Summer Camp for students who fail to meet passing requirements in any core course and/or who score less than a 2 on state standardized ELA and Math tests. Students who subsequently pass courses in summer school and score at least a 2 on the August Citywide ELA and/or Citywide Mathematics standardized assessments may be promoted to the next grade. In the event a modified standard has been specified on a student’s IEP for promotion, the modified standard will be applied.

A. CURRICULUM AND INSTRUCTION

Overview: The sole school-level factor with the utmost influence on student achievement is a guaranteed and viable curriculum. With this point in mind, Harlem Preparatory Charter School has devised a clear, feasible three-dimensional framework for curriculum and instruction that will address our key educational priorities. The world-renowned International Baccalaureate (IB) World School Curriculum program will meet New York State Standards for achievement in all content areas and will provide the defining structure of HPCS’ curriculum framework. The tried and tested Science, Technology, Engineering and Mathematics (STEM) thematic program focuses on these subjects to help our nation’s youth gain the skills required to succeed in today’s challenging world, and promotes the ability to think critically and learn how to solve increasingly complex problems. STEM will be infused throughout all subjects to support the learning needs of our target population and “raise all boats” with respect to college-bound preparation. Universal Design for Learning (UDL) pedagogical methodologies will be actualized in HPCS’ instructional methods, incorporating multiple intelligences and varied assessments utilized throughout our school in order to provide an inclusive and integrative learning process.

The International Baccalaureate (IB) Curriculum Design program provides multiple points of access and engagement for teachers, administrators, and students that address academic achievement, English Language Learning (ELL), special needs and other barriers for our target population. Coupled to HPCS’ implementation of Universal Design for Learning (UDL) and the Science, Technology, Engineering and Mathematics (STEM) model, our curriculum framework provides an integrative and comprehensive design across subject areas. It will provide inclusion and adaptation for multiple levels of learning; instill key principles that shape and support the whole learner; and offer continuity between our initial Middle Years and the planned 2012 inception of our Diploma programs. Providing ease of academic transition between middle school and high school is key concern of ours, particularly given rising school dropout rates in our service area.

We believe the curriculum framework we have created meets these goals and also aligns with our mission and with our school-wide goals for student achievement, while supporting the positive and sustainable school culture we aspire to. Because we will offer both the Middle Years (Grades 6-10) and Diploma (Grades 11-12) Programs, it is necessary to provide an explanation of how the curriculum for each program is organized and to provide a description of the curriculum content for each of these programs.

Instructional Strategies and Teaching Methods that Support the Curriculum

Science, Technology, Engineering and Science (STEM): “The academic achievement gap has been measured from course selections to grades, and standardized-test scores to dropout rates, and college

graduation statistics.”⁵ For students in Harlem Districts #3 and 4, this is no exception, where large minority populations at significant economic risk reside, and where dropout rates are disproportionately high.⁶ On average, 40% of District 5 eighth graders score below grade level on standardized New York State Mathematics exam, and 68 percent fail to meet or exceed grade level on New York State English exams.⁷ These figures demonstrate that for students in Harlem Districts #3 and #4, failing mathematics scores are nearly double the national average. New York State Testing Program performance measures also show that too many District 3 and District 4 secondary students categorically fail to make adequate progress in English Language Arts and Math⁸ To close achievement gaps, foster active learning and critical thinking, prepare our students for the rigor of college and position them well for the upcoming employment market, our curriculum design team selected the Science, Technology, Engineering and Mathematics (STEM) teaching model, which we will infuse throughout our curriculum framework.

Conventionally, the four disciplinary strands of STEM (Science, Technology, Engineering, and Mathematics) are taught separately and independent from one other. At HPCS, all four strands will play an integral part in the teaching of the whole. STEM embodies an interdisciplinary, integrative approach to learning.⁹ Our STEM program will draw from the tenets, principles and methodologies already utilized and tested by the Massachusetts Institute of Technology’s (MIT’s) Science Program for Middle and High School students (the “Minority Introduction to Engineering & Science” Program), and Columbia University’s School of Engineering and Applied Science Fu Foundation Program. Dr. Cardinal Warde, a renowned member of the MIT’s Engineering Department faculty, will serve on HPCS’ advisory board, to help guide our STEM program. We will apply STEM through five main points of entry:

(1). Instructional units in subject areas across the curriculum will combine Science, Engineering, and Mathematics and Technology (STEM) applications as pedagogical critical inquiry and active learning strategies to offer our students the opportunity to explore creative and innovative solutions and apply what has been learned in the content area and to answer the core IB curriculum questions posed for each subject area.¹⁰

(2). Teachers in each discipline will apply these same STEM problem-solving and inquiry-based methodologies to each of the same IB curriculum’s thematic strands incorporated into the Middle Years Program.¹¹ HPCS will have two weeks of professional development activities, school and department meetings onsite in which teachers will be trained in STEM methodologies, discuss optimum curriculum block synchronization of IB thematic strands between the disciplines, and to create an effective and school-wide, “across the curriculum” application of STEM for each of the thematic strand and/or core curriculum activities.

(3). Students will learn from and collaborate with mentors in STEM professional fields. Mentorships will be accomplished through partnerships between HPCS and area universities, professional associations, nonprofit agencies, area government offices, and community businesses.

(4). STEM application will offer HPCS students concentrated learning experiences in laboratory activities that support creative, inquiry-based STEM-based learning across the Science disciplines, for class field work, and where relevant, may also be utilized for student’s capstone research projects.

⁵ K. Christie, “[States Address Achievement Gaps.](#)” ([Phi Delta Kappan](#), 2002); J.P. Greene, “[Public High School Graduation and College Readiness Rates in the United States.](#)” ([Manhattan Institute for Policy Research](#), 2003); [U.S. Department of Education, “National Center for Education Statistics,”](#) (U.S. Department of Education: [Digest of Education Statistics](#), 2002).

⁶ See Section 1.B on Target Population.

⁷ Test Pattern Graphic, “Is the Promise Real?” (*City Limits*, Vol. 34:1, 2010 March,)p. 22

⁸ See Section 1.B on Target Population

⁹ Teaching Institute for Excellence in STEM, “What is STEM?” (Teaching Institute for Excellence in STEM, n.d.), para. 2. <<http://www.tiesteach.org/stem-education.aspx>?>

¹⁰ Middle Years Thematic Strands: (1) approaches to learning; (2) community and service; (3) human ingenuity; (4) environments; and (5) health and social education]; Diploma Program Core Curriculum Program Requirements: (1) extended essay; (2) Theory of Knowledge course; (3) Creativity, Action Service); See Section 1, all IB Curriculum Program subject areas for more details.

¹¹ See Section 1.a and 1.b, IB Middle Years Program Thematic Strands and IB Core Curriculum Diploma Program Requirements.

(5) Annual STEM-based science project competitions at HPCS will result in top candidates being formally recommended for participation in MIT's and Columbia University's intensive summer course STEM programs. University officials note a strong correlation between program participation and admission to their own and other college engineering and science colleges.¹²

Combined, our activities applied to the STEM learning platform are well aligned to HPCS' mission and vision for a robust, active learning, inquiry-based and college bound educational experience, particularly for preparing our students to become future leaders in the fields of science, technology, engineering and mathematics, and instilling and supporting the habits of mind that sustain life-long learning.

Universal Design for Learning (UDL): The core principle of UDL is that to be appropriate, accessible, and authentically dedicated to student success, a school curriculum must incorporate alternatives that address the range and depth of need of their students, who bring to widely varied learning contexts and classrooms their own different backgrounds, diverse learning styles, abilities and disabilities. Rather than suggesting that all learning is the same, the UDL pedagogical model stresses the universal need to create learning opportunities that best fit each learner and that support each learner's progress.¹³ Using the tenets of learning as applied to neuroscience, this methodology finds that students engage all three recognition, strategic and affective brain networks while learning. Using the recognition neural network, students recognize essential cues and patterns that support learning of content. Tapping the strategic neural network, students master skillful strategies for expression or action in the learning of content. Finally, drawing from the affective neural network, students engage with learning. It is recognized in research that not all students use all three of these networks effectively or consistently.

This may be due to their own unique learning strengths, weaknesses, and preferences; it may be also due to barriers in the curriculum that prevent learning in one or more of these processes; and/or instructional strategies that "teach to" rather than involve students in learning may frustrate and impede learning across all three of these neural domains.¹⁴ To eliminate these barriers as much as possible and to also leverage and structure learning scaffolds between all three neural arenas, the combination of curriculum and instructional strategies we employ will provide a flexible framework that allows students multiple points of access, and which facilitates differentiated instruction.¹⁵ Specifically, we will apply UDL's three principal operations: (1) multiple, flexible methods of presentation, to support recognition learning; (2) multiple, flexible methods of expression and apprenticeship to support strategic learning; and (3) multiple, flexible options for engagement, to support affective learning.¹⁶ These three UDL operational principals will be aligned from top to bottom, bottom to top, across and within our curriculum and applied to classroom instructional strategies so that students maximize their learning experience at HPCS.

Curriculum Organization

Middle Years Program: The IB Middle Years Program (Grades 6-10) includes eight academic areas (subject groups), with five thematic areas of interaction at their core. Students are required to study English, a second language, humanities, sciences, mathematics, arts, physical education and technology. In the final year of the program, students engage in an individual capstone essay, which allows them to demonstrate the understandings and skills they have developed throughout this integrated program. Each subject group incorporates broad objectives that allow a variety of teaching and learning approaches, and

¹²Minority Introduction to Engineering and Science," (MIT Office of Engineering Outreach Programs, 2010), para. 2. <<http://web.mit.edu/mites/>>

¹³ "What is Universal Design for Learning." *Teaching Students in the Digital Age*. (CAST, 2010), para. 2. <http://www.cast.org/teachingeverystudent/ideas/tes/chapter4_1.cfm>.

¹⁴ "UDL Implementation," *Teaching Students in the Digital Age*. (CAST, 2010), para. 3. <http://www.cast.org/teachingeverystudent/ideas/tes/chapter4_4.cfm>

¹⁵ "The Framework for UDL: Three Principles," *Teaching Students in the Digital Age*. (CAST, 2010), para. 1-3.

¹⁶ "The Framework for UDL, Three Principles", para, 3.

which address the domains of knowledge, understanding, skills and attitudes: (1) **Knowledge**: The essential facts students need to remember that guarantee subject competence; **Understanding**: The methods students utilize to interpret, apply or predict facets of the subject; (2) **Skills**: The range and efficacy of students; applications of learned content to new situations; (3) **Attitudes**: The degree of change in students from the learning experience. Various aspects of the areas of interaction are addressed naturally through and across the distinct disciplines. The five Areas of Interaction (AOIs) permit students to connect their understanding to real world circumstances. “AOIs give meaning to what is learned through the exploration of real-world issues; encourage higher-order thinking skills to deepen understanding; help students develop positive attitudes and a sense of personal and social responsibility; engage students in reflection to better understand themselves as learners; and lead students from academic knowledge to thoughtful action”¹⁷

Pedagogical methods and learning strategies will reinforce that subject areas are learned by students through the five AOL lenses. Moreover, some aspects of AOIs, including particular topics linked to “Approaches to Learning” (ATL) or Health and Social Education, will be reinforced through our Homeroom program. As students employ the AOIs, they will advance through a progressive, 3-stage Inquiry Cycle, in which they 1) increase consciousness and perception of issues, 2) consider their understanding of, connections to and participation in those issues, and 3) engage in reflective and affirming action. Overall, the fluidity of the Middle Years curricular model, the interrelatedness of the subjects and AOIs, learning objectives rigorously aligned to the New York State Standards and the opportunities provided for active inquiry and differentiated instruction meet important criteria for the actualization of HPCS’ mission and vision for our students.

HPCS has correlated its subject course offerings for the Middle Years Program in alignment with all six IB Middle Years subject areas. There are nine, 40 minute periods for each class listed, and forty periods for each student across all subject areas, though the amount of teaching time devoted to each subject changes over time, with increased focus in the areas of Math and Science, in particular as students matriculate through the program:

| Middle Years Subject Area | Subject Courses |
|---|---|
| Language A (ELA) | English Language Arts 6-10 th Grade; ESL |
| Language B (Foreign Language) | French, Spanish, Latin (AB Initio*, Level 2-4) |
| Mathematics | Grades 6-10 Math |
| Humanities | Humanities Grades 6-9; World History Grade 10; US History I & II; 10 th Grade Geography |
| Sciences | Grades 6-8 General Science; Grades 9 General Biology; Grades 7 or 8 Earth & Space Science; Grades 9 or 10 General Chemistry |
| Arts | Music, Visual Arts |
| Technology | Technology Grades 6-10 |
| Personal & Social Education | Grades 6-10 Personal & Social Education |
| Community & Service Project ¹⁸ | Through Faculty Advisor supervision; IB assessment |

Middle Years Program Course Content & Sequence

Language A: Five Hours Per Week: “Language A” English Language Arts (ELA) classes in grades 6-10 are essential to the curriculum because they traverse the boundaries of all traditional disciplines. Each addresses all four New York State Standards. As students progress from one course to the next, complexity of materials and tasks in the students’ independent application of skills and strategies increases. Reading, writing, speaking, listening and viewing competencies are integrated throughout

¹⁷ International Baccalaureate Program, *MYP: From Principles into Practice* (Geneva: IB World School), 2008.

¹⁸ The Community and Service Project is a requirement for promotion to our Diploma Program

students' learning experiences. Grammar, spelling and reading comprehension are all areas of emphasis and appropriate to each grade level.

| Language A (English Language Arts) | |
|---|--|
| <u>Grade 6 English</u> | Ability to communicate both orally and in writing. Course material facilitates development in these areas and addresses all the areas of interaction. |
| <u>Grade 7 English</u> | Learn history of English and roots of the language, learn to set personal goals for work, self-assessment; develop/apply planning, drafting and revising skills |
| <u>Grade 8 English</u> | Use texts from various cultures and time periods; hone writing, listening and negotiation skills; apply processes of collecting ideas, drafting, conferencing, and rewriting. |
| <u>Grade 9 English</u> | Learn literary analysis & skills involved in presenting objective, expansion of reading interests, poetry and prose reading & writing, development of oral, reading and library skills |
| <u>Grade 10 English</u> | Study increasingly sophisticated texts and develop and augment critical concepts and vocabulary. Students learn library research skills and the use of secondary sources. |
| <u>ESL</u> | Develop English Language & academic skills through learning and activities correlated to levels of language proficiency that integrate listening, speaking, reading and writing that develop higher order cognitive academic language proficiency. |

Language B: Four Hours per week of Modern Foreign Language or ESL (*1.5 Hours per Week of optional Latin): The Language B program aims to meet the needs of students of mixed ability and varied backgrounds in foreign language study. Students develop linguistic skills fundamental to the language learning process: speaking, listening, reading and writing. Through the areas of interaction, teachers facilitate creativity, cultivation of good study habits, understanding of and open-mindedness towards people from other cultures.¹⁹ Each Level represents two semesters of instruction. Unit content includes: Communication, Culture, Connections, Comparisons and Experiences. French and Spanish are offered as a five-year program from Grades 6-10. Students are grouped according to previous language exposure:

| Language B | |
|-------------------|--|
| <u>Level 1</u> | Students introduce themselves and others, answer basic questions, interact/communicate using familiar vocabulary. Basic grammar structures and vocabulary are introduced. |
| <u>Level 2</u> | Topics: Self, food, shopping, house and home, fashion, local geography and free time. Aims: Learn basic grammatical concepts, frequent expressions, and produce short written tasks. |
| <u>Level 3</u> | Topics: School life, feelings, shopping, leisure activities, the environment and vacation plans. Wider grammar structures are practiced and developed. Students produce small written tasks. |
| <u>Level 4</u> | Students express more freely in spoken and written language, use a wider range of verb tenses/some complex grammar structure, read and write more elaborate reading material. |
| <u>Level 5</u> | Topics: Social issues, the media, health, environment, immigration/racism. Aims: Competent reading of literature, greater fluency of grammar/expression, advanced oral and written work. |

Humanities (Social Studies): 4 Hours per Week: The Humanities component includes history and geography. Aims are to communicate and interpret historical and geographical information and to foster appreciation of these subjects. Students gain a greater understanding of their place in the world and their own identity, and develop an international perspective. Learning focuses on cultural identity, respect for the values of others, responsibility towards community, environment and global identity. Areas of interaction are integrated to promote holistic understanding. History and geography are combined through Grade 9. Grade 10 history and geography are two separate subjects.

| Humanities | |
|---------------------------|---|
| <u>Grade 6 Humanities</u> | Topics: Development of early peoples and civilization: The Fertile Crescent, Ancient Egypt, Greece and Rome. Aims: Explore impact humans have on regional environments, |

¹⁹ . For both our Middle Years Program students and our future Diploma Program students, HPCS will support our language curriculum and learning priorities through a fully-equipped Rosetta Stone Language Lab.

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| | human interaction with natural processes; human, physical and environmental geography. |
| <u>Grade 7 Humanities</u> | Topics: Development of early civilizations in the Americas, Africa, India, the Middle East and China. Aims: explore historical methods of analysis; explore environmental change and shifting relationship between different peoples and their environments. |
| <u>Grade 8 Humanities</u> | Topics: Middle Ages, Renaissance, and 15 th & 16 th century European advances. Aims: Apply geography to voyages of discovery, development and topography of continents; colonization and the developing world. |
| <u>Grade 9 Humanities</u> | Topics: Global History of the 20th Century. Aims: Apply geographic lens to explore conflict related to historical events. STEM-based water management involves fieldwork. |
| <u>Grade 10 World History</u> | Topics: The American and French revolution, Enlightenment and the Scientific Revolution, the Industrial Revolution, and civil wars. Aims: Examine and analyze political, economic and social changes. |
| <u>US History I</u> (*Advised between grades 6-8) | Topics: U.S. History before 1877; historical analysis used to examine colonial history, philosophies, ideas and events that shaped the U.S; fundamental concepts in civics, economics, and geography utilized to incorporate sequential, chronological history of the U.S. as well as patterns of change and continuity. Aims: Develop analytical and interpretive skills to examine primary sources concerning landmark events, ideas, and culture. |
| <u>US History II</u> (* US History I prerequisite) | Topics: U.S. History since 1877; students extend historical analysis skills; apply essential concepts in civics, economics, and geography. Aims: Attain the ability to analyze the social, political, and economic impacts of the Civil War and develop an awareness of patterns of continuity and change. |
| <u>10th Grade Geography</u> | Topics: Population dynamics, development and the quality of life; settlement, urbanization and global environmental issues. Aims: Engage in fieldwork, oral presentations, problem-solving, case studies, analyzing sources, and creating scale models. |

Mathematics: Five hours per week: An integrated spiral curriculum approach is used—each year students work on skills and an increasingly complex range of topics in numbers, algebra, geometry, trigonometry, statistics and probability, and discrete mathematics. Instructional strategies refine concepts already covered and gradually introduce more advanced concepts. By careful grouping, learning is supported to achieve success. Areas of interaction and application are explored through project work and case studies. Students develop skills in organizing and communicating ideas as approaches to learning.

| Mathematics | |
|-------------------------------------|--|
| <u>Grade 6: General Mathematics</u> | Topics: Explore numbers, algebra, geometry, statistics and discrete mathematics. Aims: Investigate, communicate and apply mathematical concepts, including how numbers underpin mathematics and how math is applied in real life settings and for recreational use. |
| <u>Grade 7: General Mathematics</u> | Topics: Practical application of numbers, algebra, geometry, statistics and discrete mathematics. Aims: Consolidation and development of skills previously attained; interdisciplinary mathematical application; percentages; identify mathematical patterns in real life scenarios. |
| <u>Grade 8: General Mathematics</u> | Topics: Extensive application of numbers, algebra, geometry, statistics and discrete mathematics. Aims: Consolidation and development of conceptual sequences and relations; geometrical measurement; applied probability and its role in rational thought. |
| <u>Grade 9: General Mathematics</u> | Topics: Further extensive study and application of algebra, geometry, statistics and discrete mathematics. Aims: Exploration and application of algorithms and their ability to manipulate algebraic expressions; algebraic equations and values; graphing linear geometric equations; historical role of mathematics. |
| <u>Grade 10: General</u> | Topics: Advanced study and application of geometry, statistics and discrete mathematics. Aims: Greater precision in communication and the ability to proof equations; rational and |

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|--------------------|---|
| <u>Mathematics</u> | irrational numbers; trigonometry; the Pythagorean Theorem; functions, sequences; trigonometric values of angles and scientific application. |
|--------------------|---|

Sciences: Five Hours per Week: MYP Sciences curriculum provides a sound foundation of scientific knowledge with a strong emphasis on scientific inquiry, investigative and analytical skills. Students reflect on social and ethical implications of science and practice skills to communicate understanding. The areas of interaction encourage students to link knowledge of science to real world issues, to develop awareness that applications of science may be both beneficial and detrimental and to develop an understanding of the scientific method and the ways in which scientific discoveries are made.

| Sciences | |
|--|---|
| <u>Grade 6: General Science</u> | Topics: Investigative skills, collecting reliable data using observations rather than inferences, biodiversity and maintenance of the biosphere; chemical and physical reactions. Aims: Know and apply scientific method; scientific report writing, presentation and model analysis using environmental case study investigations. |
| <u>Grade 7: General Science</u> | Topics: Application of scientific theories, rudimentary physics, chemistry, and anatomy; muscular and skeletal structure; atomic structure; acids, bases, solvents and solutions. Aims: Explain the effects of heating and cooling on weather and climate, analyze what muscles and bones differentiate the human body from other species’. |
| <u>Grade 8: General Science</u> | Topics: Intermediate Biology/Chemistry/Physics: Human health and fitness, homeostasis, genetics, periodicity, chemical reactions, astronomy, gravitational force as it applies in physics. Aims: Learn and apply scientific techniques and research skills to explore topics of study. |
| <u>Grade 9: Biology/Chemistry/Physics</u> | Topics: Biology: circulatory systems, sexual reproduction and human impact on the environment. Chemistry: atomic theory of matter; separation and purification techniques; properties of metals and practical applications. Physics: electricity; nuclear physics and its impact on health and society. Aims: Identification of aforementioned topics of study and enabling students’ to construct experimental practical applications. |
| <u>Grade 10: Biology/Chemistry/Physics</u> | Topics: Biology: cell structure and microscopy; the human nervous system; animal behavior studies; digestion; photosynthesis and related applications; genetics and inheritance. Chemistry: atomic structure and bonds, chemical equations and formulas, periodic table, acids/bases, moles and natural chemistry. Physics: light, Newton’s laws, electromagnetic fields and the electromagnetic spectrum. Aims: Identifying, describe and utilize formulas and theories to explain a variety of natural phenomena. |

Technology: 1.3 Hours Per Week: This course aims to develop creative problem-solvers who are caring and responsible individuals; able to respond critically and resourcefully to the demands of an increasingly technological society and to appreciate the importance of technology for life, society and the environment. Technology is organized into three branches of study: information, materials and systems. The program combines both computer technology and design technology in one curriculum area.

| Technology | |
|----------------------|--|
| <u>Grade 6 Tech.</u> | Topics: The design cycle; “design and make” activities; introduction to a range of digital imaging applications. Aims: The ability to create a project utilizing stop frame animation. |
| <u>Grade 7 Tech.</u> | Topics: CAD/CAM (Computer Aided Design/Computer Aided Manufacture) software; soldering of basic circuits. Aims: Students will be capable of completing their first “end to end” tech project revolving around the production of a design folder. |
| <u>Grade 8 Tech.</u> | Topics: Intro to vector-based animation and composition. Aims: Students will be capable of completing three interdisciplinary projects utilizing their current tech knowledge. |
| <u>Grade 9 Tech.</u> | Topics: Wide range of architecture and multimedia software introduced; material selection; varied techniques; applications. Aims: Design work will focus more student-led projects. |
| <u>Grade 10</u> | Topics: Advanced CAD/CAM; specialist software and manufacturing equipment. Aims: An |

| | |
|--------------|---|
| <u>Tech.</u> | introduction to engineering and advanced project design will provide students with the opportunity to develop skills readily transferable to a variety of contexts. |
|--------------|---|

Personal and Social Education (PSE): 4 Hours per Week: PSE focuses on personal, social and physical development. Discussion-based curriculum incorporates current events. Units including sexual health, mental health and conflict resolution are taught at all grade levels through age appropriate topics and vocabulary. Media and specialist speakers augment student learning experiences.

| | |
|---------------------|---|
| <u>Grade 6 PSE</u> | Topics: MYP introduction; differing cultural identities; physical and sexual health (focusing on body changes); peer pressure and conflict resolution. Aims: To help students settle into their new academic and social environment and adjust to secondary school. |
| <u>Grade 7 PSE</u> | Topics: Environmental issues; types of communities and social relationships. Aims: Students continue to develop personal, social, emotional and physical understanding and awareness. |
| <u>Grade 8 PSE</u> | Topics: Government, democracy, and human rights; social pressures; sexual reproduction (safety and responsibility). Aims: Students learn how society can affect their personal, social and emotional health and how they as individuals can affect a society/community. |
| <u>Grade 9 PSE</u> | Topics: AIDS awareness; nutrition; civic services, resources and responsibilities. Aims: Guest speakers and instruction will enable students to consider their future academic path, develop their awareness of how to care for themselves as young adults and learn where to find supportive resources. |
| <u>Grade 10 PSE</u> | Topics: Stress management; academic planning and success; study skills; citizenship; sexual protection and related issues. Aims: Students will construct a personal project on social issues and personal involvement and will also begin to plan their future academic path in detail via on-site counseling and information on requirements and application procedures. |

The Arts: 3.3 Hours per Week: Arts curriculum encompasses the visual arts. Courses aim to (a) organize learning around the creative cycle; (b) encourage creative energy, communication, interaction and reflection; (c) help students become developing artists; and (d) acquaint our students with the creations of artists' works of enduring worth. Students will be brought into contact with the art forms and aesthetic values of other cultures as well as their own, develop perceptions between ideas and art, identify particular creative abilities and practice appropriate techniques.

| Music | |
|----------------------------|---|
| <u>Grade 6-8</u> | Topics: Renaissance, baroque, classical, romantic, 20 th century and contemporary artists and masterpieces; musical instruction and application. Aims: Begin composition and start to use software developed for music, resulting in a performance where the intricacies of involving an audience or performing on the internet are experienced. |
| <u>Grade 9-10</u> | Topics: Advanced identification (both from reading and listening); Aural and rhythmic dictation; advanced musical theory and composition. Aims: Compose differing varieties of music on manuscript paper and/or using software to perform in school, in the local community or on the internet. |
| Visual Arts | |
| <u>Grade 6 Visual Arts</u> | Topics: Artistic preconceptions; drawing, painting, sculpture, photography and architectural masterpieces and artists. Aims: Maintain a portfolio of differing styles and approaches to multiple artistic projects. |
| <u>Grade 7 Visual Arts</u> | Topics: Drawing, processes and applications; drafting. Aims: Work from observation, memory and imagination. Drawing is presented as the grammar of visual education, with research and conceptual exploration becoming a greater focus. |
| <u>Grade 8 Visual Arts</u> | Topics: Artistic design; media applications. Aims: Reflection and planning is recorded in student portfolios; students are given clear criteria on skills assessed, and how to document their thinking. The aim is to involve students in the process of identifying their own areas of |

| | |
|-----------------------------|---|
| | strength and those that need improvement. |
| <u>Grade 9 Visual Arts</u> | Topics: Art history; fundamental elements of art and design; critical analysis. Aims: Students will be exposed to techniques and concepts through demonstration and experimentation. Students will reflect upon artistic methods, analyze art works critically and make informed aesthetic judgments. |
| <u>Grade 10 Visual Arts</u> | Topics: Presentation aesthetics and manipulation. Aims: Students will begin the process of placing their work into the context of history. Students learn how to present their work as a sequential development of ideas throughout the course, both in group critiques, and through exhibiting their work. |

Curriculum Organization: The Diploma Program: After establishing a consistent student population in our Middle Years Program, HPCS plans to implement IB’s world-renowned Diploma Program in 2012. This two-year program will seamlessly couple to our Middle Years Program curriculum. A key purpose for this Program continuity is to provide the needed structural, social and emotional attachments in the school community²⁰ and a strong educational culture to support these new secondary level students from Harlem Districts #3 and #4 during what statistics demonstrate are notoriously pivotal and often final stages in their academic careers.²¹ The Diploma curriculum includes six subject groups and three compulsory components—the extended essay, theory of knowledge and creativity, action, service—that are central to the Diploma Program. A minimum of 24 credits, plus the Theory of Knowledge course (ToK), the Extended Essay and compulsory participation in the Creativity, Action and Service (CAS) capstone project are needed to graduate. Each year, students must be enrolled in three or four higher level (HL) and two or three standard level (SL) courses. All courses are two year courses. One course is selected from each of groups 1-5, and a 6th course chosen may be chosen from groups 1-6.

The Extended Essay, with a prescribed limit of 4,000 words, offers students the opportunity to investigate a topic of individual interest, and familiarizes students with the independent research and writing skills expected at a university. The interdisciplinary ToK course aims to provide student coherence by exploring the nature of knowledge across disciplines while stimulating appreciation of other cultural perspectives. Participation in HPCS’ ongoing Creativity, Action, and Service (CAS) program fosters students’ awareness and appreciation of life beyond the academic realm and encourages students to be involved in their communities through artistic pursuits, community engagement and volunteer service work. Students complete a series of activities culminating in one or a series of capstone projects demonstrating their work. Over the two years of the Diploma Program, students are required to complete 100 hours of community service as part of this activity.

| Subject Area | Credits | Subject Courses |
|-------------------------------|-----------|--|
| Language A (ELA) | 4 | English Language Arts 11 th and 12 th grade |
| Language B (Foreign Language) | 4 | French, Spanish, Latin ²² (ab initio, Level 1 and Level 2, or ELL |
| Mathematics | 4 | Math 1, Math II, Mathematics Studies |
| Humanities | 3 | Contemporary History, Geography, Economics |
| Sciences | 4 | Biology, Chemistry, Physics, Design Technology |
| Arts | 3 | Music, Visual Arts |
| Theory of Knowledge | 1 | ToK course |
| Community, Action & Service | Pass/Fail | Through Faculty Advisor supervision; IB assessment |

²⁰Lehr, C.A., Johnson, D.R., Bremer, C.D., Cosio, A., & Thompson, M. *Essential Tools: Increasing Rates of School Completion: Moving from Policy and Research to Practice*. Minneapolis, MN: University of Minnesota, Institute on Community Integration, National Center on Secondary Education and Transition (2004), pp 31-60.

²¹ See Section 1.B. Target Population section for details

²² Latin is an elective in the DP program.

HPCS Diploma Program (Grades 11-12) Subject Descriptions and Course Sequence

Group 1: English Language Arts courses focus on the use of English language in many different contexts. Students study and apply skills to works from a variety of sources and genres, both literary and non-literary. They learn critical techniques that allow them to analyze meanings created by language as it is used for different social and cultural purposes. There is a focus on developing students' ability to use a range of oral and written forms of language to analyze, justify and evaluate ideas and to effectively and accurately apply grammar, research and writing skills to increasingly challenging assignments.

| Language A (ELA): Language and Literature | |
|--|---|
| Standard Level | Topics: Literary genres/contexts; Essay formats. Aims: Students will learn literary analysis techniques and differing literary forms and formats and how to contextualize them. |
| Higher Level | Topics: Traditional and contemporary renowned artists and texts. Aims: Students will be able to critically analyze language as it is used for different social and cultural purposes. Students develop their abilities to use a range of oral and written forms of language to communicate, analyze, and/or evaluate ideas. |

Language A: Language and Literature: Higher Level (HL) and Standard Level (SL): This course focuses on the use of language in many different contexts. Students explore works from a variety of sources and genres, both literary and non-literary; learn critical techniques for the analysis of meanings created by language as it is used for different social and cultural purposes; and develop their abilities to use a range of oral and written forms of language to analyze, justify and evaluate ideas..

Group 2 Language Acquisition

| Level 1 AB Initio Standard Level): French and Spanish, or ESL | |
|---|---|
| Aims | Develop linguistic tools to respond and interact appropriately in a range of everyday situations; gain insight into target language culture and civilization; demonstrate understanding of cultural diversity and/or similarities between the target language and the students' own |
| Topics | Individual and society, Leisure and work, Urban and rural environment, |
| Language B (Higher Level & Standard Level) French, Spanish and Latin | |
| Aims | Explore the culture(s) and literature connected to it; approach learning of language are through meaning; expansion of receptive, productive and interactive skills. |
| Topics | Communication and Media; Global issues; and Social relationships. At Standard Level and Higher Level, teachers also select two of following five options: Cultural diversity; Customs and traditions; Health; Leisure; Science and technology. At Higher Level, students also read two works of literature. |

Group 3: Individuals and Societies: History, Geography and Economics:

| Contemporary History (Higher Level and Standard Level) | |
|---|---|
| Aims | Investigate the past and links to the present; develop awareness of the forces, people and events shaping economic, political and social; examine and analyze historical events in international context; use historical source materials; discover diverse interpretations of the past; and evaluate the value, limitations and reliability of sources |
| Topics | Causes, practices & effects of war; origins/development of authoritarian and single-party states; role of international organizations; the Cold War. HL students add European Great Powers relations 1815-1852; and growth of the German and Italian states |
| Geography | |
| Aims | Interpret/analyze geographical material; formulate and undertake geographical investigations, use quantitative analysis methods, interpret maps, producing written material; understand interrelationships between people, places, spaces and the environment; |

| | |
|--|---|
| Topics | Patterns and Change: Populations in transition; Disparities in wealth and development; Patterns in environmental quality and sustainability; Patterns in resources consumption. HL students add Hazards and Disasters; Extreme Environments |
| Business and Management (Higher Level and Standard Level) | |
| Aims/Topics | Main themes of organizational resources and challenges are set against a background of decision-making, communication and change. Aims and Topics: Development understanding of how and why individuals form organizations; organizational problems and life cycles; types of organizations; the principles of organization; ongoing process of decision-making; interdependency's effects on problem-solving; and role of individuals and groups within organizations. |

Group 4: Experimental Sciences: With a focused concentration in STEM activities and learning strategies, science at Diploma level aims to develop an appreciation of the nature of the scientific method and the role that scientific knowledge and its applications play in society. Curriculum addresses the international nature of science and its potential for solving problems that transcend national boundaries.

| | |
|---|---|
| Biology: (Standard Level): Includes Lab Work | |
| Aims | Apply biological knowledge and methods that relate science and technology to current issues; develop experimental and investigative skills to understand science as a process; explore moral, social, economic and environmental implications of science and technology. |
| Topics | Statistical analysis; Cells; Genetics; Ecology and evolution; Human health and physiology. |
| Biology(Higher Level) Includes Lab Work | |
| Aims | Same as above but more in-depth, particularly statistical analysis |
| Topics | Cells; Genetics; Ecology and evolution; Human health and physiology; Nucleic acids and proteins; Cell respiration and photosynthesis; Plant science. Optional topic: neurology and behavior or further human physiology. |
| Chemistry | |
| Aims | Learn and apply collection, analysis and evaluation methods |
| Topics | Stoichiometry and atomic theory; Bonding; Energetics; State of matter; Equilibrium; Acids/bases; Oxidation/reduction; Periodicity. Grade 12 includes Kinetics; Organic chemistry and Chemical industries |
| Physics: | |
| Aims & Topics | 11 th grade: Measurement; Forces and Motion; Momentum and Energy; Thermal physics and Global Climate; Electric Charge, Fields and Circuits; Electromagnetism and Fossil Fuels power production. 12 th Grade: Oscillations and waves; Nuclear physics; Nuclear Energy and Renewable Energy; Quantum Physics and Digital Technologies Optional topics: Astrophysics; Relativity and Particle physics; Electromagnetic waves; and Medical physics. |
| Environmental Systems and Society | |
| Aims | Identify/analyze environmental problems, evaluate relative risks, and examine alternative solutions. Laboratory and field investigation component supports a systems approach |
| Topics | Major ecosystems, global cycles, human population; carrying capacity, natural resource exploitation; natural diversity, and pollution management from a global perspective |

Group 5: Mathematics: Students must study at least one course in mathematics; and one of their elective courses must be in computer science. Students select from among four mathematics courses based upon pre-existing skills/knowledge. Courses facilitate development of mathematical knowledge, concepts and principles; logical, critical and creative thinking; powers of abstraction and generalization an appreciation of mathematics' international dimensions and of the multiplicity of its historical and cultural perspectives. STEM-based labs provide critical linkages between mathematics learning and real-world situations.

| Mathematics: (Higher Level): | |
|---|---|
| Aims | Explore and apply advanced math skills to topics |
| Topics | Algebra; functions and equations; circular functions and trigonometry; matrices; vectors; statistics and probability; and calculus. An additional topic from sets, relations and groups, series and differential equations, discrete mathematics or further statistics. |
| Mathematics: (Standard Level) | |
| | Learn, explore and apply math skills to topics |
| Topics | Algebra, functions and equations, circular functions and trigonometry, geometry, matrices, vector, statistics and probability, and calculus. |
| Mathematical Studies (Standard Level): | |
| Aims | Explore apply and extend math skills to topics |
| Topics | In more depth: the graphic display calculator; number and algebra; sets, logic and probability; functions; geometry and trigonometry; statistics; introductory differential calculus; and financial mathematics. |
| Further Mathematics (Standard Level) | |
| Aims | Expanded exploration, application and extension of math skills to topic |
| Topics | In more depth: Geometry; statistics; probability; sets; relations; groups; series; differential equations and discrete mathematics |

Group 6: Arts: Visual Arts and Music:

| Visual Arts (Higher Level and Standard Level): | |
|---|--|
| Aims | Develop visual language in a personal, increasingly sophisticated way; record research, conduct experimental development; put own work and the work of artists/designers into context, develop critical faculties, foster self-motivation; reflect upon progress |
| Topics | Fundamentals of art and art design; two and three dimensional media-- printmaking, painting, and digital media. |
| Visual Arts (Standard Level): | |
| Aims | Studio work; Research, critical thinking; intellectual engagement. Choice of two options; Performance-- prepare exhibition or conduct research; maintain portfolio of work and submit research workbooks |
| Topics | Historical and contemporary exploration and application of artistic techniques and ideas |
| Visual Arts (Higher Level) | |
| Aims | Intellectual engagement; Take on series of exercises to challenge preconceptions; refine skills in personal motivation and self-discipline. |
| Topics | Art mediums, artists and techniques. Student-directed projects develop as students refine personal motivation and self-discipline, skills and knowledge |
| Fine Arts Forum (Required of all Visual Arts Students) | |
| Aims | Fieldtrips provide students with ideas, inspiration and research material. Students will also practice and apply life-drawing skills in drawing from the human figure. |
| Topics | Exploring Real World Art and Artists: Visit exhibitions or have artists leading workshops, and full use is made of New York City as an international arts capital |

The Theory of Knowledge: The ToK course is one of the three core requirements for obtaining the International Baccalaureate Diploma and provides coherence to the IB Program. The course will cover the full two years of the program by being taught during the spring semester of 11th grade and the fall semester of 12th grade. Course candidates reflect on all aspects of their work throughout their diploma program at HPCS, with weight placed on the role of language and thought and on the development of the student's critical thinking skills.

Additional Diploma Program Requirements: Creativity, Action, Service emphasizes experiential learning. Over the course of their program, students explore CAS projects that they, themselves create and plan that includes carrying out action-oriented creative projects or an action-oriented service-oriented community, environmental or international volunteer project that relates to student academic learning. Students document evidence of initiative; planning, and organization; amount of commitment and effort displayed; and individual achievement and development and maintain CAS logbooks that are reviewed quarterly. Extended Essay: Students complete a 4,500 word essay project on a topic of choice from one of the six DP Program subject areas. With faculty advisor mentoring, students apply research, writing, self-direction and motivation skills by writing outside of the classroom on their own time. The process starts in the fall of the junior year and ends in December of the senior year.

Professional Development Support for Curriculum and Instruction: Our plans call for both in-house and external professional development activities that support our curriculum and instructional strategies and pedagogical methods associated with our curriculum framework. Ongoing priorities will include training and support for effective instruction that is linked explicitly to New York State Literacy Standards and the New York State Learning Standards for Mathematics, effective use of student assessment data to improve instruction, and effective instructional strategies and support interventions for students at risk:

- (1) Before the start of each school year in August, all teachers will take part in a “Back to School Professional Institute.” Teachers will receive in-house and consultant training on the content and delivery strategies of the IB Curriculum Program, the STEM platform, the UDL model, our Response to Intervention Data Assessment program for all students, culturally responsive teaching, and Parent/Family Engagement.
- (2). In September, November, February and April, single-day workshops will be provided on Saturdays on a staggered basis to all faculty that focus on curriculum-related instructional methods, school-wide and interdepartmental coordination of IB-related thematic strands, intersections between the curriculum framework, instructional strategies and student achievement, long-term implementation goals, and on best practices in student academic advisement .
- (3). Departmental curriculum planning and discussion sessions will take place twice weekly at the end of the school day. On a rotating basis, the Principal will attend and participate in these departmental meetings
- (4). To promote a vibrant and effective teaching/learning culture, HPCS teachers will maintain an electronic portfolio to be reviewed each year by the principal and executive director for annual evaluation, with weighted assessments for teaching, professional development activities, and community involvement. Teacher performance competencies will be aligned to the National Board of Professional Teaching Standards (NBPTS), and NBPTS’s Five Core Propositions: (i.) Teachers are committed to students and their learning; (ii.) Teachers know the subjects they teach and how to teach those subjects to students; (iii.) Teachers are responsible for managing and monitoring student learning; (iv.) Teachers think systematically about their practice and learn from experience; and (v.) Teachers are members of learning communities.
- (5). With a future funding source, annual teacher benefits will also include professional development “Choice Vouchers,” which may be applied to administration-approved professional development activities on a case-by-case basis, including curriculum/education field appropriate support materials, workshop/seminar/conference registration fees, National Board Certification, or advanced higher education course work.
- (6). Upon the close of the academic school year, each department will prepare for and take part in a one-day, on-site school-wide retreat where year-end curriculum and instructional progress appraisals and year-ahead goal-setting will be reported, discussed and finalized.
- (7). For external ongoing support, we will utilize the IB Program’s services, which include 20 hours of onsite consulting, teacher training at IB workshops; an IB counseling service, an IB online curriculum center that includes curriculum guides and teacher resources, and access to online IB subject specialists.

By guiding and reinforcing these professional development activities, HPCS will continuously position all of its teachers optimally within our robust and rigorous learning community.

B. SCHOOL CALENDAR AND DAILY SCHEDULE²³

School Calendar: HPCS will be open from 7:15 a.m. until 5:30 pm. Breakfast will be available at 7:20 a.m., and the formal school day will end at 4:15 p.m. Our school will utilize a block schedule. There will be nine, 40-minute-long instructional periods of teaching per day, compared to the traditional 5.5 periods in traditional public schools. Each teacher will have one period per day for instructional preparation and planning. Between 4:15 p.m. and 5:15 p.m., extracurricular activities will be offered, including IB “Boot Camp,” tutoring, clubs, sports, electives and student government. One hour of our afterschool program will be used for studying, playing games, participating in physical activities, club meetings, student-teacher meetings, science workshops, independent study and electives. In July, HPCS students will attend a four weeklong “Thinking and Writing” or STEM summer program on Mondays through Fridays. In August, our students will engage in a three weeklong Creativity-Action-Service (CAS) project. Overall, HPCS students will receive two hours and twenty minutes more of instruction per day than traditional public students and will be in school 215 days, a full 35 days longer than traditional public schools year. Students are required to take a specific number of hours of instruction per week in each subject area that is provided through our IB curriculum.

| Middle Years (Grades 6-10) Program Subject Area Instruction Time | | | | | | | | | |
|--|---------|------------------|------|---------|------------------------|-------------------------------|------------|------|--------|
| Subject Area | English | Foreign Language | Math | Science | Technology & Computing | Personal and Social Education | Humanities | Arts | Latin* |
| Minutes Per Week | 200 | 160 | 200 | 200 | 200 | 160 | 160 | 160 | 90 |
| *Latin is optional | | | | | | | | | |

High School courses are two year courses. Excluding electives, students taking Higher Level classes spend 200 minutes per week in courses in the subject areas, while students in Standard Level classes spend 160 minutes per week in subject area courses, as illustrated below:

| Subject Area | Language & Literature (HL) | French (SL) | Math (HL) | Biology (HL) | Contemporary History (SL) | Music (HL) |
|------------------|----------------------------|-------------|-----------|--------------|---------------------------|------------|
| Minutes Per Week | 200 | 160 | 200 | 200 | 160 | 160 |

More time during the school day and school year, in addition to extra-curricular activities designed to both extend learning and support the whole student are well-aligned to our mission of robust active-learning, inquiry-based, and college-bound educational experiences for our students, and the support of their intellectual, social and affective development.

Yearly Calendar: HPCS has created a school year that is longer than a traditional public school year. Our academic year will start the first of July and run through the third week in August, allowing students and families one week of summer vacation. Student and teacher recruitment processes will begin in May. There will be orientation for staff and parents and curriculum training for teachers. Our summer program begins in July and ends in August. We have also structured our schedule to allow for more opportunities to monitor and report our students’ progress to families throughout the year. Also included are our community-based partnerships celebrations days, academic awards day, monthly science lectures and

²³ See Attachments 3 and 4 for School Calendar and Daily Schedule tables.

workshop days, parent meetings, and professional development training days. The attachment explains in greater detail our yearly calendar and daily schedule.

C. ALIGNMENT TO TARGET POPULATION NEEDS

Anticipated Enrollment: HPCS has a goal of maintaining an enrollment of 764 students when our school is at full capacity. We will admit new students in the 6th grade only between 2011-12 and 2015-16. Beginning in 2014-15, 9th graders will also be added and it is anticipated that our full capacity will be reached by the beginning of the 2017-18 school year. We believe it is important to limit enrollment to 6th grade until 2014-15 in order to build a stable student population and cohesive learning culture. By the time that new 9th graders are added in 2014-15, the initial cohort of 9th graders will be able to act as peer support for newly-admitted 9th grade students, as well.

Anticipated Enrollment Table²⁴

| School Year | 2011-12 | 2012-13 | 2013-14 | 2015-16 | 2015-16 | 2016-17 | 2017-18 |
|-------------|---------|---------|---------|---------|---------|---------|---------|
| 6 | 125 | 125 | 125 | 125 | 125 | 125 | 125 |
| 7 | | 112 | 112 | 112 | 112 | 112 | 112 |
| 8 | | | 100 | 100 | 100 | 100 | 100 |
| 9 | | | | 125 | 125 | 125 | 125 |
| 10 | | | | | 112 | 112 | 112 |
| 11 | | | | | | 100 | 100 |
| 12 | | | | | | | 90 |
| Total | 125 | 237 | 337 | 462 | 574 | 674 | 764 |

Evidence that Enrollment Projections are Realistic: Restricting our initial entry point to 6th grade will cultivate a cohesive learning culture at HPCS, while initiating at the 6th grade provides a safety net for students at a crucial period in their cognitive, social and emotional development. By providing continuity from 6th-12th grade, Harlem Prep will develop strong bonds with students that they will know on a first-name basis, and students’ themselves, will be forming lifelong bonds that will strengthen their resolve to remain in school throughout their high school years. As enrollment grows each year, continuity of instruction, class size and consistent development of these learning strengths and relationships will leverage ongoing academic achievement for all of our students.²⁵ Fieldwork explorations, development and outreach efforts undertaken by the founding team have included numerous visits with representatives of public schools, charter schools, parent-teacher organizations, non-profit agencies, business professionals, and social agencies. These feasibility and outreach efforts have helped tremendously to inform us as to the enrollment that would be optimal for HPCS, and have confirmed that there exists both interest and need for our charter school, and the mission and vision it advances for our target community. With approximately 180 parent signatures on our outreach petition thus far, we believe that our anticipated enrollment figures are realistic.

A Curriculum Framework to Meet the Needs of the Target Population: The two Community School Districts (CSDs) that Harlem Preparatory Charter School will serve are located in East and West Harlem; Geographic Districts #3 and #4 While these areas are characterized by a diverse, historic and creative community culture, high-performing, rigorous and robust educational opportunities are sorely lacking for students in our target populations. A primary aim of HPCS is to assure that each of our students has the opportunity to excel in school and in life. More and more, how well our students succeed in school determine their success as adults; shaping whether and where they attend college, the professions that are

²⁴ Anticipated Student Population Chart for HPCS allows for a natural attrition rate of 10%.

²⁵ Wagner, Tony. “The Global Achievement Gap”. Basic Books, 2008 p.115.

open to them, and how much they will be paid. Research suggests that increasing both the quantity and quality of schooling can play a powerful role in overcoming both racial and income inequality.²⁶ Though public education seeks to close the achievement gap, there exist circumstances so severe that a concentrated, deliberate educational remedy is in order. Harlem Preparatory Charter School wants to be that remedy in Harlem Community Districts #3 and #4, has researched the realities and needs of our target populations, and carefully crafted an education plan to aligned to helping them overcome the educational and life challenges facing them.

A critical educational and life challenge is ending the cycle of poverty. According to a recent report by the Children’s Defense Fund, in Harlem, three out of every four children are born into poverty, and most of them stay there, and stay poor.²⁷ Minority populations in Harlem—predominantly Latino and African American face not only cyclic poverty but systemic inequality that challenges not only school success, but also the most fundamental capabilities, and which find form in barriers to adequate housing, adequate healthcare, social services, and personal safety, to the degree that the average male in Harlem has less of a chance living to age 40 than the average male in Bangladesh.²⁸ As an indicator of poverty levels for our target population, *The New York State District Report Card: Accountability and Overview Report 2008-09* finds that approximately 65% of our target populations in District 3 and 4 are eligible for free lunch.²⁹

A high percentage of students in our target in Harlem are also identified as at-risk in terms of social and affective learning. The New York Department of Health and Mental Hygiene’s 2008 study of teenage health behaviors in New York City public high schools found the following high risk factors in Harlem neighborhoods: 70% of high school students in East and Central Harlem had more than one alcoholic drink in the past 30 days; two percent reported using cocaine, ecstasy, or sniffing glue; 10% reported using alcohol of drugs before their last sexual encounter. The teen pregnancy rate among East and Central Harlem high school students is 142 per 1,000—almost double the national average of 75 per 1,000 and 66% higher than the average of New York City as a whole. While four in 10 East and Central Harlem high school students reported being sexually active, only 7% used birth control pills at their last sexual encounter. Only 67% of high school students were reported to be at a healthy weight. Twenty-six percent of students in East and Central Harlem reported symptoms of depression while 8% had attempted suicide in the past 12 months. Eighty-three percent of East and Central high school students do not eat the recommended daily allowances of fruit and vegetables; 29% of females and 45% of males in East and Central Harlem reported being in a physical fight in the past 12 months and one in 10 reported being a victim of violence by an intimate partner. All of these stressors and aggravating conditions in these Districts impair learning for students in these neighborhoods.

By creating a vibrant and rigorous learning culture at HPCS, extending the school day and school year, supporting personal and social health in our curriculum, providing our students with mentors, teachers and role models they can look to for guidance, support and belonging, HPCS will provide our target population with the daily and ongoing support they need to succeed. This approach has been tried and tested in schools with high-risk populations and successfully provides critical support to students at vulnerable transition points in their lives.³⁰ North Central Regional Educational Laboratory reports, “Intensifying learning helps build high-achieving schools, which in turn are most likely to produce successful, high-achieving students. High-achieving schools are rigorous schools. They develop rigorous standards, a rich curriculum, knowledgeable and skilled teachers, and meaningful learning experiences as

²⁶Stephen W. Raudenbusch, “Creating Shared Instructional Products: An Alternative Approach to Improving Teaching (*Educational Researcher* Vol.40: January 1, 2011), pp. 5-14

²⁷ Bill Weir and Tracey Marks, “Harlem Agency Hopes to End Poverty Cycle,” (*ABC News: Good Morning America*, March 21, 2009), para.5. < <http://abcnews.go.com/GMA/Weekend/story?id=7134484&page=1>>

²⁸ Amartya Kumar Sen, *Inequality Reexamined*, (Boston: Harvard University Press, 1995) p. 114.

²⁹ *Ibid.*

³⁰ North Central Regional Educational Laboratory. (2000). *Indicator: Engaging learning environments*. Available online: <http://www.ncrel.org/engage/framework/efp/viron/efpenvin.htm>

essential elements.”³¹ Our focus on community service, action and creativity will also foster positive civic engagement, and help students develop the self-esteem and confidence they need to move beyond environmental pressures and challenges.

Our program offers differentiated instruction, flexible curriculum, additional learning time, tools and support to address English literacy because inadequate English Language Literacy is a key educational and life challenge for our target population. Recent results on the New York State English as a Second Language Proficiency Achievement Tests (NYSESLAT) for English as a Second Language show that reading and writing proficiency is rare for more than half of all students in these Harlem neighborhoods. Statistics demonstrate that in listening and speaking, proficiency was achieved by only 43% of 5th and 6th graders; by 73% of 7th-8th graders, and 48% of 9th-12th graders in our target population. NYSESLAT data on reading and writing are even less favorable. Proficiency was achieved by only 27% of 5th-6th graders; by 18% of 7th-8th graders and by just 19% of 9th-12th graders in our target population. Results for students with disabilities are worse than that. Our efforts to develop a dynamic school culture, rigorous curriculum, multiple points of access for learning, and active inquiry are designed to address critical academic achievement gaps observed for students in our target population. New York State Testing Program performance measures find that District 3 secondary students failed to make adequate progress in English Language Arts and Math.

Keeping students in our target area in school is a critical aim that has also driven our embrace of the IB World School model and our commitment to creating a “learner identity.” For students in our target area, 37% of African Americans, 42% of Latinos, 55% of Limited Language Proficiency (LLP) learners, and 74% of students with disabilities drop out of school.³² Our active learning approach, college-bound academics, and infusion of STEM throughout our education program will keep students engaged as they develop mastery of skills and understanding applicable to the real world and to their attainment of a desirable future. UDL strategies will utilize multiple means of action and expression in the classroom so that the learning of basic skills and procedures become routine or automatic. UDL strategies will be utilized by HPCS teachers to design instruction that supports and integrates multiple modalities for learning and multiple means of engagement. These strategies will support (a) students’ conceptual knowledge networks using multiple means of representation; and (b) strategic networks that control routine actions or procedures and generate active strategies for solving problems. Building confidence and efficacy with learning and allowing students to explore how they learn best will transform our target population of students into active, inquisitive and involved learners. Equipping students in the Harlem neighborhoods that HPCS will serve with a strong, inquiry-based and integrative education in STEM will also boost our students’ efficacy in “learning to learn” across the curriculum, and offer to them distinctly realizable higher education and career opportunities

D. ASSESSMENT

Performance assessment, evaluation, and a grading system are systematically connected parts of the curriculum. Collection of comprehensive data from multiple sources and real-time analysis will allow HPCS to make effective use of data in order to draw conclusions, make decisions, and act based on what the data tell us.

Evaluating Student Progress: We will employ a series and range of formative, internal/external, and summative assessments to measure student progress. Pre-test, internal examinations will be administered to all incoming students and this will provide a baseline from which we can measure individual growth. Teacher-initiated course grades will be comprised of a skills and content component that will comprises

³¹ Johnson, Debra. *Beyond Social Promotion and Retention: Five Strategies to Help Students Succeed*. (North Central Regional Educational Laboratory, 2001), p. 3. Retrieved from URL: < <http://www.ncrel.org/sdrs/areas/issues/students/atrisk/at800.htm>>

³² *The New York State District Report Card: Accountability and Overview Report 2008-09: New York City Geographic District #4*, p. 14. Retrieved from URL: < <https://www.nystart.gov/publicweb-rc/2009/37/AOR-2009-310400010000.pdf>>

70% of a student's overall grade average, and which will include (a) formal assessments such as tests quizzes, essays, lab reports, presentations and projects, and also course objective-specific student work that evaluates student mastery of academic learning skills and strategies. The remaining 30% of the teacher course grade will weigh student completion, performance and skills in homework assignments, participation, and organizational skills. At the end of each course, students take a comprehensive written examination that is reviewed and assessed by IB international examiners, themselves. To receive the IB Middle Years and High School Diploma, students must maintain a score of 4 (satisfactory), based upon a scale of 1-7, in which 1 is rated as "Unacceptable", and 7 is rated as "excellent".³³ All HPCS students will also participate in the regularly scheduled New York City and state standardized English and Math assessments. Middle Years Program students are expected to take the PSAT, and Diploma Program Students are expected to take the SAT.³⁴

HPCS will utilize the Response to Intervention (RTI) database management system for real-time analysis of student progress. Data inputted into the RTI system will be driven by two distinct processes: (1) Official records of student performance and (2) Informal teacher and homeroom advisor "Effort Expended" reports. As part of official records, student's faculty advisors will use RTI to generate behavioral bi-monthly reports that provide a summary of behavior, homework completion, current core subject grades and progress in capstone projects. A copy of the report is signed by the student and sent home for the parent to sign. Every four weeks, HPCS will generate in RTI a Student Progress Report that is sent home with students for parents to sign. Course teachers will contact parents of students achieving less than 70%. Report cards will be generated in RTI and issued to students at the close of each academic quarter. These will list current grades for each course, attendance, behavior, recent test scores, homework completion and academic effort. Results from state standardized assessments will also be input into the RTI system. Combined, this RTI data will provide a wealth of crucial information about each student that will allow HPCS to monitor progress, and to make effective and timely decisions on how best to support student success. Informal "Effort Expended" reports submitted to RTI weekly by students' faculty advisors document a letter grade for student effort. Faculty advisors will fill out these reports after meeting with students' course teachers to assess effort. "Effort Grades" are based upon student attributes that include such factors as submitting homework on time, remaining on task in class and completing all tasks, presenting well organized and appropriate work, and demonstrating respect for others. Though not a part of students' official transcripts, "Effort Grades" will provide a viable tool for measuring how our students are adjusting to HPCS and developing the skills and habits of mind for success.

Evaluating Cohorts over Time: We will use the RTI system to assess how each cohort at HPCS has advanced over the course of the year and in subsequent years, in comparison to past cohorts. We will be able to mine and interpret a wide array of performance data from the variety of performance measures we will use to measure student progress. English and Math literacy, attendance, effort, attendance and rates of overall improvement will be analyzed monthly, with reports provided to the HPCS Board.

Evaluating School Performance & Applying Assessment for Continuous Improvement: Not only will we be able to assess student progress from cohort to cohort and to measure our own progress in critical areas of achievement, but we will also be able to evaluate HPCS performance in areas other than direct achievement and in relation to other schools. Data collection, analysis and program modification will comprise a continuous cycle of improvement HPCS, as we use results from the RTI system to evaluate our overall performance in meeting our mission and goals. Results drawn from the NY State ELA and Math tests, the New York Regents Exam, in-house assessments and IB-validated comprehensive exams for students, as well as evaluation processes for faculty and staff will be drawn from to supply HPCS with a full-bodied review of our growth and effectiveness. We will be able to weigh our school progress

³³ HL examinations are recognized for college credit and placement by most universities; the number of colleges recognizing SL examinations continues to grow. Each college or university sets its own acceptance policies.

³⁴ HPCS will hold voluntary Saturday morning SAT preparatory classes.

relatively, in terms of how student achievement at HPCS compares with other public schools and charter schools in Community Districts #3 and #4, with New York City, and with state and national performance averages. Quarterly, semi-annual and annual reports will be generated that will help guide where we need to focus improvements, and this timely data will allow us to leverage positive trends with forward-driven measures designed to punctuate progress. School leadership will utilize results in year-end-year-ahead review and planning, and the Board will make use of this data to guide strategic policy decision-making that consistently steers HPCS on the optimum path forward.

Policies & Criteria for Student Promotion and Graduation from School: All students at HPCS in both the Middle Years Program and the Diploma Program must meet the following criteria in order to be promoted to the next grade: (1) achieve a 70% grade average in all courses; (2) meet 90% attendance requirements; (3) pass year-end IB course examinations; and (4) pass all mandated standardized assessments with a minimum proficiency level of 2. In the event a student fails one core subject, acceptable course achievement in summer school is compulsory in order to be promoted to the next grade level. If a student takes and passes the required standardized assessment in the summer, the student will be allowed to move on to the next grade. If a student fails two or more core courses, retention is compulsory and the student must repeat the grade level.³⁵ In addition to the above criteria, policies for graduation from the Middle Years Program are as follows: (1) Complete Creativity and Service project and meet community service hours requirements; (2) maintain a at least minimum satisfactory scores on all IB end of course external examinations; (3) complete all required course sequences in the Middle Years IB Program IB. In addition to the above promotion criteria, award of the IB Diploma requires students to meet the following standards and conditions: (1) completion of the required sequence of courses in each of the six groups; (2) acceptable scores on IB external assessments in three or four subjects at the higher level and acceptable scores on IB external assessments at the standard level in other subjects; completion of the required Extended Essay in one of the curriculum subjects; completion of the course in Theory of Knowledge; and completion of Creative, Action, Service activities that include 100 cumulative hours of community service.

E. SCHOOL CLIMATE AND DISCIPLINE

HPCS's standards of conduct and bold aspirations for student performance holds everyone (including teachers and staff) accountable to high expectations, based upon the premise that all are stakeholders that stand to benefit from fulfillment of our educational goals and mission. HPCS is absolutely dedicated to creating a learning community that is inclusive, cohesive, and aimed toward success. To foster and sustain this climate, we will emphasize positive student behavior, beginning with the IB learner profile. We will lift up parent and family support through frequent communication, school programs and outreach, and will gauge satisfaction with our school climate by reviewing weekly trends in "Effort Expended" student reports in terms of behavior, participation, and completion of tasks, among other indicators. HPCS will be a "No Excuses" school, based upon our contention that all students can excel if provided the right school climate, teachers, routine, and curriculum. HPCS will incorporate six key elements that define the "No Excuses" school: (1) a Culture of Universal Achievement; (2) Collaboration; (3) Standards Alignment; (4) Assessment; (5) Data Analysis and (6) Interventions.

A Culture of Universal Achievement: Academic, emotional and social supports are aimed at "raising all boats" and closing achievement gaps. "Learning how to learn," information literacy, collaborative skills, problem solving, communication, subject-specific and interdisciplinary conceptual understanding, the development of positive attitudes and effective habits of mind are at the core of our mission.

³⁵ If a student takes and passes the required standardized assessment in the summer, the student will be allowed to move on to the next grade. If a student fails two or more core courses, retention is compulsory and the student must repeat the grade level.

Collaboration: Collaboration takes many forms at HPCS, with the targeted goal of improving the lives of our students and supporting their holistic growth. This collaboration is driven by two key principles. The first is that every student has the right to be successful. Secondly, it is the responsibility of the school to develop exceptional systems that make success a reality.

Standards Alignment: Producing consistently high results will promote a positive school climate and reinforce positive, on task behavior for all. Instructional will be relevant, and will be aligned to all 28 New York State Learning Standards as well as to national discipline standards for grades 6-12.

Assessment: Satisfaction from students and parents will derive from results. Our focus on continuous improvement of all aspects of operation at HPCS will provide us with real-time data to assure we delivering results

Data Analysis: Data will compel planning and decision-making at HPCS on both behavior and academic achievement. The RTI database system will allow us to obtain real-time know and understand the factors impeding positive behavior and outcomes for students, and to monitor and address class and school-level management issues in real-time.

Interventions: Behavioral issues often emerge from academic barriers or other limitations of access. HPCS will address the needs of at-risk students that face challenges in closing their achievement gaps and succeeding academically. Based upon data retrieved from the New York City Department of Education for Harlem Community District 3 & 4, we can expect that 11.5 % of our students will be Limited Language Proficient (LLP), and that 16.5% will consist of Students with Disabilities (SWDs).³⁶ Low achievement scores on state math and literacy achievement exams also indicate that at least half of HPCS students may require intervention. While supporting a model of inclusion, when encountering a student who is not finding success in the HPCS program, we will strive to determine the underlying issue(s) and then supply systematic, strategic supports. To respond to academic, organizational, socio-emotional and/or behavioral issues, HPCS will provide two types of intervention: school-based programs and referral-based programs. School-based programs include:

- HPCS' Saturday Language, Math and Science Academy will be an ongoing, four-week, three-hour-long tutoring series that provides intensive basic skills remediation in these subject areas.
- (2) HPCS' After-School IB "Boot Camp" held in our Academic Success Center Monday through Friday provides all students a quiet place to do their homework in the "Homework Club," and also provides one-on-one remediation in reading and math skills fundamentals.
- (3) After school detention is a behavioral intervention option. No screening criteria are required for school-based interventions. Referral-based services will support special needs students identified as at risk for academic failure.

Students with Disabilities: In compliance with all applicable statutes including the Individuals with Disabilities Education Act (IDEA), Section 504 of the Rehabilitation Act, the Americans with Disabilities Act (ADA), and Limited Language Proficiency (LLP), HPCS will ensure that students are provided mandatory internal and referral services and curriculum, and that inclusion, referrals and pullout services are provided in accordance with all such required provisions. Continuous implementation of the RTI database system will monitor student progress and alert faculty and school leadership to changes in student progress, so that quick and appropriate interventions can be employed. In addition to these positive reinforcements, while we are in the process of defining the behavioral needs and demands of our school population and developing a customized disciplinary policy, HPCS will implement, emphasize and strictly adhere to the state education department's Code of Conduct, which will apply to all students.

II. ORGANIZATIONAL PLAN

³⁶*Educational Impact Statement Proposed Temporary Grade Expansion of Harlem Success Academy 1 in M149/M207 for 2011-2012*, (New York City DOE), Retrieved from URL: http://schools.nyc.gov/NR/rdonlyres/964086CE-D82A-4480-8E77-C5516251AA56/94721/EIS_HSA2.pdf>, 2010, p. 8

A. Governing Body: Harlem Preparatory Charter School will be governed by the Board of Trustees. Together, the Board of Trustees and the Executive Director will ensure that the governing functions of the board complies with HPCS’s charter, bylaws, code of ethics, mission and vision. The Board of Trustees will be governed and function as follows:

- a.) A permanent Executive Committee shall be established to facilitate development and implementation of the school charter and subsequent to the initiation of this effort, to create Board meeting agendas, preside at Board meetings and articulate any school data reporting and/or school-wide policy changes. The Executive Committee also coordinates all management hires and personnel recruitment for the school. The initial Executive Committee shall consist of the following individuals: Milagros Diana Garcia, Alexander Mathew Tish, John Joseph Kelley, Phillip Kim, Kathleen O’Halleran, Dr. Carlos Pagan, and Dr. Edmund W. Gordon.
- b.) A permanent Academic Advisory Committee (AAC) shall be established to provide oversight of all school education programs, curriculum, platforms, support systems and assessment data tools
- c.) A permanent Finance and Operations Committee shall be established to provide ongoing oversight and policy recommendations to the Board that will assure the ongoing fiscal soundness of the school.
- d.) A permanent Fundraising and Grants Committee shall be established to explore sources and activities to support school growth and facility development.
- e.) A permanent Legal committee shall be established to provide ongoing oversight and advisory input that assures school compliance with all applicable laws and regulations, to assure the filing of all required legal and regulatory documents and to assure all required reports are completed and up to date.
- f.) A Human Resources Committee shall be established to coordinate school recruitment efforts, to make recommendations for new hires, and to serve in an advisory capacity with respect to ongoing human resources issues and topics relating to the school.

The overarching role of the Board of Trustees is to set policy, appoint the principal, and ensure that the goals of the school are met. The Board will be responsible for assuring that the charter school is in compliance with all governmental regulations. The Board will establish procedures that promote the highest potential for success in terms of fostering and sustaining the effectiveness of HPCS’s teachers, the motivation of our students, the involvement of parents and the support and participation of the community in order to facilitate continuous improvement of all school programs and to advance a climate of sharing and openness with other schools in our target community. A primary role for all Board members will be to establish clear expectations and goals that provide strategic direction for HPCS today and tomorrow. The successful future of HPCS will depend upon a transparent, informed and mutual relationship between school leadership and the Board, particularly with respect to policy, operations and performance. The National School Boards Association’s governance matrix, illustrated below, provides an indication of the two-way process approach we will aspire to maintain in order to meet the mission and vision of HPCS:

| The School Board | The Principal |
|--|---|
| 1. Regularly reviews student achievement data to ensure continuous improvement | (a.) Proposes processes for continuous improvement to the Board. (b.) Sets benchmarks and performance indicators that demonstrate student progress aligned to strategic plan and standards. (c.) Provides clear analysis of relevant data related to student achievement. (d.) Gathers professional staff input on changes to strengthen instructional programs. (e.) Recommends instructional program changes indicated by data and staff input. |
| 2. Takes part in training on principles of continuous improvement including use of data and customer focus. | (a.) Plans and engages in training with the Board on principles of continuous improvement. (b.) Provides ongoing training on principals of continuous improvement. (c.) Provides professional development to support staff understanding of data and collaboration on needed changes. |
| 3. Engages in work sessions to better understand needed changes in curriculum and instruction based on related data. | (a.) Presents information to the Board when curriculum/instructional changes are needed. (b.) Supports recommended changes with data and analysis. |

| | |
|--|---|
| 4. Provides funding for continuous improvement | (a.) Reviews curriculum, instructional platforms and associated costs for Board budget planning. (b.) Presents budget recommendations to the board on resources needed for continuous improvement. |
| 5. Adopts policies to support continuous improvement | (a.) Proposes policies to support continuous improvement plan efforts. (b.+ Conducts periodic review with the Board to target new or revised policies |
| 6. Publicly supports and communicates to the community the value of continuous improvement | (a.) Communicates continuous improvement efforts to key stakeholders as part of the district's communication plan. (b.) Communications proposed and approved changes to affected stakeholders such as students, staff, and parents. |

The HPCS Board of Trustees will hold public meetings monthly. Board committees will also meet once monthly, and may convene more frequently, depending upon tasks and needs. The Board will assure that all Board meeting are publicized in advance and are in compliance with state Open Meeting laws. Monthly Board agendas will include a monthly accounting from school leadership and committee members of current educational, operational, finance, human resources, development, and legal reports, including all relevant data. Pending agenda posting that is in compliance with state regulations, the Board may hear, discuss and vote on school policy changes and/or initiate new policies to assure HPCS's continual success. At monthly public meetings, the Board shall regularly schedule in the agenda an open public hearing session in which any community member or parent may address the board on any topic related to the school. Board members, themselves, will understand that they will be expected to devote considerable time before and during meetings and committee meetings reviewing data and assessing the outcomes of HPCS's educational programs, operations and policies. Overall, the board goal is to ensure a strong and sustainable operation that will produce high academic outcomes on a yearly basis.³⁷

B. Founding Group Composition: The founding groups are dedicated educators who have worked very hard in putting this charter application together. They share a passion for educating students in Harlem, and have worked with children in the area. They understand the need and urgency for such school concept. The founding team and board members are education professors, a teacher, finance managing directors, and attorneys. The lead applicant and founder of the school is a resident of the Harlem community, has a passion and deep understanding of the school's mission. She is a success story who brings a relentless prospective that "nothing is impossible and doing whatever it takes" has brought her to develop a charter school called HPCS. Founding group members possess skills sets and expertise to ensure a well-functioning organizational structure.

Defined roles of accountability and detail roles of responsibility for board members and all staff at HPCS is described in this charter application. We are certain our founding group members will carry out its academic program and ensure policies and practices are followed and refined as the school grows. Additionally, they will participate in training to refine their skills and capacity to provide effective governance. Our founding board and Board of Trustees have strong experiences and key skills that support their ability to fulfill the charters mission of HPCS. The founding group and board shall involve parents in all aspects of the schools wide events. We will have surveys twice a year to determine if parents are satisfied. We will use surveys as one indicator to measure the schools effectiveness and viability. They will consistently set high expectations at all times and ensure all stakeholders are accountable to and follow through the schools mission. The founding group currently has recruited three more board members and has one open seat for a parent to serve on the board.

Recently, we were able to recruit Dr. Cardinal Warde as a new founding board member serving on the academic advisory committee. He is currently a faculty member at Massachusetts Institute of Technology department of electrical engineering and computer science. Furthermore, he is an entrepreneur founded Optron Systems, Inc. in 1982 and then in 1999 co-founded Radiant Images,

³⁷ See Attachment 5 proposed by-laws and attachment 6 code of ethics

(subsequently acquired by a large Japanese Company). Radiant Images was a manufacturer of liquid-crystal micro-displays for use in cellular phones, digital cameras, computer projectors, TV and computer monitors and virtual-reality display eyeglasses. Dr. Warde also serves on the boards of a number of other high-technology companies. In giving back to his United States community, he has served as a mentor and advisor to students in the Network Program of the New England Board of Higher Education. The goals of that program were to motivate and encourage minority youth in the six New England states to consider majoring in science and engineering and to pursue careers in these fields. Also, since 1997, he has served as the Faculty Director of the MIT *MITES* program. *MITES* is a six-week intensive program in science and engineering for gifted under-represented minority high-school seniors. Furthermore, Dr. Warde has received numerous honors and awards for personal achievement in science and engineering.

We also recruited Phillip Kim who brings 15 years of financial experience. He is currently managing director at Barclay management, has an MBA degree from Columbia University Business School and received a dual degree from B.A from University of California. He majored in economics, electrical engineering and computer science. Additionally, Arif Joshi and Anisa Keith have been added to the board of trustees. Both have more than 12 years of financial experience, marketing, and training in total quality management systems. Our recent changes in founding boards were due to unforeseen circumstances that led to their departure. We were very happy to find new board members who were ready to contribute and work diligently and ethically in such notice. The table clearly defines qualifications and experience to uphold and sustain a solid school.

| Founders | Milagros Garcia | Alexander Tish | Arif Josi | John Kelley | Phillip Kim | Kathleen O'Halleran | Dr. Carlos Pagán | Dr. Edmund Gordon | Anisa Keith | Dr. Cardinal Warde |
|--|-----------------|----------------|------------|-------------|-------------|---------------------|------------------|-------------------|-------------|--------------------|
| Implementation of Science & Engineering Programs | | | | | | | | | | yes |
| Strong legal skills, contracts and policies experience | | | | yes | | | | | | |
| Strong familiarity with effective classroom teaching methods | yes | yes | | | | yes | yes | yes | | yes |
| Finance Skills | | | yes | yes | yes | | | yes | yes | |
| Marketing Skills | yes | yes | yes | yes | yes | | | yes | yes | |
| Organizational Sustainability | yes | yes | yes | yes | yes | yes | yes | yes | yes | yes |
| Implementing Curriculum & Instruction Programs | yes | yes | | | | yes | yes | yes | | yes |
| Evaluation Systems & Assessment Tools | yes | yes | | | | yes | yes | yes | | yes |
| Fundraising | | | yes | | yes | | yes | | yes | |
| Operations | | | | | | yes | yes | | yes | |
| Implementation of Professional | | | | | | yes | yes | | | |

| | | | | | | | | | | |
|-------------------------------------|-----|-----|--|--|-----|-----|-----|-----|--|-----|
| Dev. Programs | | | | | | | | | | |
| Educational Leadership | yes | yes | | | yes | yes | yes | yes | | yes |
| Special Ed. & ELL Programs | yes | yes | | | | | yes | yes | | yes |
| Charter Startup | yes | | | | yes | | yes | yes | | |
| International Baccalaureate Program | | | | | | | | yes | | |

C. Management and Operation:

Organizational Structure of the School

The Executive Director (ED) will be the education strategist for the school, reporting directly to the Board of Trustees. S/he is responsible for managing the school building, data systems and professional development education programs. The ED manages school finances and operations, ensures compliance with the charter authorizers and that documents are updated, manages all hiring needs, evaluates staff and assures all employees meet daily work obligations and collaborates with the IB organization on education program compliance and teacher training. The ED conducts meetings with staff members, articulates policy changes, ensures the mission is delivered daily, develops multiple forms of evaluating the school, and guides education programs for continuous improvement. The ED will make sure that the after-school student support system leads to academic progress; participates in all school-wide events and involves parents. Grant oversight and fundraising activities, school compliance with all applicable laws, and participation in the hiring of teachers are also responsibilities. We expect our ED to be a motivational leader who leads with enthusiasms and passion and who builds a culture of excellence and respect.

The Principal will be the education leader of the school. Responsibilities include: Acting as primary spokesperson for the school; serving as liaison between faculty and the Executive Director; developing a teaching staff that functions as a team; creating and overseeing curriculum development; assuring continuous improvement through multiple evaluation instruments; involving parents in school-wide activities; building community outreach and parent relations; conducting staff meetings; conducting daily observation of teachers; participating in staff and teacher hiring, ensuring school compliance with special education laws, developing students schedules, leading ethically and motivating staff with enthusiasm and passion; managing students behavior; developing awards/recognition systems for students and staff, conducting professional development; managing school budget and control expenditures, providing a safe environment; managing community-based education programs including the community service project, and participating in all strategic development of the school.

The Director of Instruction and Curriculum will be the instructional coach, working closely with teachers to attain and maintain exemplary student achievement, curriculum and instruction. Responsibilities include communicating and aligning organizational goals; supporting and mentoring of classroom teachers; collecting lessons plan and provide evaluation feedback; developing student academic plans; aligning curriculum development with IB programs; monitoring instructional programs and making recommendations; using research-based methodologies to develop curriculum; assuring alignment with college requirements; developing and implementing testing instruments; overseeing the school calendar and student schedules; evaluating and assessing teaching staff, participating in professional development; assuring special education classroom services are provided, participating in grade team meetings weekly; collaborating with principal and ensuring the school adheres to the schools charter.

The Director of Finance and Operations will work closely and collaboratively with the principal and executive director to maintain the budget and provide monthly reports to the Principal and Executive Director. Responsibilities include ensuring accounting books and financial records of the school are fiscally sound; maintaining payroll; managing purchase systems; updating data systems and student information systems (websites); making payments to contractors; ensuring a safe, clean and environmentally friendly physical space and school compliance with health department and building inspections; participating in and managing school capital improvement projects, supervising student transportation, food services, food staffing and office management operations; managing school-wide medical issues and injuries, working with the school nurse, and performing other special duties as required to meet our mission.

The Data Analyst and Technology Manager will work closely and collaboratively with the Executive Director and Principal. Responsibilities include analyzing schools data and all assessment instruments; managing students grading systems; creating multiple evaluation reports of teachers test scores and education programs; running the school website; initiating employee email accounts; creating student profiles; and staffing and managing other special duties to accomplish the mission of the school.

The Special Education Coordinator will work closely with the Director of Curriculum and Instruction and will serve as a liaison between home and school to assure student academic and behavioral progress. Responsibilities include working closely with classroom teachers; ensuring implementation of IEPs; managing administration of special education and ELL programs; providing observation, guidance, evaluation, analysis and educational assessment of students' academic performance and learning characteristics; reporting assessment findings; maintaining confidential records on all referred students and student/parent contacts in accordance with federal and state law; communicating students' needs and progress; playing a key role in providing students with necessary skills to be productive students and citizens; serving as a resource and/or consultant to school personnel; and any other matters relating to special needs and IEPs.

The Teachers will possess exceptional expertise in their subject areas and have extensive teaching experience. Responsibilities include providing an academically stimulating environment; involving parents in the academic process; documenting student progress through data driven instruction; assuring their instructional strategies, methods and materials align with the IB program and all common core standards; attending professional development training; teaching an ambitious daily schedule program; developing quarterly academic goals for each student; developing classroom reward systems; creating research-based programs to address behavioral problems in the classroom; conducting 20 hours of professional development with staff members; teaching as needed in the summer program; advising students' community service projects, ensuring that college writing is infused in daily classroom assignments; creating a professional portfolio and meeting HPCS professional development standards; providing regular academic student progress reports; reporting failing students to the Principal and Executive Director; attending meetings with parents, including but not limited to parent-teacher conference night; instilling a culture of excellence; fostering student achievement; and other special duties required to accomplish our mission.

The Office Manager will be bilingual, & oversee the non-academic affairs of the school. Responsibilities include managing all daily operations, including monitoring the front desk; tracking employee and student attendance; answering the phone; managing deliveries and mail, supporting staff, students, and parents. Each employee must participate in a criminal background check and attend a child abuse training course before first day of employment.³⁸

³⁸ All hiring qualifications and requirements are explained in further detail in section D.

D. Staffing and Human Resources: In our first year we will hire a data and technology manager to maintain our assessments and management systems. In addition to normally assumed responsibilities, the Executive Director will also be responsible for handling the duties of Principal for at least the first year of operation. This will assure that limited financial resources dedicated to personnel are expended on teachers and other staff that provide direct services to students. Teachers for art, music, foreign language, and our engineering elective course will assume part-time responsibilities in HPCS's first year, until enrollment increases justify fulltime hires in these subject areas. We will have a Director of Operations and Finance, and our Director of Curriculum & Instruction will assume additional responsibilities as International Baccalaureate Coordinator to save costs. We will hire a Special Education Coordinator and a Data Analyst and Technology Manager.

HPCS's strategy for recruitment and retaining effective teachers and all staff members is to ensure it meets our goals. We seek candidates that commit to the mission and vision of the school who are highly motivated and competent and who share the guiding principles of HPCS. Teachers should be fully certified in their subject area, and preferably hold a Master's degree. We require three years of teaching experience and in depth knowledge of the subject matter in the area they plan to teach in or (for staff) extensive experience in the position they are seeking. Prospective teachers' academic transcripts should reflect a GPA of 3.5 or better. We desire personnel who are bilingual in English and Spanish or any other foreign language, and who have experience with or are willing to learn data-driven practices and the implementation of effective data collecting/warehousing systems. Successful teacher prospects will be open to enhancing their instructional practices in the classroom and willing to plan and lead and plan monthly professional development sessions. We seek candidates with a respectful, professional demeanor, who believes all students can learn and attain the college degree they desire. Teachers should demonstrate passion, high expectations, and pleasure in their teaching practices. Teacher commitment to supporting parental involvement in all aspects of students' education and a respect for diverse communities is required. Teacher ability to set clear expectations in the classroom and deftly organize and manage classroom routines and the ability to follow a year-round, extended day school routine school and participate in internal and external professional development are required.

HPCS will insist that all successful teacher hires comply with the provisions of No Child Left Behind and the National Board for Teaching Standards. Our goals are to train our teachers within three years of hire to become nationally board certified. Annual assessment and evaluation of our teachers will be weighted to include performance measures for teaching, professional development and community involvement. Teachers will maintain an electronic professional portfolio that parents, students and members of the HPCS community may access. These portfolios, combined with Principal observations and in-class performance will serve as the basis for evaluation. We want teachers to perfect their daily teaching practices and use assessment data as a learning tool to reflect on their teaching and understand student's academic strengths and weaknesses. Each day teachers at HPCS will ensure student progress is occurring daily in the classrooms. In our planning we have allocated each teacher approximately \$1,000 per year to be used toward professional development so as to enhance the knowledge and skills of our teaching staff. Our instructional faculty will follow the International Baccalaureate assessment policy and guidelines and attend professional training.

HPCS will adhere to the U.S. Equal Employment Opportunity Act and all its provisions. We will create an Employee Handbook and Personnel Plan, drawing upon research and best practices in the field. Overall, our employee relationship and personnel policies will encourage and assure that mutual respect, collegiality, professionalism, collaboration, trust, motivation are embedded in our school's culture.

HPCS's Staffing Plan: The table below shows our anticipated staffing needs for our first year and subsequent years as the school grows to full capacity.

| Staffing | | | | | | | |
|---------------------------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
| Instructional Leadership | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Year 6 | Year 7 |
| Executive Director | 1 | 1 | 1 | 1 | 1 | 1 | 1 |

| | | | | | | | |
|--|-----|-----|---|-----|-----|---|-----|
| MYP Principal | | 1 | 1 | 1 | 1 | 1 | 1 |
| DP Principal | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Special Ed. Coordinator | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Director of Curriculum, Instruction & Assessment; IB Coordinator | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Dean of Students | | 1 | 1 | 1 | 1 | 1 | 1 |
| Teachers | | | | | | | |
| Classroom teachers | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| Special education teacher | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Art Teacher | 0.5 | 0.5 | 1 | 0.5 | 0.5 | 1 | 0.5 |
| Music Teacher | 0.5 | 0.5 | 1 | 0.5 | 0.5 | 1 | 0.5 |
| Math Teacher | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Humanities Teacher | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Foreign Language Teachers | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Technology Teacher | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Other | | | | | | | |
| Guidance counselor/College support | | | | 1 | 1 | 1 | 1 |
| Security | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Porter/Maintenance / Cleaning | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Finance & Operations | | | | | | | |
| Director of Operations & Finance | | | | | | | |
| Director of Development & Fundraising | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Data Analysis & Technology Manager | | 1 | 1 | 1 | 1 | 1 | 1 |
| Admissions & Student Recruitment Dir. | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Office Manager | 1 | 1 | 1 | 1 | 1 | 1 | 1 |

E. Student Recruitment, Enrollment, and Evidence of Demand: HPCS will enroll 125 students in Grades 6-12 in the fall of 2012. We will limit enrollment solely to incoming 6th Grade students during our first year of operations, and will add a new 6th grade cohort each year, with the previous year's cohort advancing to the next grade. We anticipate a 10% attrition rate per year beginning in our second year and continuing until HPCS reaches full capacity. Available spaces will be filled via a lottery administered by an independent, non-HPCS-affiliated individual. To assure that we reach and accommodate all potential candidates in our target areas of Community Districts #3 and #4, we will advertise in area newspapers, distribute flyers and present informational sessions at various locations in the community. These advertising and outreach venues will include area churches, hair salons, fast-food restaurants, bookstores, banks, libraries, community centers, public and charter schools, and educational institutions. All marketing materials will be provided in English and Spanish.

Upon granting of our charter, HPCS we commence with recruitment and admissions processes.

Outreach efforts will focus on families and students who reside in Harlem-area public housing projects, where family poverty and related social pressures most frequently place students at academic risk. This is in direct alignment with our program mission to close the achievement gap where most needed; Harlem NY. Locations where we will actively petition include St. Nicholas Housing Projects, the Stanley M. Isaacs Housing Development, Esplanade Gardens, Carver Houses, Clinton Houses, Corsi Houses, Drew Hamilton Housing Projects, East River Houses, Frederick E. Samuel Apartments, Grant

Houses, Harlem River Houses, Holmes Towers, Jackie Robinson Houses, Jefferson Houses, Johnson Houses, King Towers, Lehman Village, Lexington Houses, Lincoln Houses, Manhattanville Houses, Metro North Plaza, Milbank-Frawley, Polo Grounds Towers, Rangel Houses, Robert F. Wagner Houses, Taft Houses, Washington Houses, and Wilson Houses. Because target populations in these residential complexes comprises a diverse range of African American and Hispanic populations who speak either English or Spanish, we will conduct two lotteries, one in Spanish and one in English.

Through our outreach efforts, we hope to attract students and the support of their families from all areas of East and West Harlem. This area is known for its rich culture and diverse population. We consider this community's heritage to be a valuable learning resource that we desire to foster for all our students through responsible inclusion, flexible, multicultural instruction resources and promotion of the contributions diversity makes to enriching all learners. Our recruitment policy will admit all applicants for admissions without conditions placed achievement, aptitude, ethnicity, national origin, race, gender, disability, or any other basis prohibited by law. Admission reference will be provided to students living in the Harlem Community Districts our school will serve. Parents will be required to submit a signed and completed application and attend an informational session during the admissions period. Each applicant selected through lottery will be required to submit all documentation prior to enrollment.

We will conduct our public lottery at the beginning of March before the start of the academic school year. In our first year of operation, our admissions and lottery will be conducted in the following manner: Step 1: The applicant's name is drawn from the lottery. Step 2: The applicant is sent a notification letter to attend an information session. Parents then determine whether HPCS meets their needs. Step 3: The applicant submits all required documents. Step 4: The applicant and parent or legal guardian attends an orientation and tour of HPCS. Step 5: Admission and enrollment proceeds. All applicants whose names are not drawn from the lottery will be placed on a waitlist. If a vacancy becomes available, the first name that appears on the list will be notified. However, if HPCS has a vacant seat, preference will be given to a sibling who is also an applicant and placed on the roster. Parents will be allowed to withdraw their child from HPCS for any reason. However, the principal will meet with both the student and parent to discuss reasons for withdrawal, seek resolution to the problem and discuss all available options. In the event remaining at HPCS is not an option, we will assist the student and parent to find another school and transfer all required reports, documents and other academic information to their chosen school.

Outreach efforts thus far are heartening. Approximately 180 signatures were received by parents in a short time frame of time during our recruitment efforts.³⁹ Based upon this outcome, we anticipate that we will have more parents applying on behalf of their children than seats we will initially have available when our charter is authorized. Enthusiastic input from potential students and their families include support for the curriculum program and the infusion of STEM and UDL into our program.

F. Community Involvement: HPCS founders have spent the last two months reaching out to important community partners throughout the Harlem community. Our goal has been to capitalize on the assets available in the community and identify services available for students at HPCS. Outreach to community-based organizations and parents associations in the Harlem community included requests for community input into HPCS's design and operation. Through these efforts we have developed a network of community partners ready to support our school and its programs. We have also met with elected officials and their staff, community organizations, concerned parents, other charter school leaders, public school official and business owners throughout the target area. HPCS founding members persist in developing these community contacts and shall continue to do so throughout the charter review process to further refine our plans and develop our ties to the community.

³⁹ Related attachment shows signatures from parents in District 3, 4, and 5 who showed interest in enrolling their child in our school.

A critical component of our mission and program is that our students become engaged in meaningful ways with outside community-based organizations and businesses. HPCS believes that the school, its faculty, administrators, businesses, community-based organizations and students should all be assets to the community. Networking with these community-based organizations is a step toward academic success for our students at HPCS. The value they will bring for our students has no price tag. We strongly believe these organizations will help motivate our students and instill social and professional skills that will produce better academic results for our students. Access to successful professionals who mentor and coach our students during their academic years at HPCS will guide our students to set their sights on their own future achievements and success. A chief goal of HPCS is to improve the social networks of our students and particularly to provide supports to less privileged students who face barriers to success. Research demonstrates the need to educate the whole student—to incorporate not just academic rigor but also social and affective learning that helps students navigate beyond real-world barriers.

We have strategically selected our partnership relationships to ascertain how they can best serve our mission. As a result, we are developing strong partnerships with community groups to provide the best possible outcomes for our students:

(1) New York Needs You: Led by Columbia University alumni, and colleague Robert Reffkin whose mission is to help first generation African-American and Hispanic college students realized their career goals and ambitions. This wonderful organization has committed to tutor and mentor our students. Each student will spend a Saturday session once a month with a mentor in their professional field of interest for approximately three hours.

(2) Society of Hispanic Professional Engineers (HSPE): We have firm commitment from the New York City Chapter leader Edward Montenegro to provide one-on-one mentorships for students wishing to pursue fields in engineering. HSPE will provide monthly science workshop and training for students and parents to keep current with new science topics and career opportunities. Currently, the organization has a program working with several New York City STEM Public Schools.

(3) The New York Academy of Sciences (NYAS): The director for the K-12 science education initiative program has committed to work with HPCS. The organization will allow teachers to have access to their science education programs and our students will be granted access to Academy science education workshops. For professional development, our teachers and staff will be able to attend NYAS science lectures by experts in the field.

(4) Children's Aid Society: This agency has committed to provide swimming and ballet lessons for our students on Monday through Friday and to provide GED classes and other educational programs for parents at HPCS.

(5). University Partnerships: Columbia University and Teachers College Student Run Organizations have agreed to tutor and mentor our students. We are continuing dialogue with National Society of Black Engineers, The Society of Women Engineers and Council for Urban Professional in an effort to obtain additional commitments for support.

F.1 Joint Application (N/A if applicable)

III. FINANCIAL PLAN

A. (1). Charter School Budget and Cash Flow Template⁴⁰: Based upon projections, HPSC has assumed a realistic budget. Key revenue sources will include the Charter School Program Planning and Implementation grant of \$600,000 (\$200,000 during the start-up period, and \$200,000/year for the first 2 years) and per-student revenue of \$13,527 during the charter period. To aid in our start-up phase, we have obtained confirmation from Ellena Day at New York City Charter Center for a \$60,000 low-interest loan. Cash flow from this loan will support additional startup costs and fund capital purchases not

⁴⁰ See attachment 17 for detailed budget and cash flow projections for the pre-opening period and the initial 7 year operational period.

covered through the CSP grant. Our loan repayment plan will retire this debt in year 2 of HPCS operations. Should we not secure the CSP grant, we are committed to exploring all options to remain viable. Personnel have committed to volunteer time to this endeavor as an in-kind contribution, representing a savings of approximately \$75,000. Planned start-up capital expenditures totaling \$40,000 will most likely be delayed until July 2012, a month before instruction starts. During planning phases, staff and founders will meet at and work from their own home offices to cut \$40,000 from office expenses. These pragmatic measures would reduce our pre-opening costs to just \$46,000 which will primarily consist of accounting, legal and marketing expenses to be covered by the NYC Charter Center loan.

While we hope to receive DOE space for HPCS, we have prepared backup strategies, budgets and forecasts designed to respond to the possibility that we may need to lease instructional space, instead. This has necessitated careful consideration of the economic climate and related conditions, consistent with the long term inflation trends in the U.S. Assumptions are as follows: The budget is prepared on the assumption that enrollment targets will be achieved. All revenue sources are assumed to be rising at a rate of one percent per year, while expenses such as teacher and staff salaries are assumed to increase by three percent per year. Healthcare and benefits are assumed to increase at a larger five percent rate, which is also consistent with recent history. Despite these conservative predictions, our budget is still projected to produce an operating surplus, beginning year-one. This should produce a healthy, positive cash balance by the end of the charter period. Projected surplus will be used as a buffer against any unexpected costs and shortfalls in enrollment targets. In the event of unplanned needs for additional financial resources, the founding group has the financial acumen and strength to raise additional monies from public supports, including loans or donations. If budgetary challenges exceed these potential sources, HPCS will pursue loans from sound financial institutions. We will also actively seek funding from state, federal and private competitive grant sources, from corporations and corporate foundations, from community-wide fundraising, and from nonprofit organizations or foundations that sponsor educational programs.

A. (2.) Budget Information for Applicants Applying for a Charter School Program (CSP) Grant: Once the charter for HPCS is granted, the first year of operations will chiefly encompass a pre-opening phase that will end on June 30, 2012. Until that date, we assume two sources of revenue: (1) \$200,000 of the \$600,000 CSP grant for allowable expenses; and (2) \$25,000 in loan funds that will cover pre-opening expenses not covered by the CSP grant. The following items are allowable expenses we plan to pay with the CSP grant:

Curriculum Development – We plan to hire a consultant specializing in the International Baccalaureate (IB) program at a cost of \$25,000 to help us develop comprehensive IB curriculum design and execution plan.

Marketing – During the pre-opening period, we will incur expenses related to staff and student recruitment, website development, conference attendance, etc, estimated to total \$35,000. Key Staff – Salary and benefits for key staff during the pre-opening period will have to be lower than the going-rate to conserve cash during this period, and will include the Executive director, the Director of Finance and Operations, and possibly an HR/Marketing director. We estimate these salary costs at \$75,000. Start-up Costs – Initial office space, equipment, furniture and supplies estimated at \$50,000 will be needed for the initial staff.

Accounting/Audit – We estimate this expense to total \$10,000. Overall, these expenditures comprise \$195,000 of the assumed \$200,000 initial tranche of the CSP Grant.

NYC Charter Center Loan – Because the CSP grant does not allow for large equipment purchases for school operations, furniture and computer equipment for the incoming class, we have assumed a \$60,000 loan to cover these initial outlays.⁴¹

⁴¹ See Attachment 17 for budget and cash flow template

B. Financial Management

1. Systems and Procedures: Through its Finance Committee, HPCS will develop a set of prudent fiscal policies that include checks and balances designed to mitigate budget shortfalls and prevent abuse. The school will draw upon the expertise of Board members and staff. Our financial management plan will be comprehensive, and will include the areas of compliance, purchasing and logistics, financial accounting, cash management, credit, ledger control, reporting and payroll.

2. Staff Responsible for Financial Oversight: The Executive Director will hold final authority and responsibility for HPCS's financial management and will present monthly budget status reports, cash reports and quarterly statements of financial condition to the Board of Trustees. All reporting will meet all government accountability standards, requirements and provisions. The Executive Director will hire a Director of Finance and Operations (DFO) experienced in charter school budget planning and non-profit finance. The DFO will retain the services of an outside company to provide extensive back-office business services. The selected vendor will provide the following functions at the direction of the DFO: (1) Manage annual budget process with the Executive Director; (2) manage annual financial audit, tax filings and 990 filing with auditor; (3) manage monthly, quarterly and annual fiscal reporting to all constituents including Charter Authorizer and Board of Trustees; (4) complete all federal, state and city grant administration/reporting; (5) post revenues, bank deposits, expenses, check disbursements in accounting system and file all related accounting documents; (6) complete bank reconciliations, handle treasury management to maximize interest income; and (7) prepare payroll.

3. Protection of Student and Financial Records: The DFO will assume responsibility for data security of the financial records and student information. Firewall technology will keep all protected information private. The DFO will also track enrollment and attendance eligibility, Title I eligibility, SPED and ELL enrollment, as each metric is associated with state and federal entitlements as well as grant monies. Tracking the precise eligibility of each student will be an on-going process that commences with student recruitment, intensifies with registration and reoccurs at key junctures throughout the academic year.

4. Annual Independent Financial Audit: The DFO assumes responsibility for closing the June 30th fiscal year and for preparing timely and accurate annual financial statements. An external auditor will verify and certify our financial statements. These reports and findings will be provided to the Board's Finance Committee for review and comment, and then to the Committee. Financial statements and audit reports will be made public via the school's web site.

5. GAAP: HPCS will maintain records and prepare financial statements for all financial management, budgeting, bookkeeping and reporting according to Generally Accepted Accounting Principles (GAAP). The DFO will ensure that procedures and systems used and the financial reports generated are consistent with school needs and charter authorizer requirements. Financial management will be executed through an annual budget forecasting process, annual audits, tax filings, and 990 filings.

6. Internal Controls:

(a) Purchases: The DFO assumes responsibility for purchasing and acquisition. The system will ensure that assets are secure and that supplies purchased are tracked. Purchase orders for goods up to \$5,000 for the good of the school may be processed pending approval from the DFO. For agreed-upon standard purchases less than \$5,000, the DFO, with ED approval, can acquire goods from vendors based solely on price, quality, dependability and date of delivery. For purchases exceeding \$5,000, at least three competitive bids from vendors offering similar products or services must be obtained. The ED is responsible for signing all checks, subject to Board authorization. Checks over \$100 shall be issued only when approved by the ED. All checks in excess of \$5,000 will require the signature of the ED and the Board.

b) Payroll: The DFO will be responsible for providing payroll administration and related services to the school. The DFO will establish a system to ensure the following: (1) The school obtains and collects all necessary employee data at the commencement of employment and on an ongoing basis. (2) The school processes payroll, prepares required records, and reports and submits such records and reports to the appropriate agencies. (3) Payroll management and Human Resources processes are reviewed on an

ongoing basis and modified, as needed. Payroll and reporting responsibilities will include W2 and 1099 distribution, pay scale determination, time tracking for days off, vacation, sick, personal, jury duty, bereavement, and excused absences for professional development.

c) Compliance: The DFO will be responsible for all functions that ensure the school operates in compliance with its charter and all governmental regulations. The job description for the Director of Finance and Operations will clearly delineate the responsibilities related to all compliance and the Director of Finance and Operation’s responsibility to carry out or to provide oversight to all areas of compliance for the school. Title funding, teacher certification, safety, fire drill coordination, health, fingerprinting, software compliance, COBRA letters and the student lottery will follow all applicable laws. Legal and compliance issues related to Board of Trustees and charter renewal will be addressed annually.

d) Cash Management and Investing: In partnership with the Executive Director and the Board, after the budget has been completed and cash balances determined, the DFO will create an investment strategy for cash balances. Investment options will be limited to liquid conservative strategies such as savings accounts, CDs, treasury bills and money market mutual funds.

C. Facility: Efforts to site facility space for HPCS have entailed considerable research on the part of our founding team. We have consulted with many real estate developers who confirm that the real estate market in Harlem is quite tight, and costs reflect this demand. Thus, we hope to consult in earnest with the New York City Department of Education (DOE) to secure a place that will allow us to meet the needs of our target population. We have identified an adequate space for the school located at 344 East 104th street; the site of a historic Catholic church which previously operated a private school on site. While this structure will require capital improvements, it may be pragmatic for HPCS to secure purchase of this property if no other opportunities present themselves. In addition to capital cost concerns, a secondary factor to consider is that church operations continue throughout the day, which may limit HPCS’s access to future space that will be needed as our school grows to full capacity. We are also exploring the feasibility of negotiating with Columbia University and/or the New York City Public Housing Authority for use of un-utilized space or space for lease. We continue to work diligently to assure that the best use of capital resources provides the best solution for our facility needs, particularly as HPCS grows to full capacity. Toward that end, we have projected total square footage needs over a seven-year time frame:

| Student population | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Year 6 | Year 7 | Rooms Needed | Total Sq. Footage |
|--------------------------------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------------|-----------------------------------|
| Middle | 125 | 237 | 337 | 337 | 337 | 337 | 337 | 35 | 5000 |
| High School | | | | 125 | 237 | 337 | 427 | 35 | 5000 |
| Total | 125 | 237 | 337 | 462 | 574 | 674 | 764 | 70 | 10000 |
| Non-instructional space needs | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Year 6 | Year 7 | Rooms Needed | Total Square Footage (600) |
| Main Office | 1 | | | 1 | | | | 2 | 2000 |
| Copy Room/Teacher Lounge | 1 | | | 1 | | | | 2 | 2000 |
| Cafeteria | 1 | | | 1 | | | | 2 | 5,000 |
| Science Lab | 1 | | | 1 | | | | 2 | 2000 |

| | | | | | | | | | |
|---|--------------|--|--|----------|--|--|--|-----------|--------------|
| Bathrooms | 2 | | | 2 | | | | 4 | 2000 |
| Main Entrance of Bld. | 1 | | | | | | | 1 | 1000 |
| Gym (can be used to accommodate 3 classroom periods) | 1 | | | | | | | | 5,000 |
| Rooftop Observatory Plant center | | | | | | | | | 15,000 |
| Principal Office | 1 | | | 1 | | | | 2 | 2000 |
| Executive Director Office | 1 | | | 1 | | | | 2 | 2000 |
| Director of Finance & Operations | 1 | | | 1 | | | | 2 | 2000 |
| Director of Curriculum & Instruction | 1 | | | 1 | | | | 2 | 2000 |
| Total | 7 | | | 7 | | | | 14 | 42000 |
| Total Square Footage at Full Capacity in 7 Years | 52000 | | | | | | | | |

D. Transportation: HPCS students will be eligible for a reduced fare Metro card. We will use the same guidelines and policies used by NYC Department of Education. Students will be able to use the Metro card on any NYC transit system and NYC Metropolitan bus. Special arrangements will be made for students with disabilities and we will hire a private contractor if necessary to meet these needs. If a student exceeds eligibility requirements for a reduced fare Metro card, the parents will be responsible for his/her transportation.

E. Food Service: The schools food service policy is essential to our students' health and ability to function in the classroom. Our school food program reflects our values on food nutrition, health and child poverty. HPSC students deserve a better school food program that advances the right to an impeccable education and prepares our students for a better future. Wise food choices are an essential part of student education. We at HPCS take food nutrition and food choice seriously and intend to work with several food vendors to ensure it aligns with our schools vision and mission.

Contracting: HPCS intends to contract with a food service vendor, and will consult with the New York City Department of Education's office of Nutrition and Food Services as we explore arrangements with private companies that currently provide food services to existing schools. Possible vendors include *Red Rabbit*, *Performance Food Group*, *Revolution Foods*, and *Regina Caterers*. We will consider all bids. Pending further investigation of the feasibility of cost for services provided, our preliminary preference for selection is *Whole Foods*.

Time: HPCS will serve breakfast and lunch for students, and hope to provide mid-to-late-afternoon snacks during our extended-day after school program. For all students, breakfast will open 7:20am and lunch will be served at 12:55pm. In keeping with federal guidelines, HPCS reserves the right to determine which meals and/or snacks to serve.

Cost: HPCS intends to spend >\$1.50 per student, based upon the premise that quality nutrition supports overall well-being and sharpens mental acuity in the classroom. Food expenditures are an investment we are more than willing to make in our students' academic success and in the promotion of a healthy and nurturing school environment. Great educational experiences begin with good nutrition.

Compliance: HPCS will take part in Federal Free-and-Reduced-Priced breakfast, lunch and snack programs administered by the U.S. Department of Agriculture. We will meet all applicable requirements including but not limited to meal pricing, determination of eligibility, nutritional value, and reporting requirements. Food service subsidy revenues received from Federal and State meal programs shall be used solely for the purpose of providing meals to eligible students. Statistics indicate that a majority of HPCS students will be eligible for either free or reduced-price meals. We will assure that meals provided to HPCS students meet USDA nutrition requirements, including dietary guidelines and recommended daily allowances of protein, vitamins, minerals and calories. HPCS will comply with any added nutritional guidelines from the State as part of the Healthy Schools Initiative. If allocated school facility space, we will use the same food contracting service.

F. Insurance: The school will purchase all necessary insurance policies to insulate the corporate entity, itself, its Board, staff and teachers from liabilities and claims arising from day-to-day operations. This will include property & auto insurance, casualty, liability and workers' compensation. We have obtained a quote for the following set of coverage and amounts from Christopher Spofford (518) 464-0059 at the insurance brokerage firm Ten Eyck Group, as follows:

| Type | Coverage Amount |
|----------------------------|--|
| General Liability | \$1 million for each occurrence, \$3 million aggregate |
| Automobile | \$1 million |
| Directors & Officers | \$1 million combined limit |
| Umbrella Liability | \$5 million for each occurrence and aggregate |
| Workers Compensation | Statutory |
| Student Accident | \$1 million for catastrophic coverage |
| Crime | Up to \$1 million |
| Business Personal Property | \$200 thousand |

G. Pre-Opening Plan: The spreadsheet below shows our pre-opening plan highlighting outstanding task necessary to ensure a smooth and successful first year of operation:

| Target Items | Stakeholders | Completion Date |
|--|---------------------------------|-----------------|
| Facility Space | | |
| Identify potential sites | Board//Executive Director | 12/11-1/12 |
| | Volunteers/ Real Estate Brokers | |
| Preliminary inspection | Board//Executive Director | 12/11-1/12 |
| | Volunteers/ Real Estate Brokers | |
| financing secured | Board//Executive Director | 12/11-1/12 |
| | Volunteers/ Real Estate Brokers | |
| negotiate lease | Board//Executive Director | 12/11-1/12 |
| | Volunteers/ Real Estate Brokers | |
| Capital Improvements Plan | | |
| Classrooms, bathrooms, offices | Board//Executive Director/ | 2/12-3/12 |
| | Volunteers/Construction Co | |
| Recruitment | | |
| Teacher recruitment: Job fairs | Board | 9/11-3/12 |
| | Executive Director & Volunteers | |
| Identify students; List elementary schools | Board | 9/11-3/12 |
| | Executive Director/Volunteers | |

| | | |
|--|---|---------------|
| Identify community organizations; meet/present | Board | 9/11-3/12 |
| | Executive Director/Volunteers | |
| Interview prospective candidates | Board | 9/11-3/12 |
| | Executive Director/Volunteers | |
| Notifications letters of new hires | Board | 9/11-3/12 |
| | Executive Director/Volunteers | |
| Call parents from the petitioning form schedule a meeting & have a power point presentation about the school | Board | 9/11-3/12 |
| | Executive Director/Volunteers | 9/11-3/12 |
| Transportation | | 5/12-6/12 |
| Determine transportation arrangement | Board | May/June 2012 |
| | Executive Director/Volunteers | |
| Complete contract process | Board | May/June 2012 |
| | Executive Director/Volunteers | |
| Human Resources & Employee Relations | | |
| Collect documentations from prospective teacher applicants: TB, Fingerprinting, W-2 & ID forms | Executive Director | 9/11-3/12 |
| | Principal/Volunteers | |
| Certification verification | Executive Director | 9/11-3/12 |
| | Principal/Volunteers | |
| W-4 Withholding forms | Executive Director | 9/11-3/12 |
| | Principal/Volunteers | |
| Set up employee email addresses | Executive Director | 9/11-3/12 |
| | Principal/Volunteers | |
| Complete all hiring paperwork | Executive Director | 9/11-3/12 |
| | Principal/Volunteers | |
| Complete Student Admission Form | Executive Director | 9/11-3/12 |
| | Principal/Volunteers | |
| Create Ads for all teacher positions & Staff | Executive Director | 9/11-3/12 |
| | Principal/Volunteers | |
| Complete Benefits Eligibility Policy Plan | Executive Director | 9/11-3/12 |
| | Principal/Volunteers | |
| Finalize job descriptions: all teacher & staff positions | Executive Director | 9/11-3/12 |
| | Principal/Volunteers | |
| Establish online record for new employees; Create a personnel payroll system | Executive Director | 9/11-3/12 |
| | Principal/Volunteers | |
| Orientation for new hires, students, parents, prepare PowerPoint presentation | Executive Director/Principal/Volunteers | 9/11-3/12 |
| Schedule interviews with Board members & prospective candidates | Executive Director | 9/11-3/12 |
| | Principal/Volunteers | |
| Establish health/dental benefits plan | Executive Director/ Principal/Volunteers | 9/11-3/12 |
| | Executive Director | |
| Establish building insurance | Executive Director | 9/11-3/12 |
| | Principal/Volunteers | |
| Marketing | | |
| Create & distribute flyers door to door (Spanish & English Translation) | Board | 9/11-3/12 |
| | Executive Director/Volunteers | |
| Create PowerPoint Presentation for parents & students (orientation) | Board | 9/11-3/12 |
| | Executive Director/Volunteers | |
| Identify marketing businesses | Board | 9/11-3/12 |

| | | |
|---|-------------------------------|-----------|
| | Executive Director/Volunteers | |
| Purchasing | | |
| International baccalaureate materials | Board | 2/12-3/12 |
| | Executive Director/Volunteers | |
| STEM-based Science books/lab inquiry projects | Board | 2/12-3/12 |
| | Executive Director/Volunteers | |
| Classic literature Books | Board | 2/12-3/12 |
| | Executive Director/Volunteers | |
| Classroom materials, art, pencils, etc. | Board | 2/12-3/12 |
| | Executive Director/Volunteers | |
| 2 printers | Board | 2/12-3/12 |
| | Executive Director/Volunteers | |
| 2 copy machines | Board | 2/12-3/12 |
| | Executive Director/Volunteers | |
| 2 desktop computers & 30 laptops | Board | 2/12-3/12 |
| | Executive Director/Volunteers | |
| Rosetta stone software | Board/Interns | 2/12-3/12 |
| | Executive Director/Volunteers | |
| Order furniture | Board | 2/12-3/12 |
| | Executive Director/Volunteers | |
| Professional Development Training | | |
| Introduction to Middle Years IB Program | Executive Director | 2/12-6/12 |
| | Principal/IB Consultant | |
| IB training in Math | Executive Director | 2/12-6/12 |
| | Principal/IB Consultant | |
| IB training in Science | Executive Director | 2/12-6/12 |
| | Principal/IB Consultant | |
| IB training in Spanish | Executive Director | 2/12-6/12 |
| | Principal/IB Consultant | |
| IB training in Humanities | Executive Director | 2/12-6/12 |
| | Principal/IB Consultant | |
| IB training in Visual Arts | Executive Director | 2/12-6/12 |
| | Principal/IB Consultant | |
| IB training in Music | Executive Director | 2/12-6/12 |
| | Principal/IB Consultant | |
| IB training in Technology | Executive Director | 2/12-6/12 |
| | Principal/IB Consultant | |
| IB training in Physical Education | Executive Director | 2/12-6/12 |
| | Principal/IB Consultant | |
| Board Training | Executive Director | Ongoing |
| | Principal/IB Consultant | |
| Contracts and Policies | | |
| Finalize Teacher Contract Document | Board/Attorney | 3/12-5/12 |
| | Executive Director/Principal | |
| Finalize Student Contract Document | Board/Attorney | 3/12-5/12 |
| | Executive Director/Principal | |
| Finalize Employee Policy Document | Board/Attorney | 3/12-5/12 |
| | Executive Director/Principal | |
| Finalize School Policy Documents (Academic, | Board/Attorney | 3/12-5/12 |

| | | |
|--|--|-----------|
| Behavior, Schedule, Assessment procedures) | Executive Director/Principal | |
| Finalize Fire Drill Procedures & Policy | Board/Attorney | 3/12-5/12 |
| | Executive Director/Principal | |
| Finalize Admissions Policy | Board/Attorney | 3/12-5/12 |
| | Executive Director/Principal | |
| Construct Board Governance Handbook | Board Members | 3/12-5/12 |
| Fire Department Policies & School Safety Plan | | |
| Schedule meeting & discuss fire drill routines | Board | 5/12-6/12 |
| | Executive Director/Volunteers | |
| School Calendar and Schedule | | |
| Finalize school schedule | Executive Director | 5/12-6/12 |
| | Principal | |
| Construct Student Daily Schedule | Executive Director | 5/12-6/12 |
| | Principal | |
| IB assessment dates | Executive Director | 5/12-6/12 |
| | Principal | |
| State test for ELA/Math & Science | Executive Director | 5/12-6/12 |
| | Principal | |
| Curriculum Planning and Summer Program | | |
| Complete Summer Program Curriculum | Academic Advisory Committee | 2/12-6/12 |
| | Executive Director/Principal | |
| Academic Advisory Board Committee will review curriculum | Board | 2/12-6/12 |
| | Executive Director/Volunteers | |
| STEM Program Development | Dr. Cardinal Wade/ Executive Director | 2/12-6/12 |
| STEM Lectures/Workshops | Ms. Groome: NY Academy of Sciences | 2/12-6/12 |
| | Executive Director/Principal | |
| Complete Community Service Program Plan | Executive Director | 2/12-6/12 |
| | Community Partners Principal | |
| Complete Community-based Program Plan | Executive Director | 2/12-6/12 |
| | Community Partners/ Principal | |
| Special Education Program and Special Needs | | |
| Teacher training in Special Education Law and Policies | Teachers | 5/12-6/12 |
| | Board/Executive/Principal | |
| Screen and identify students needing IEP | Teachers | 5/12-6/12 |
| | Board Member Monica White | |
| | Executive/Principal | |
| Health and Safety | | |
| Obtain First aid Resources | Board/Principal | 2/12-6/12 |
| | Executive Director/Volunteers | |
| Identify doctor/nurse resources | Board/Principal | 2/12-6/12 |
| | Executive Director/Volunteers | |
| Acquire required medical forms | Board/Principal | 2/12-6/12 |
| | Executive Director/Volunteers | |
| Complete Health Policy handbook | Board/Principal | 2/12-6/12 |
| | Executive Director/Volunteers | |
| Technology | | |
| Assure Internet bandwidth needs are met | Executive Director/Principal | 2/12-4/12 |

| | | |
|--|------------------------------|-----------|
| Finalize website development | Executive Director/Principal | 2/12-4/12 |
| Obtain needed technology plug-ins | Executive Director/Principal | 2/12-4/12 |
| Operations | | |
| Make needed vendor arrangements | Executive Director/Principal | 6/12-7/12 |
| Complete submit 501c(3) application | Executive Director/Principal | 6/12-7/12 |
| Complete International Baccalaureate application | Executive Director/Principal | 6/12-7/12 |
| Finalize Food Service | Executive Director/Principal | 1/12-2/12 |
| Meet with DOE engineers for building safety inspection; discuss capital improvements | Board/building Engineers | 2/12-4/12 |
| | Executive Director/Principal | |

Attachment 1: Roster of Key Contacts

| Name | Role (Founding Group Member, Proposed Board Member, or Proposed School Employee) |
|------------------------|---|
| Milagros Diana Garcia | Lead Applicant, Proposed School Principal |
| Phillip Kim | Proposed Board Chair |
| Alexander Mathew Tisch | Proposed Board Member |
| John Joseph Kelley | Proposed Board Member |
| Kathleen O'Halleran | Founding Group Member, Proposed Director of Curriculum and Instruction |
| Ari T. Joshi | Proposed Board Member |
| Dr. Edmund W.Gordon | Founding Group Member |
| Dr. Carlos Pagan | Founding Group Member |
| Anisa Keith | Proposed Board Member |
| Dr. Cardinal Warde | Proposed Board Member |

Attachment 2: Certification Statement

Proposed Charter School Name Harlem Preparatory Charter School For Science, Technology, Engineering and Mathematics

Proposed School Location (District) 3, 4 and open to 5

I hereby certify that the founding group/prospective Board of Trustees have all read Article 56 of the New York State Education Law, and understand the relationship between a charter school and the authorized chartering entity as defined in that statute. By submitting a charter school application to the Board of Regents, the prospective Board of Trustees understands that the Board of Regents is the authorized chartering entity with the authority to approve our application to establish the proposed charter school and enter into an agreement with us, as the Board of Trustees, setting forth the terms and conditions under which we, the Board of Trustees, will operate the charter school.

I hereby certify that the information submitted in this application is true to the best of my knowledge and belief; and further I understand that, if awarded a charter, the proposed school shall be open to all students on a space available basis, and shall not discriminate on the basis of race, color, national origin, creed, sex, ethnicity, sexual orientation, mental or physical disability, age, ancestry, athletic performance, special need, proficiency in the English language or a foreign language, or academic achievement. I also certify that I am an eligible to apply for a charter under the requirements of Education Law. This is a true statement, made under the penalties of perjury.

Signature of Lead Applicant
Authorized Person



Date

3/30/2011

(Please label the copy that has original signatures)

Print/Type Name Milagros Diana Garcia

Address

[REDACTED]

Daytime Phone:

[REDACTED]

Email:

[REDACTED]

HARLEM PREPARATORY CHARTER SCHOOL FOR SCIENCE, TECHNOLOGY, ENGINEERING & MATHEMATICS

IB MYP Student Schedule for 6th Grade

| House of Oxford 6 th Grade | | | | | | |
|--|--|--|--|--|--|--|
| Time | Monday | Tuesday | Wednesday | Thursday | Friday | Saturday |
| Period 0 7:20-7:45 | Breakfast | Breakfast | Breakfast | Breakfast | Breakfast | |
| Period 1 Advisory Period 7:45-8:15 | Advisory Community Circle | Homeroom/ Advisory Community Circle | Advisory Community Circle | Homeroom/ Advisory Community Circle | Advisory Community Circle | |
| Period 2 8:15-9:55 | Language B Foundation (Spanish/French) | Introduction to Philosophy | Humanities World Geography | Introduction to Philosophy | Language B Foundation (Spanish/French) | 9:00-9:30am Breakfast |
| Period 3 9:55-10:35 | Language A (English 6) Literature | Math 6 | Language A (English 6) Literature | Math 6 | Language A (English 6) Literature | 9:30-10:30 KAPLAN SAT Prep ELA |
| Period 4 10:35-11:15 | Humanities World Geography | Language A (English 6) Literature | Math 6 | Humanities World Geography | Math 6 | 10:30-11:30 KAPLAN SAT Prep Math |
| Period 5 11:15-12:55 | General Science | Humanities World Geography | General Science | General Science | General Science | 11:30-12:30 ROBOTICS, ELECTIVES, CAS Snack will be provided |
| Lunch 12:55-1:35 | Lunch | Lunch | Lunch | Lunch | Lunch | |
| Period 6 1:35-2:15 | Math 6 | General Science | Engineering | Engineering | Humanities World Geography | |
| Period 7 2:15-2:55 | Technology: ICT Computer Skills | Engineering | | Language A (English 6) Literature | Technology: ICT Computer Skills | |
| Extended Day Period 8 2:55-4:15 | Health & Physical Education | Electives Music | Technology: Design Technology | Electives Science Seminar | Electives Visual Arts | |
| Period 9 4:15-5:15 | IB Camp Study Group Tutoring Sessions Student Clubs | |

IB MYP SAMPLE SCHEDULE

| Time | Monday | Tuesday | Wednesday | Thursday | Friday |
|---------------------------|---------------------|------------------------|----------------------|-----------------------|----------------------|
| HR | Homeroom | Homeroom | Homeroom | Homeroom | Homeroom |
| Period 1 | Spanish, French/EAL | Humanities | Design Tech/Music | Physical Education | Science |
| Period 2 | Spanish, French/EAL | Humanities | Design Tech/Music | Physical Education | Science |
| Break (15 minutes) | Break | Break | Break | Break | Break |
| Period 3 | Art/Drana | Spanish, French/EAL | Math | Homeroom | Humanities |
| Period 4 | Art/Drana | Spanish, French/EAL | Math | Homeroom | Humanities |
| Period 5 | English | Art/Drama | English | Design Tech/Music | Design Tech/Music |
| Lunch | Lunch | Lunch | Lunch | Lunch | Lunch |
| Period 6 | Science | Science | English | English | Physical Education |
| Period 7 | Math | Science | Spanish, French | English | Physical Education |
| Period 8 | Math | Math | Art/Drama | Humanities | English |
| Period 9 | After School | After School | | After School | |

Student sample taken from the IB MYP website.

**HARLEM PREPARATORY CHARTER SCHOOL FOR
SCIENCE, TECHNOLOGY, ENGINEERING & MATHEMATICS
IB MYP Student Schedule for 9th Grade**

| House of Harvard 9 th Grade | | | | | | |
|--|--|--|--|--|--|---|
| Time | Monday | Tuesday | Wednesday | Thursday | Friday | Saturday |
| Period 0 7:20-7:45 | Breakfast | Breakfast | Breakfast | Breakfast | Breakfast | |
| Period 1 Advisory Period 7:45-8:15 | Advisory Community Circle | Homeroom/ Advisory Community Circle | Advisory Community Circle | Homeroom/ Advisory Community Circle | Advisory Community Circle | |
| Period 2 8:15-9:55 | Language B Standard/Adv. (Spanish/French/ German) | Advanced Philosophy | Humanities Modern Era | Advanced Philosophy | Language B Standard/Adv. (Spanish/French/ German) | 9:00-9:30am Breakfast |
| Period 3 9:55-10:35 | Language A (English 9) Literature | Math 9 | Language A (English 9) Literature | Math 9 | Language A (English 9) Literature | 9:30-10:30 KAPLAN SAT Prep ELA |
| Period 4 10:35-11:15 | Humanities Modern Era | Language A (English 9) Literature | Math 9 | Humanities Modern Era | Math 9 | 10:30-11:30 KAPLAN SAT Prep Math |
| Period 5 11:15-12:55 | Life Sciences | Humanities Modern Era | Life Sciences | Life Sciences | Life Sciences | 11:30-12:30 CAS, College Tours, Electives, Roboics, Club Events Snack will be provided |
| Lunch 12:55-1:35 | Lunch | Lunch | Lunch | Lunch | Lunch | |
| Period 6 1:35-2:15 | Math 9 | Life Sciences | Advanced Engineering | Advanced Engineering | Humanities Modern Era | |
| Period 7 2:15-2:55 | Technology: Design Technology & ICT Computer Skills | Advanced Engineering | | Language A (English 9) Literature | Technology: Design Technology & ICT Computer Skills | |
| Extended Day Period 8 2:55-4:15 | Health & Physical Education | Electives Music | Technology: Design Technology & ICT Computer Skills | Electives Science Seminar | Electives Art/Drama | |
| Period 9 4:15-5:15 | IB Camp Study Group Tutoring Sessions Student Clubs | IB Camp Study Group Tutoring Sessions Student Clubs | IB Camp Study Group Tutoring Sessions Student Clubs | IB Camp Study Group Tutoring Sessions Student Clubs | IB Camp Study Group Tutoring Sessions Student Clubs | |

IB MYP SAMPLE SCHEDULE FOR GRADE 9-10

| Time | Monday | Tuesday | Wednesday | Thursday | Friday |
|---------------------------|-----------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| HR | Homeroom | Homeroom | Homeroom | Homeroom | Homeroom |
| Period 1 | Spanish, French/EAL | Humanities | Design Tech/Music | Physical Education | Biology and Chemistry |
| Period 2 | Spanish, French/EAL | Humanities | Design Tech/Music | Physical Education | Biology and Chemistry |
| Break (15 minutes) | Break | Break | Break | Break | Break |
| Period 3 | Art/Drama/Music* | Spanish, French/EAL* | Math | Homeroom | Humanities |
| Period 4 | Art/Drama/Music | Spanish, French/EAL | Math | Homeroom | Humanities |
| Period 5 | English | Art/Drama/Music | English | Design Tech/Music | Design Tech/Music |
| Lunch | Lunch | Lunch | Lunch | Lunch | Lunch |
| Period 6 | Physics and Chemistry | Physics and Chemistry | English | English | Physical Education |
| Period 7 | Physics and Chemistry | Physics and Chemistry | Spanish, French | English | Physical Education |
| Period 8 | Math | Math | Art/Drama/Music | Humanities | English |
| Period 9 | Math | | Biology and Chemistry | Biology and Chemistry | |

***Students select one**

Student Schedule taken from the IB MYP website.

English as an Additional Language (EAL) Students with limited English receive support through the EAL programme. Instead of taking French or Spanish, EAL students receive five additional periods of English per week. These classes focus on helping the student develop his/her academic English. In addition, the EAL teachers work with classroom teachers and sometimes attend other classes to provide additional support. Students are placed in this programme based on a combination of teacher recommendation, samples of work and testing.

HARLEM PREPARATORY CHARTER SCHOOL FOR SCIENCE, TECHNOLOGY, ENGINEERING & MATHEMATICS

IB Diploma (2 Year Program)

Sample Student Schedule

| Time | Monday | Tuesday | Wednesday | Thursday | Friday |
|---|--|------------------------------|---|----------------------------|---|
| Breakfast 7:30-7:55 | Breakfast | Breakfast | Breakfast | Breakfast | Breakfast |
| 0 Period 8:00-8:35 | Homeroom IB Study Group | Homeroom IB Study Group | Homeroom IB Study Group | Homeroom IB Study Group | Homeroom IB Study Group |
| Period 1 8:35-9:15 | Language A2 or B: English, French, Spanish, Russian Or Self---Taught* | Individuals and Societies | Arts | Science | Language A1 English |
| Period 2 9:15-9:55 | Language A2/B: English, French, Spanish, Russian Or Self---Taught* | Individuals and Societies | Arts | Science | Language A1 English |
| Break (15 minutes) 9:55-10:10 | Break | Break | Break | Break | Break |
| Period 3 10:10-10:50 | Theory of Knowledge | Language A1 English | Language A2/B English, French, Spanish, Russian Or Self---Taught* | Math | Language A2/B: English, French, Spanish, Russian Or Self---Taught* |
| Period 4 10:50-11:30 | Math: Standard Level Math: Higer Level Math: Math: or Methods* | Language A1 English | Language A2/B: English, French, Spanish, Russian Or Self---Taught* | Theory of Knowledge | Language A2/B: English, French, Spanish, Russian Or Self---Taught* |
| Period 5 11:30-12:10 | Individuals and Societies: History, Geography or Economics* | Math | Math | Theory of Knowledge | Math |
| Lunch 12:10-12:50 | Lunch | Lunch | Lunch | Lunch | Lunch |
| Period 6 12:50-1:30 | Science: Biology, Chemistry, Physics, Environmental Systems or Design Technology* | Science | Math | Arts | Individuals and Societies |
| Period 7 1:30-2:10 | Language A1: English, French, or Spanish* | Science | Math | Arts | Individuals and Societies |
| Period 8 2:10-2:50 | Creative Action Service (CAS) | Arts: Art or Drama* | Individuals and Societies | Language A1 English | Theory of Knowledge |
| Period 9 2:50-3:30 | Creative Action Service (CAS) | Arts | | | |

*students select one

Student Schedule taken from the IB MYP website.

Language A (English, 6, 7, 8, 9, 10), all levels including pre-IB

Language B (Introduction to foreign language)

Introduction to Foreign Language (IFL)

French (either 1A-1B) 1, 2, 3

German (either 1A-1B) 1, 2, 3

Spanish (either 1A-1B or 1) 2, 3 *also Spanish for Fluent Speakers

Harlem Preparatory Charter School For Science, Technology, Engineering & Mathematics

Yearly Calendar 2012

| EVENTS | | DATE |
|-----------|---|---------------------------------------|
| March | Teacher Recruitment College Fairs, Interviews Lottery, notification letters, informational sessions | 1-31 |
| April | Teacher Recruitment, Interviews | 2-30 |
| May | Welcome Teachers First Day Teacher Orientation Staff IB Curriculum Planning and Training, Student Schedules Parent Orientation (5pm-7pm & Sat 11am-1) (set-up profile) Student Orientation (Only Students Sat 11-2) (set-up profile) Memorial Day School Closed | 7-11 7-31 18-19 25, 26 28 |
| June | Review Curriculum & Summer Program | 1-30 |
| July | First Day of Summer Program I Freshman (6th graders) Thinking & Writing Summer Program (4 weeks) 8am-3pm Independence Day School Closed Father's Day Monthly Performance Evaluation Day , Academic Award Celebration, Parent Conference | 2-27 4 17 30-31 |
| August | Summer Program II program 8:30-3pm (3 weeks) IB CAS Project & Writing Reflections (18 hours per week), Language Course A Parent CAS program (12pm-2pm) Monthly Performance Evaluation Day, Award Celebration, Parent Conference | 1-24 4, 11, 18, 24 24 |
| September | Labor Day School Closed First Day of School for students Community-based Partnerships Program begins orientation day (Parents & Child) Monthly Professional Training (1.20 minutes) Rosh Hashanah Schools Closed | 5 6 9 28 29-30 |
| October | Monthly Performance Evaluation Day , Award Celebration, Columbus Day School is closed Kaplan SAT Program, IB Camp Saturday Academy Monthly Professional Training (1.20 minutes) Monthly New York Academy of Sciences Seminar Training (Parents & | 7 10 6, 13, 20, 27 31 30 |

| | | |
|----------|---|--|
| | Students) Halloween | 31 |
| November | Parent-Teacher Conference Kaplan SAT Program, IB Camp Saturday Academy Election Day School Closed Veterans Day School Closed Veterans Day Observed Thanksgiving Day School Closed No Monthly Professional Training (1.20 minutes) Monthly New York Academy of Sciences Seminar Training (Parents & Students) Semester Performance Evaluation Day , Award Celebration | 3 3, 10,17, 24 8 11 12 22 29 29 30 |
| December | No Monthly Professional Training (1.20 minutes) Community Partnership Celebration Monthly New York Academy of Sciences Seminar Training (Parents & Students) Kaplan SAT Program, IB Camp Saturday Academy Semester Ends Winter Recess Begins thru January 3rd School Closed Christmas Eve School Closed Christmas Day School Closed | 1, 8 13 1, 8, 15 24 25 |
| January | 2 nd Semester Begins New Program Kaplan SAT Program, IB Camp Saturday Academy Open House Student Recruitment Dr. Martin Luther King Day school is closed Monthly New York Academy of Sciences Seminar Training (Parents & Students) Monthly Professional Training (1.20 minutes) Monthly Performance Evaluation Day , Academic Award Celebration | 3 5, 12, 19, 26 3-31 17 24 30 31 |
| February | Open House Student Recruitment Kaplan SAT Program, IB Camp Saturday Academy Parent Teacher Conferences Winter Recess begins school is closed thru February 25 Monthly New York Academy of Sciences Seminar Training (Parents & Students) Monthly Professional Training (1.20 minutes) | 1-28 2, 9, 16, 23 16-17 17-25 28 29 |
| March | No Monthly Professional Training (1.20 minutes) Kaplan SAT Program, IB Camp Saturday Academy | 2, 9, 16, 23, 30 |

| | | |
|-------|--|---|
| | <p>Teacher Recruitment College Fair, Interviews Open House Student Recruitment Parent Teacher Conference Evening Parent Teacher Conference Afternoon Monthly New York Academy of Sciences Seminar Training (Parents & Students) Monthly Professional Training (1.20 minutes) Monthly Performance Evaluation Day , Academic Award Celebration</p> | <p>1-31 1-31 18 19 21 28 29</p> |
| April | <p>Teacher Recruitment, Interviews Kaplan SAT Program, IB Camp Saturday Academy Community Partnership Spring Gala, Awards Celebration, Community Service Day Open House Student Recruitment Spring Recess Good Friday school is closed Monthly New York Academy of Sciences Seminar Training (Parents & Students) Monthly Professional Training (1.20 minutes) Monthly New York Academy of Sciences Seminar Training (Parents & Students)</p> | <p>1-29 6, 13, 20, 27 11 1-18 18-26 25 29 30</p> |
| May | <p>Monthly Professional Training Review Testing Procedure & Assignments (1.20 minutes) Monthly Performance Evaluation Day , Award Celebration Kaplan SAT Program, IB Camp Saturday Academy Open House Student Recruitment Tentative Date for NYS ELA Exam Tentative Date for NYS Math Exam Monthly New York Academy of Sciences Seminar Training (Parents & Students) Tentative Date for NYS Science Exam</p> | <p>1 2 4, 11, 18, 25 2-31 3 11 23 31</p> |
| June | <p>Semester Performance Evaluation Day , Award Celebration No Monthly Professional Training No Monthly Performance Evaluation Day , Award Celebration No Kaplan SAT Program, IB Camp Saturday Academy Monthly New York Academy of Sciences Seminar Training (Parents & Students) New Mentor Assignments for 7th grade</p> | <p>13 20 21</p> |
| July | <p>First Day of Summer Program I Freshman (6th graders)</p> | <p>1-26</p> |

| | | |
|-----------|---|-------------------------------------|
| | Thinking & Writing Summer Program (4 weeks) 8am-3pm Independence Day School Closed Father's Day Monthly Performance Evaluation Day , Award Celebration, Parent Conference | 1-26 4 26 |
| August | Summer Program II program 8:30-3pm IB CAS Project & Writing Reflections (18 hours per week), Language Course A Parent CAS program (12pm-2pm) Monthly Performance Evaluation Day, Award Celebration, Parent Conference | 1-30 1-30 3,10,17,24,31 30 |
| September | Labor Day School Closed First Day of School for students Community-based Partnerships Program begins orientation day (Parents & Child) Monthly Professional Training (1.20 minutes) Rosh Hashanah Schools Closed | 2 3 5 6 |

**HARLEM PREPARATORY CHARTER SCHOOL FOR SCIENCE, TECHNOLOGY,
ENGINEERING AND MATHEMATICS
BY-LAWS**

**ARTICLE I
NAME**

The name of the Corporation is Harlem Preparatory Charter School for Science, Technology, Engineering and Mathematics (the “**School**”).

**ARTICLE II
MEMBERSHIP**

The School has no members. The rights which would otherwise vest in the members vest in the Directors of the School (the “**Trustees**”). Actions which would otherwise require approval by a majority of all members or approval by the members require only approval of a majority of all Trustees or approval by the Board of Trustees (the “**Board**”).

**ARTICLE III
BOARD OF TRUSTEES**

A. **Powers.** The Board shall conduct or direct the affairs of the School and exercise its powers, subject to the provisions of applicable law (including the Education Law and Not-for-Profit Corporation Law), as well as the requirements of the School’s Charter and these Bylaws. The Board may delegate the management of the activities of the School to others, so long as the affairs of the School are managed, and its powers are exercised, under the Board’s ultimate jurisdiction.

Without limiting the generality of the powers hereby granted to the Board, but subject to the same limitations, the Board shall have all the powers enumerated in these Bylaws, and the following specific powers:

1. To elect and remove Trustees;
2. To select and remove Officers, agents and employees of the School; to prescribe powers and duties for them and to fix their compensation;
3. To conduct, manage and control the affairs and activities of the School, and to make rules and regulations;
4. To enter into contracts, leases and other agreements which are, in the Board’s judgment, necessary or desirable in obtaining the purposes of promoting the interests of the School;
5. To carry on the business of operating the School and apply any surplus that results from the business activity to any activity in which the School may engage;
6. To act as trustee under any trust incidental to the School’s purposes, and to receive, hold, administer, exchange and expend funds and property subject to such a trust;

7. To acquire real or personal property, by purchase, exchange, lease, gift, devise, bequest, or otherwise, and to hold, improve, lease, sublease, mortgage, transfer in trust, encumber, convey or otherwise dispose of such property;

8. To borrow money, incur debt, and to execute and deliver promissory notes, bonds, debentures, deeds of trust, mortgages, pledges, hypothecations and other evidences of debt and securities, subject to the provisions of the Not-for-Profit Corporation Law and any limitations noted in the By-laws;

9. To lend money received only from private sources and to accept conditional or unconditional promissory notes therefore, whether interest or non-interest bearing, or secured or unsecured; and

10. To indemnify and maintain insurance on behalf of any of its Trustees, Officers, employees or agents for liability asserted against or incurred by such person in such capacity or arising out of such person's status as such, subject to the applicable provisions of the New York Not-for-Profit Corporation Law and the limitations noted in these Bylaws.

B. **Number of Trustees.** The number of Trustees of the School shall be not fewer than five (5) and shall not exceed fifteen (15). The Board shall fix the exact number of Trustees, within these limits, by Board resolution or amendment of the Bylaws.

C. **Election of Trustees.**

1. **Election.** The Board shall elect the Trustees by the vote of a majority of the Trustees then in office or, in the event that only one Trustee remains, then by the sole remaining Trustee. Trustees-elect assume office subject to approval by the [Charter Entity].¹

2. **Eligibility.** The Board may elect any person who is at least eighteen (18) years old and who, in its discretion, it believes will serve the interests of the School faithfully and effectively.

3. **Interested Persons.** Not more than forty percent (49%) of the persons serving on the Board may be interested persons. An "**interested person**" is: (1) any person currently being compensated by the School for services rendered to it within the previous 12 months, whether as a full-time or part-time employee, independent contractor or otherwise; or (2) any sister, brother, ancestor, descendant, spouse, domestic partner, sister-in-law, brother-in-law, daughter-in-law, son-in-law, mother-in-law or father-in-law, cousin or cousin-in-law of any such person.

3a. Organizational Affiliation. Not more than 40% percent of the persons serving on the board may be a trustee or employee of a single organization.

3b. Ex-Officio Members. There shall be one seat on the board reserved for the elected President of the school's Parent Council, who shall be a parent of a child matriculating in the school. Additionally, there shall be one non-voting seat on the Board reserved for the Executive Director of Harlem Preparatory Charter School for Science, Technology, Engineering, and Mathematics. This person shall not hold the office of Chair or Treasurer. Termination of the contract with the Harlem Preparatory Charter School for

Science, Technology, Engineering, and Mathematics shall constitute cause for removal of this person from the school board, and upon such termination this person may be removed from the school Board by vote of the school board provided there is a quorum of at least a majority of the entire school Board present at the meeting.

Term of Office.

(a) The Trustees elected shall be divided into three classes for the purpose of staggering their terms of office. The Board Executive Committee will assign each founding Board member to a class prior to the first Board meeting. All classes shall be as nearly equal in number as possible. The assignment of any Board member to a particular class does not in any way restrict that Board member from participating fully in all Board activities and from serving additional terms.

(b) The terms of office of the Trustees initially classified shall be as follows: that of the first class shall expire at the next annual meeting of the Trustees, the second class at the second succeeding annual meeting and the third class at the third succeeding annual meeting. Following the expiration of these designated terms, the term of each Trustee shall continue for three (3) years. Trustees may not serve more than two consecutive terms.

(c) The term of office of a Trustee elected to fill a vacancy in these Bylaws begins on the date of the Trustee's election, and continues: (1) for the balance of the unexpired term in the case of a vacancy created because of the resignation, removal, or death of a Trustee, or (2) for the term specified by the Board in the case of a vacancy resulting from the increase of the number of Trustees authorized.

(d) A Trustee's term of office shall not be shortened by any reduction in the number of Trustees resulting from amendment to the Charter, the Bylaws, or other Board action.

(e) A Trustee's term of office shall not be extended or shortened beyond that for which the Trustee was elected by amendment of the school's charter or the Bylaws or other Board action.

4. **Time of Elections.** The Board shall elect Trustees whose terms begin on July 1st of a given year at the Annual Meeting for that year, or at a Regular Meeting designated for that purpose, or at a Special Meeting called for that purpose.

D. **Removal or Suspension of Trustees, Officers and Employees.** The Board may remove or suspend from office by vote of a majority of the entire Board any Trustee, officer or employee engaged under special contract, on examination and due proof of the truth of a written complaint by any Trustee, of misconduct, incapacity or neglect of duty (*provided*, that at least one week's previous notice of the proposed action shall have been given to the accused and to each Trustee), in accordance with the applicable provisions of the Education Law and the Not-for-Profit Corporation Law.

E. **Resignation by Trustee.** A Trustee may resign by giving written notice to the Board Chair or Secretary. The resignation is effective upon receipt of such notice, or at any later date specified in the notice. The acceptance of a resignation by the Board Chair or Secretary shall not be necessary to make it effective, but no resignation shall discharge any accrued obligation or duty of a Trustee.

F. **Vacancies.** A vacancy is deemed to occur on the effective date of the resignation of a Trustee, upon the removal of a Trustee, upon declaration of vacancy pursuant to these Bylaws, or upon a Trustee's death. A vacancy is also deemed to exist upon the increase by the Board of the authorized number of Trustees.

G. **Compensation of Trustees.** Trustees shall serve without compensation. However, the Board may approve reimbursement of a Trustee's actual and necessary expenses while conducting School business.

ARTICLE IV **OFFICES**

The School's principal office shall be located at the school operated by the School (the "**School Facility**"), which shall be at such place as the Board may select from time to time by resolution of a majority of the Board. The Secretary shall note any change in office on the copy of the Bylaws maintained by the Secretary. The School may also have offices at such other places, within the State of New York, as the Board may from time to time determine.

ARTICLE V **MEETINGS OF THE BOARD**

A. **Place of Meetings.** Board Meetings shall be held at the School Facility *provided* that Board meetings shall be scheduled at least monthly at the School Facility.

B. **Annual Meeting.** An Annual Meeting shall be held in the month of June of each year for the purpose of electing Trustees, making and receiving reports on corporate affairs, and transacting such other business as comes before the meeting.

C. **Frequency of Meetings.** A minimum of twelve (12) meetings (inclusive of the June Annual Meeting and any Special Meetings) shall be scheduled each year on dates determined by the Board; *provided* that Board meetings shall be scheduled at least monthly at the School Facility.

D. **Special Meetings.** A Special Meeting shall be held at any time called by the Chair, or by any Trustee upon written demand of not less than one-half of the entire Board.

E. **Adjournment.** A majority of the Trustees present at a meeting, whether or not a quorum, may adjourn the meeting to another time and place.

F. **Notice to Trustees.** Notices to Trustees of Board Meetings shall be given as follows:

1. If the Board fixes the dates of regular meetings (which may include the Annual Meeting) for the year, then such meetings may be held without further notice of time and place. In the event that the date of an Annual Meeting or regular meeting is changed (or a regular meeting is added), written notice of the new meeting date (or the date of the new regular meeting) will be provided at least ten (10) days in advance of the meeting.

2. Special Meetings shall be held upon reasonable notice (at least 48 hours, if practicable).²

3. Notices will be deemed given when deposited in the United States mail, addressed to the recipient at the address shown for the recipient in the School's records, first-class postage prepaid; when personally delivered in writing to the recipient; or when faxed, e-mailed, or communicated orally, in person or by telephone, to the Trustee or to a person whom it is reasonably believed will communicate it promptly to the Trustee.

4. Public notices of Board Meetings shall be made in accordance with the New York Open Meetings Law.

G. **Waiver of Notice.** Notice of a meeting need not be given to a Trustee who signs a waiver of notice or written consent to holding the meeting or an approval of the minutes of the meeting, whether before or after the meeting, or attends the meeting without protest prior to the meeting or at its commencement, of the lack of notice. The Secretary shall incorporate all such waivers, consents and approvals into the minutes of the meeting.

ARTICLE VI **ACTION BY THE BOARD**

A. **Quorum.** Unless a greater proportion is required by law, a majority of the entire Board shall constitute a quorum for the transaction of any business or of any specified item of business.

B. **Action by the Board.**

1. **Actions Taken at Board Meetings.** Any business may be transacted and any corporate action may be taken at any annual, regular or special meeting of the Board at which a quorum is present, whether such business or proposed action be stated in the notice of such meeting or not, unless special notice of such business or proposed action is required by law or by these bylaws. Except as otherwise provided by statute or by these Bylaws, the vote of a majority of the Board present at the time of the vote, if a quorum is present at such time, shall be the act of the Board. If at any meeting of the Board there shall be less than a quorum present, the Trustees present may adjourn the meeting until a quorum is obtained.

2. **Board Participation by Other Means.** In all events, a quorum of Trustees must be present to lawfully conduct a Board meeting. To the extent permitted by the Open Meetings Law, Trustees participating by means of video-conferencing may be counted toward achieving a quorum. Once a quorum is present, additional Trustees may participate in a Board meeting through conference telephone or similar communication equipment, *provided* that all Trustees participating in such meeting can hear one another. Trustees shall not be entitled to vote unless they attend the meeting in person or, to the extent permitted by the Open Meetings Law, by live video-conferencing. Trustees participating by means of video-conferencing shall do so from a site at which the public may attend, listen and observe. All meetings of the Board are subject to the provisions of the Open Meetings Law.

C. **Committees.**

1. **Appointment of Committees.** The Board may create committees of the Board (each, a "**Committee**") for any purpose, and the Chair of the Board shall appoint members to and designate the chairs of such Committees, subject to the approval of the Board. A Committee will consist of not fewer than three Trustees (or not fewer than five Trustees in the case of the Executive Committee), who shall be appointed by the Chair, subject to the approval of the Board.

2. **Standing Committees.** The Board shall have three standing Committees: an Executive Committee (chaired by the Chair), a Finance Committee (chaired by the Treasurer) and an Education and Accountability Committee. Additional Committee members shall be appointed by the Chair, subject to the approval of the Board.

3. **Authority of Committees.** The Board may delegate to a Committee any of the authority of the Board, except with respect to:

- (a) The election of Trustees;
- (b) Filling vacancies on the Board or any Committee which has the authority of the Board;
- (c) The amendment or repeal of Bylaws or the adoption of new Bylaws; and
- (d) The appointment of other Committees, or the members of the Committees.

4. **Procedures of Committees.** The Board may prescribe the manner in which the proceedings of any Committee are to be conducted. In the absence of such prescription, a Board Committee may prescribe the manner of conducting its proceedings, except that the regular and special meetings of the Committee are governed by the provisions of these Bylaws and the Open Meetings Law with respect to the calling of meetings.

D. **Standard of Care.**

1. **Performance of Duties.** Each Trustee shall perform all duties of a Trustee, including duties on any Committee, in good faith and with that degree of diligence, care and skill, including reasonable inquiry, as an ordinary prudent person in a like position would use under similar circumstances.

2. **Reliance on Others.** In performing the duties of a Trustee, a Trustee shall be entitled to rely on information, opinions, reports or statements, including financial statements and other financial data, presented or prepared by:

- (a) One or more Officers or employees of the School whom the Trustee believes to be reliable and competent in the matters presented;
- (b) Legal counsel, public accountants or other persons as to matters that the Trustee believes are within that person's professional or expert competence; or
- (c) A Board Committee on which the Trustee does not serve, duly designated in accordance with a provision of the School's Charter or Bylaws, as to matters within its designated authority, *provided* the Trustee believes the Committee merits confidence and the Trustee acts in good faith, and with that degree of care specified in Paragraph D.1., and after reasonable inquiry when the need is indicated by the circumstances, and without knowledge that would cause such reliance to be unwarranted.

3. **Investments.** In investing and dealing with all assets held by the School for investment, the Board shall exercise the standard of care described above in Paragraph D.1., and

shall consider among other relevant considerations the long and short term needs of the School in carrying out its purposes, including its present and anticipated financial requirements. The Board may delegate its investment powers to others, *provided* that those powers are exercised within the ultimate direction of the Board.

E. **Rights of Inspection.** Every Trustee has the right to inspect and copy all books, records and documents of every kind and to inspect the physical properties of the School, *provided* that such inspection is conducted at a reasonable time after reasonable notice, and *provided* that such right of inspection and copying is subject to the obligation to maintain the confidentiality of the reviewed information, in addition to any obligations imposed by any applicable federal, state or local law.

F. **Participation in Discussions and Voting.** Every Trustee has the right to participate in the discussion and vote on all issues before the Board or any Committee, except that any Trustee shall be excused from the discussion and vote on any matter involving: (a) a conflict of interest for such Trustee (even if such conflict of interest does not constitute a prohibited transaction under applicable law); (b) indemnification of that Trustee uniquely; or (c) any other matter at the discretion of a majority of the Trustees then present.

G. **Duty to Maintain Board Confidences.** Every Trustee has a duty to maintain the confidentiality of all Board actions which are not required by law to be open to the public, including discussions and votes which take place at any Executive Sessions of the Board. Any Trustee violating this confidence may be removed from the Board.

ARTICLE VII **OFFICERS**

A. **Officers.** The Officers of the School consist of a Chair (the “**Chair**”), Vice Chair (the “**Vice Chair**”), a Secretary and a Treasurer. The School also may have such other officers as the Board deems advisable.

1. **Chair.** Subject to Board control, the Chair has general supervision, direction and control of the affairs of the School, and such other powers and duties as the Board and these bylaws may prescribe. If present, the Chair shall preside at Board meetings.

2. **Vice Chair.** If the Chair is absent or disabled, the Vice Chair shall perform all the Chair’s duties and, when so acting, shall have all the Chair’s powers and be subject to the same restrictions. The Vice Chair shall have other such powers and perform such other duties as the Board may prescribe.

3. **Secretary.** The Secretary shall: (a) keep or cause to be kept, at the School’s principal office, or such other place as the Board may direct, a book of minutes of all meetings of the Board and Committees, noting the time and place of the meeting, whether it was regular or special (and if special, how authorized), the notice given, the names of those present, and the proceedings; (b) keep or cause to be kept a copy of the School’s Charter and Bylaws, with amendments; (c) keep or cause to be kept a copy of the School’s incorporation and tax status filings and documentation; (d) give or cause to be given notice of the Board and Committee meetings as required by the Bylaws; and (e) have such other powers and perform such other duties as the Board may prescribe.

4. **Treasurer.** The Treasurer shall: (a) keep or cause to be kept adequate and correct accounts of the School’s properties, receipts and disbursements; (b) make the books of

account available at all times for inspection by any Trustee; (c) deposit or cause to be deposited the School's monies and other valuables in the School's name and to its credit, with the depositories the Board designates; (d) disburse or cause to be disbursed the School's funds as the Board directs; (e) render or cause to be rendered to the Chair and the Board, as requested but no less frequently than once every fiscal year, an account of the School's financial transactions and financial condition; (f) prepare or cause to be prepared any reports on financial issues required by any loan agreement; (g) chair the Finance Committee; and (h) have such other powers and perform such other duties as the Board may prescribe.

B. Election, Eligibility and Term of Office.

1. **Election.** The Board shall elect the Officers annually at the Annual Meeting or a Regular Meeting designated for that purpose or at a Special Meeting called for that purpose, except that Officers appointed to fill vacancies shall be elected as vacancies occur.

2. **Eligibility.** A Trustee may hold any number of offices, except that neither the Secretary nor Treasurer may serve concurrently as the Chair.

3. **Term of Office.** Each Officer serves at the pleasure of the Board, holding office until resignation, removal or disqualification from service, or until his or her successor is elected.

C. **Removal and Resignation.** The Board may remove any Officer, either with or without cause, at any time. Such removal shall not prejudice the Officer's rights, if any, under an employment contract. Any Officer may resign at any time by giving written notice to the School, the resignation taking effect upon receipt of the notice or at a later date specified in the notice.

ARTICLE VIII
NO LIABILITY OF TRUSTEES; INDEMNIFICATION; INSURANCE

A. **No Liability of Trustees.** The Trustees shall not be personally liable for the School's debts, liabilities or other obligations.

B. **Indemnification.** The School shall (in the case of Trustees and Officers) and may (in the case of employees and agents), to the fullest extent permitted by law, indemnify any person made, or threatened to be made, a party or witness to any action, investigation or proceeding by reason of the fact that he or she (or his or her testator) is or was a Trustee, officer, employee or agent of the School, against judgments, fines, amounts paid in settlement and reasonable expenses, including attorneys' fees. No indemnification may be made to or on behalf of any person if (a) his or her acts were committed in bad faith, or were the result of his or her deliberate dishonesty and were material to such action or proceeding, or (b) he or she personally gained a financial profit or other advantage to which he or she was not legally entitled in the transaction or matter in which indemnification is sought.

C. **Insurance.** The School shall have the power to purchase and maintain all insurance policies deemed to be in the best interest of the School, including insurance to indemnify the School for any obligation which it incurs as a result of its indemnification of Trustees, Officers, employees or agents, or to indemnify such persons in instances in which they may be so indemnified.

ARTICLE IX
CONFLICTS OF INTEREST

A. **Code of Ethics.** The Board shall approve a Code of Ethics applicable to Trustees, officers and employees of the School, compliant with the General Municipal Law, which may be amended from time to time by the Board.

B. **Conflict of Interest.** Any Trustee, Officer, or Committee member having an interest in a contract, other transaction or program presented to or discussed by the Board or Committee for authorization, approval, or ratification shall make a prompt, full and frank disclosure of his or her interest to the Board or Committee prior to its acting on such contract or transaction. Such disclosure shall include all relevant and material facts known to such person about the contract or transaction that may reasonably be construed to be adverse to the School's interest. The body to which such disclosure is made shall thereupon determine, by majority vote, whether the disclosure shows that a conflict of interest exists or can reasonably be construed to exist. If a conflict is deemed to exist, such person shall not vote on, nor use his or her personal influence on, nor be present during the discussion or deliberations with respect to, such contract or transaction (other than to present factual information or to respond to questions prior to the discussion). The minutes of the meeting shall reflect proceedings, including the disclosure made, the vote thereon and, where applicable, the abstention from voting and participation. The Board may adopt formal policies requiring:

1. Regular annual statements from Trustees, Officers and key employees to disclose existing and potential conflicts of interest; and
2. Corrective and disciplinary actions with respect to transgressions of such policies.

For the purpose of this section, a person shall be deemed to have an “**interest**” in a contract or other transaction if he or she is the party (or one of the parties) contracting or dealing with the School, or is a director, trustee or officer of, or has a significant financial or influential interest in the entity contracting or dealing with the School. These provisions will be consistent with the General Municipal Law.

ARTICLE X
OTHER PROVISIONS

A. **Fiscal Year.** The fiscal year of the School begins on July 1 of each year and ends June 30.

B. **Execution of Instruments.** Except as otherwise provided in these Bylaws, the Board may adopt a resolution authorizing any Officer or agent of the School to enter into any contract or execute and deliver any instrument in the name of or on behalf of the School. Such authority may be general or confined to specific instances. Unless so authorized, no Officer, agent or employee shall have any power to bind the School by any contract or engagement, to pledge the School's credit, or to render it liable monetarily for any purpose or any amount.

C. **Checks and Notes.** Except as otherwise specifically provided by Board resolution, checks, drafts, promissory notes, orders for the payment of money, and other evidence of indebtedness of the School may be signed by the Chair of the Board, the Head of School, or Treasurer. Check requests for amounts of \$5,000.00 or greater must be signed by two (2) of these individuals.

D. **Construction and Definitions.** Unless the context otherwise requires, the general provisions, rules of construction, and definitions contained in the Not-for-Profit Corporation Law and the Education Law shall govern the construction of these Bylaws. Without limiting the generality of the foregoing, words in these Bylaws shall be read as the masculine or feminine gender, and as the singular or plural, as the context requires, and the word “person” includes both a School and a natural person. The captions and headings in these Bylaws are for reference and convenience only and are not intended to limit or define the scope or effect of any provisions.

E. **Interpretation of Charter.** To the extent of any conflict between any provision of these by-laws and the Open Meetings Law, the Open Meetings Law will control. Whenever any provision of the Bylaws is in conflict with the provisions of the Charter, the provisions of the Charter shall control.

ARTICLE XI **AMENDMENT**

A majority of the Trustees may adopt, amend or repeal these Bylaws, subject to approval by the Charter Entity, where applicable.

ARTICLE XII **REFERENCES TO DOCUMENTS**

References in these Bylaws to the certificate of incorporation of the School (the “**Charter**”), or to any other document, shall include all amendments thereto or changes thereof unless specifically excepted.

CERTIFICATE OF THE SECRETARY

The undersigned does hereby certify that the undersigned is the Secretary of the School, an education School duly organized and existing under the laws of the State of New York; that the foregoing Bylaws of said School were duly and regularly adopted as such by the Board of Trustees of said School; and that the above and foregoing Bylaws are now in full force and effect.

Secretary of the School

**HARLEM PREPARATORY CHARTER SCHOOL FOR SCIENCE, TECHNOLOGY,
ENGINEERING AND MATHEMATICS
CODE OF ETHICS**

The Board of Trustees recognizes that sound, ethical standards of conduct serve to increase the effectiveness of school board trustees and their staff as educational leaders in their community. Actions based on an ethical code of conduct promote public confidence and the attainment of school goals. The Board also recognizes its obligation under the General Municipal Law to adopt a code of ethics consistent with the provisions of the General Municipal Law, setting forth the standards of conduct required of all school trustees, officers and employees.

Therefore, every officer and employee of the school, whether paid or unpaid, including Board Trustees, shall adhere to the following code of conduct:

1. *Gifts:* An officer or employee shall not directly or indirectly solicit any gifts; nor shall an officer or employee accept or receive any single gift having a value of \$75 or more, or gifts from the same source having a cumulative value of \$75 or more over a twelve-month period, whether in the form of money, services, loan, travel, entertainment, hospitality, thing or promise, or any other form, if it could reasonably be inferred that the gift was intended to influence him or her in the performance of his or her official duties or was intended as a reward for any official action on his or her part.

However, the Board welcomes and encourages the writing of letters or notes expressing gratitude or appreciation to staff members. Gifts from children that are principally sentimental in nature and of insignificant financial value may be accepted in the spirit in which they are given.

2. *Confidential information:* An officer or employee shall not disclose confidential information acquired by him or her in the course of his or her official duties or use such information to further his or her own personal interest. In addition, he/she shall not disclose information regarding any matters discussed in an executive session of the Board, whether such information is deemed confidential or not.

3. *Representation before the Board:* An officer or employee shall not receive or enter into any agreement, express or implied, for compensation for services to be rendered in relation to any matter before the school board.

4. *Representation before the Board for a contingent fee:* An officer or employee shall not receive or enter into any agreement, express or implied, for compensation for services to be rendered in relation to any matter before the school board, whereby the compensation is to be dependent or contingent upon any action by the school with respect to such matter, provided that this paragraph shall not prohibit the fixing at any time of fees based upon the reasonable value of the services rendered.

5. *Disclosure of interest in matters before the Board:* A member of the Board of Trustees and any officer or employee of the school, whether paid or unpaid, who participates in the discussion or gives official opinion to the Board on any matter before the Board shall publicly disclose on the official record the nature and extent of any direct or indirect financial or other private interest he or she has in such matter. The term "interest" means a pecuniary or material benefit accruing to an officer or employee.

6. *Investments in conflict with official duties:* An officer or employee shall not invest or hold any investment directly in any financial, business, commercial or other private transaction that creates a conflict with his or her official duties.

7. *Private employment:* An officer or employee shall not engage in, solicit, negotiate for or promise to accept private employment when that employment or service creates a conflict with or impairs the proper discharge of his or her official duties.

8. *Future employment:* An officer or employee shall not, after the termination of service or employment with the Board, appear before the Board or any panel or committee of the Board, in relation to any case, proceeding, or application in which he or she personally participated during the period of his or her service or employment or that was under his or her active consideration. This shall not bar or prevent the timely filing by a present or former officer or employee of any claim, account, demand or suit against the district on his or her own behalf or on behalf of any member of his or her family arising out of any personal injury or property damage or for any lawful benefit authorized or permitted by law.

Distribution of Code of Ethics

The Chief Executive Officer shall cause a copy of this Code of Ethics to be distributed annually to every officer and employee of the school. Each officer and employee elected or appointed thereafter shall be furnished a copy before entering upon the duties of his or her office or employment.

Penalties

In addition to any penalty contained in any other provision of law, any person who shall knowingly and intentionally violate any of the provisions of the Board's code of ethics may be fined, suspended or removed from office or employment, as the case may be, in the manner provided by law.

JOHN J. KELLEY

NYC RESIDENCE

New York, New York 10026

l.com

ADMITTED TO PRACTICE:

1988 The State of New York, United States District Court (WDNY) and United States Bankruptcy Court (WDNY)
1989 District of Columbia (inactive)

LEGAL EXPERIENCE:

Assistant Attorney General

2/28/02 to 7/23/07; 5/24/10 to Present

Trial Attorney in the medical malpractice section. Demonstrated an ability to work autonomously under extreme pressure, manage a high volume, high exposure case load from discovery through trial and/or settlement, and interact with individual clients and agencies. Many cases had million to multi-million dollar exposure and were venued contemporaneously in New York State Supreme Court and the Court of Claims. Made trial and settlement recommendations to the OAG, hospital boards and State Agencies.

NEW YORK STATE DEPARTMENT OF LAW

New York, New York

Attorney of Record

7/20/07 to 5/24/10

NEW YORK LIQUIDATION BUREAU

"The Law Office of John J. Kelley"

New York, New York

Attorney of Record for an agency that liquidates insolvent insurance companies, pursuant to NY INSURANCE LAW Articles 74, 75 and 76. Duties include: (1) Supervising and managing the activities of the in-house defense team, including reviewing and overseeing legal work performed by attorneys, paralegals and clerical staff; (2) Assisting in the supervision of subordinate personnel; recommending hiring, determining workload and delegating assignments; training, monitoring, evaluating performance, and initiating corrective or disciplinary actions; providing guidance to, and working to improve the skills of, litigators; (3) Handling numerous legal tasks, including preparing legal documents, arguing motions and appeals and conducting trials and depositions; and (4) Serving on special committees as appointed by the General Counsel; consulting with and assisting the General Counsel on projects, as needed.

Associate to Partner

1/14/88 to 2/27/02

Attorney in diverse litigation practice, handling all types of civil and criminal matters, which involved actual and/or potential litigation. Experience included trial and appellate work, and extends into other areas, such as the firm's representation of various municipal corporations and interstate corporations.

JONES, SKIVINGTON AND KELLEY

Geneseo, New York

Member

1995-2001

Attorney Member, appointed for two three-year terms. Responsibilities involved review of selected disciplinary recommendations of the staff of the Grievance Office and participation in Committee meetings to determine the appropriate action, including recommendations of formal charges to the Appellate Division, Fourth Department.

ATTORNEY GRIEVANCE COMMITTEE

SEVENTH JUDICIAL DISTRICT

Town Justice

4/15/93 to 2/27/02

Duly elected Town Justice. Presided over all matters within the Court's jurisdictional limits (criminal and civil).

TOWN OF LIVONIA

Livonia, New York

Village Attorney

4/1/97 to 2/27/02

Appointed by Village Board. Prepared and/or reviewed all local legislation. Advised the Mayor and Trustees as to all aspects of Village government.

VILLAGE OF LIVONIA

Livonia, New York

Acting Public Defender

11/4/92 to 3/19/93

Complete supervision of the Office of the Public Defender from 11/4/92 to 3/19/93. Responsible for all felony cases and calendars, as well as eight (8) Justice Courts. Acting Assigned Counsel Administrator. Prepared and presented reports to the Judiciary Committee of the Livingston County Board of Supervisors.

LIVINGSTON COUNTY

Geneseo, New York

First Assistant Public Defender

3/16/92 to 11/4/92

Responsible for the complete administration of the Justice Court calendar and handled eight Justice Courts. Devised and implemented the Office's computer software system and trained staff in the usage thereof. Acted as Office's liaison to the Livingston County Magistrate's Association. Assisted with Felony cases.

LIVINGSTON COUNTY

Geneseo, New York

Curriculum Developer

9/1/89 to 8/31/01

Developed a course on emergency services law. Unfortunately, due to funding issues, the course was not offered.

MONROE COUNTY COMMUNITY COLLEGE

Henrietta, New York

EDUCATION**Juris Doctor**

8/31/84 to 5/31/87

Member of the George Mason University Law Review. Research Assistant to Professor George R. Johnson, Jr., on a report presented to the United States Administrative Law Conference. Appeared WHO'S WHO IN AMERICAN LAW SCHOOLS, 1987. Assisted in the development of *The Letter of Credit Update* in 1985.

GEORGE MASON UNIVERSITY SCHOOL OF LAW

Arlington, Virginia

Bachelor of Arts

8/31/80 to 5/31/84

History major, Applied Writing minor. Appeared on the Ithaca College Dean's List during several semesters. Member of Phi Alpha Theta National Honorary Historical Society.

ITHACA COLLEGE

Ithaca, New York.

PROFESSIONAL ORGANIZATIONS**New York County Lawyers Association**

Civil Court Practice and Professional Ethics Sections

2009 to Present

Livingston County Bar Association

Served as elected President 1994-95, Vice President 1993-94, and Secretary-Treasurer 1992-93

1987 to 2002

Livingston County Magistrate's and Court Clerk's Association

Member of the Livingston County Association, which is comprised of local court justices and court clerks. Participated on a task force, which is designed to work with county law enforcement and legislative officials to develop a proactive community service and alternatives to incarceration program. Member of Nominating Committee 1994-96.

1993 to 2002

Livingston County Fire Advisory Board

Attorney/Member. Appointed by the Livingston County Board of Supervisors.

1996 to 2002

New York State Bar Association

1987 to 2002

New York State Magistrate's Association

Member of the Association, which exclusively is comprised of New York State Local Court Justices.

1993 to 2005

Rotary International

Member and Past-President (1998-1999) of a very active Rotary Club located at Livonia, New York, performing a variety of charitable and community functions. Incorporator of the Livonia Rotary Foundation (1999). Board of Directors 1997-2000.

1993 to 2002

Junior Achievement

Second Grade Junior Achievement Volunteer Instructor at the Livonia Central School.

1996 to 2002

Phi Delta Phi Legal Fraternity

Acted as the Secretary/Treasurer of Phi Delta Phi's Lewis F. Powell Chapter from November 1984 through November 1986.

1984 to 2002

Livonia Volunteer Fire Department

Attorney, Member and Past President (1998-1999) of the Livonia Volunteer Fire Department.

1994 to 2002

Anisa Keith

New York, NY 10026

SUMMARY OF QUALIFICATIONS

- 10 years of direct investment experience.
- Responsible for \$750M in investments across various portfolio styles at a \$400B fund.
- Strong investment evaluation/due diligence capabilities.
- Experienced with investment selection and asset allocation process.
- Able to forge relationships with management and key professionals as means to develop informed investment decisions.
- Adept at making and presenting investment recommendations, monitoring and reporting on performance and taking follow-up action as needed.
- Strong writer able to produce quality investment documents.
- Experienced negotiating business and legal agreements.
- Team player and natural relationship builder with interpersonal skills to gain consensus and drive results.
- Excellent communicator. Natural relationship manager.
- Able to manage multi-party collaborations, gain consensus and drive results.
- Columbia MBA, Georgetown University undergraduate.
- CFA Level I

RELEVANT SKILLS

Data Aggregation/Screening

Due Diligence/Investment Analysis

Developing Investment Recommendations

Investment Presentations

Asset Allocation

Valuation

Financial Modeling

Portfolio Monitoring & Reporting

WORK EXPERIENCE

2008 - Present

Independent Consultant

Recent engagements include:

- Marketing and launch of market cycle-based long/short equity fund;
- PA-based broker dealer seeking to expand fixed income and MBS product offering;
- Leading PE/VC fund raise effort for a global remittance company.

2006 - 2008

DHD, Inc.

Chief Operating Officer/ Director of Business Development

Managed financial and other operating areas of a growing architectural/design firm. Led international market effort, winning lucrative Middle-East contracts, including Dubai Government. Managed all major contract negotiations including joint venture in Qatar. Increased revenue 2X and operating margins by 11%.

2004 - 2005

William Jefferson Clinton Foundation - Small Business Initiative

Team Leader (Pro-bono)

Managed team of 10 pro-bono consultants (including Booz Allen associates and industry professionals) on this 12-month strategy consulting project to a Bronx-based textile manufacturer.

2002 - 2003

Investment Strategies Fund, LP

Senior Equity Analyst

Developed investment recommendations for start-up, hedge fund operation through fundamental investment research and analysis, leveraging established industry and company network. Retail recommendations including short sale of Gap (GPS), resulting in 15% return.

1993 - 2002

TIAA-CREF Investment Management, Inc.

Sr. Analyst/Sector Fund Manager: Consumer/Retail Sector

Managed \$125M in domestic and European sector funds. Outperformed Russell benchmarks by average of 400 bps in domestic fund and 700 bps in European fund.

Equity Analyst

Performed fundamental analysis based on qualitative research and financial modeling. Developed investment recommendations and sold/presented to portfolio managers and Investment Committee. Prepared formal presentations, reports, and industry overviews. Built and maintained crucial relationships with company directors, industry experts and investors. Responsible for \$750M in retail industry investments across CREF portfolios.

1989 -1991

Booz Allen & Hamilton

Analyst

Assisted clients in assessing new business opportunities. Performed industry research and analysis to facilitate market entry strategies and partnering options within the telecommunications and government sectors.

EDUCATION

1991 - 1993

Columbia Business School

MBA – Finance. Summer internship at **Alliance Capital Management.**

Fall 1992

Hautes Etudes Commerciales (HEC), Jouy-en-Josas, France
International business and management.

1985 – 1989

Georgetown University, Washington, DC
BSBA – Marketing/Fine Arts. Dean's List.

**ADDITIONAL
INFORMATION**

Officer **Columbia Business School Alumni Club of New York**
Marketing Director **National Black MBA Association: New York Metro Chapter (2006)**
Member **Council of Urban Professionals**
Member **Arab Bankers Association of North America (ABANA)**

REFERENCES

Available upon request.

EXPERIENCE

- 2010- Lazard Asset Management, LLC** **New York, NY**
Managing Director, Portfolio Manager
- Manage emerging market fixed income and currency funds across emerging market universe
 - Responsible for four distinct strategies including hard currency, local currency, blend strategy and total return
 - Co-lead a team of seven investment professionals to analyze and trade emerging market securities
- 2003-2010 HSBC HALBIS CAPITAL MANAGEMENT** **New York, NY**
fka The Atlantic, LLC (acquired in June 2005)
Senior Vice President, Portfolio Manager GEM Fixed Income and Currencies
- Part of two-person portfolio management team that managed a \$6.5bn multi-strategy emerging market portfolio; included \$750mm long/short total return fund and multiple long-only funds and segregated mandates
 - Trade all types of investment instruments including hard currency sovereign and corporate bonds, local currency debt, private placements, equities, currencies and derivative instruments, including options, structured notes, and credit default swaps
 - Primary focus is to develop and execute trade ideas across each region of EM; responsible for determining long and short alpha opportunities in addition to risk budgeting across each fund
 - Utilize top-down qualitative and quantitative investment tools to analyze investment opportunities in 50+ countries; isolate specific instruments to express trade ideas via cashflow and comparative analysis, idiosyncratic risk drivers, technical indicators and required return given expected volatility of position
 - Conduct relative value analysis across EM sovereign and quasi-sovereign external debt curves; use of both cash and synthetic instruments to isolate mispriced assets
 - Extensive travel to emerging market countries to ascertain local positioning and determine political risk; numerous government and corporate contacts in each region as additional source of information
 - Frequently represent group in capital raising effort; assets under management have grown nearly nine-fold since acquisition in 2005
 - Responsible for writing monthly investor reports and making quarterly presentations to existing investors; reports detail emerging market investment outlook, portfolio positioning, performance attribution, and risk analysis
- 1998-2001 Strategic Management Group, Inc.** **San Francisco, CA**
Associate
- Taught finance and strategy courses for the firm's largest clients in the aerospace, construction, petrochemical and retail fashion industries; worked with Fortune 500 clients to utilize and understand measures of financial performance, international strategy and market positioning
 - Initiated higher-education client engagement with the Institute of Management Development (IMD) in Lausanne, Switzerland and the Wharton Business School. Sold and delivered courses on globalization and market-entry strategy to both the executive education program and the business school

EDUCATION

- June 2003 COLUMBIA BUSINESS SCHOOL** **New York, NY**
MBA, Finance
Honors: Dean's List; Beta Gamma Sigma Honor Society
Elections: Sectional Chair for Academic Affairs, Graduate Business Association, Vice-President of International Business Society
- May 1998 UNIVERSITY OF PENNSYLVANIA, THE WHARTON SCHOOL** **Philadelphia, PA**
BS, Economics
Honors: Mortar Board National Honor Society, President of Wharton Activities Council

ADDITIONAL INFORMATION

Professional: Chartered Financial Analyst and Member of New York Society of Security Analysts
Personal: 20-years of classical guitar experience and work with educational/health foundations

SCHOOL LEADERSHIP EXPERIENCE

BOYS AND GIRLS HIGH SCHOOL, Brooklyn, NY
Director of Early College Planning

September 2009 to December 2009
(Serving as acting based on approval and budget)

- Meet with Kaplan and Princeton Review to implement a budget plan to conduct SAT programs for 560 college bound students. Partner with Medgar Evers College to enroll students in their SAT program.
- Developed a new college office to help service 560 college bound students and 2500 high school juniors. Created a college handbook guide to making a successful preparation for college. Conducted various Webinar college tours, enrolled students in the college Now Program in partnership with New York City College of Technology, successfully led a college fair of 90 colleges and universities, assisted students with the college application process providing one-on-one counseling and advising. Developed partnerships with Berkeley College and DeVry College to provide workshops on college interviews, financial aid, admissions process and essay writing.

COLUMBIA SECONDARY SCHOOL FOR MATH, SCIENCE & ENGINEERING, New York, NY 2008 to 2009
School Leadership Fellow

- Conducted teacher evaluation reports and focused on teaching strategies. Analyzed student's behavior to understand the nature, cause and develop effective solutions. Analyzed schools assessment instruments and ensuring that multiple forms of evaluating lead to continuous improvement. Evaluated and conducted school's yearly budget. Developed an elective Fitness program. Participated in the hiring of staff members and teachers and assisted with the admissions process. Mentored and tutored students targeted as high need for academic progress and successfully developed reading and writing instructional strategies to further increase their understanding of concepts taught in the classroom.

Planning Team Member 2006 to 2007

- Familiar with start-up and school wide operational and instructional needs.

TEACHING EXPERIENCE

MANHATTAN MIDDLE SCHOOL FOR SCIENTIFIC INQUIRY, New York, NY 2006 to 2008
Bilingual Social Studies Teacher for grades 7 and 8

- Created lesson plans using the New York State Standards and the National Council for Social Studies curriculum standards. Implemented primary and secondary documents helping students develop their critical thinking skills in material comprehension. Developed activity-based inquiry projects encouraging independent learning and researching skills. Grant writing experience. Developed the schools handbook for teachers.

HENRY HIGHLAND GARNET SCHOOL FOR SUCCESS, New York, NY 2004 to 2005
Co-Team Teacher for grades 3 and 4

- Mentored student learning skills in English, writing, mathematics and social studies concepts as aligned with New York State standards and curriculum guidelines. Implemented components of activities-based learning in history curriculum. Integrated balanced literacy and balanced mathematical approaches including group and interdisciplinary instruction into lesson plans. Fostered student participation through implementation of interactive teaching strategies to facilitate mathematical and social development.

TELECOMMUNICATIONS EXPERIENCE

RADIANZ, Nutley, NJ 2002 to 2003
Consultant, Provisioning Group

- Managed \$1.2 million in customer requests for a variety of telecommunication services. Provided project management for IP-based networking solutions. Meet with customers to define scope of project. Planned and coordinated project activities. Maintained databases to track customer account information. Facilitated progress meetings and all status reports.

QWEST COMMUNICATIONS, New York, NY 2000 to 2002
Account Consultant II, National Accounts

- Successfully managed accounts for complex communication solutions (IP, data and voice) in the amount of over \$500k in revenue. Directed all aspects of sales and support for telecommunications products and services. Analyzed customer needs and technical product data. Developed product solutions and pricing. Monitored work flow and assignments. Assessed installation performance, billing rates and customer service. Interacted with sales, technical staff and upper management.

MILAGROS D. GARCIA

MCI WORLD COM, New York, NY
Account Consultant, Global Accounts

1999 to 2000

- Successfully managed international broadband telecommunication services as part of 5 person team responsible for \$40 million account. Managed maintenance and marketing for global telecommunications services. Analyzed installation performance. Participated in technical review of network design. Tracked customer account data and circuits inventory. Provided liaison between support, sales and engineering.

EDUCATION

Columbia University, Teachers College New York, NY

Ed.M in Education Leadership October 2009

M.A in Teaching Social Studies October 2006

Columbia University, School of General Studies New York, NY

Bachelor of Arts in American History February 2003

PROFESSIONAL ORGANIZATIONS

- Association for Supervision and Curriculum Development
- National Council for Social Studies
- National Middle School Association
- New York Historical Society
- Democratic Leadership for the 21st Century

LANGUAGES

- Spanish

HOBBIES

- Hiking, camping, swimming, traveling and cooking
- Avid Runner: Received six 1st place trophies in age group; half-marathon time 1 hour, 33 minutes (12th place out of 6,000 runners)
- Co-founder of Harlem Road Runners Club to educate adults and young teens on Health and Fitness

COMPUTER SKILLS

- MS Office, and PowerPoint

VOLUNTEER ACTIVITIES

- Merrick Academy Charter School: Chair, Board of Trustees Academic Committee 2010 to present
- Dome Project: Member, Board of Trustees Advisory and Fundraising Committee 2010 to present
- Lexington Democratic Club: Member, Alternate Judicial Delegate 2010 to present

ALEXANDER M. TISCH

NEW YORK, NY 1028

LEGAL EXPERIENCE

NEW YORK STATE INSURANCE DEPARTMENT, New York, NY

Associate Counsel: May 2007 to Present

- Property Rates and Forms Counsel
- Provides confidential advice to senior Department officials on the Insurance Law and regulations
- Represents the Office of General Counsel at conferences and meetings both internally and with insurers and the general public
- Researches and opines on the Insurance Law and regulations in public legal opinion letters and memoranda of law
- Drafts, edits and reviews legislation, regulations and circular letters
- Drafts and negotiates stipulations between the Department and insurers
- Prepares and accompanies senior Department officials for testimony in front of the Legislature and other bodies
- Supervises document productions in Department related litigation and prepares Department officials for testimony under subpoena
- Recruits, interviews and recommends candidates for appointment to Department panels and boards
- Assists the Attorney General with Department related litigation
- Counsel to the Department's Medical Malpractice Reform Task Force
- Counsel to the Department's Workers' Compensation Reform Task Force
- Property and Personal Lines Counsel to the Department's Insurance Modernization Initiative
- Holocaust Insurance Claims Counsel

SHORT & BILLY, PC, New York, NY

Associate: March 1999 to May 2007

- Represented insurers in the defense of automobile cases with a focus on no-fault insurance law
- Represented insurers in coverage and subrogation actions
- Represented insurers in the prosecution of civil RICO actions
- Litigated cases through trial inclusive of pleadings, motions, court appearances and depositions
- Briefed and argued appeals in the Appellate Term and Appellate Division
- Arbitrated cases between claimants and insurers
- Conducted insurance fraud investigations including examinations under oath of health providers and claimants
- Supervised and assisted junior associates
- Conducted seminars for insurers

COZEN AND O'CONNOR, New York, NY

Contract Attorney: June 1998 to September 1998

- Represented insurers on coverage and defense matters with a focus on environmental cases
- Drafted pleadings, motions, affidavits, privilege logs and EBT summaries
- Conducted research and drafted memorandums of law
- Performed extensive document reviews

NEW YORK LIFE INSURANCE COMPANY, New York, NY

Consultant: March 1997 to April 1998

- Managed claims in a large complex class action lawsuit and in the corporate compliance department
- Made award decisions in a highly detailed written analysis after extensive review of legal documents and insurance policies

LEGAL INTERNSHIPS

THE LEGAL AID SOCIETY OF NASSAU COUNTY, Hempstead, NY

Intern: Summer 1995

- Researched and drafted memorandums of law on criminal issues
- Assisted with trial preparation inclusive of interviews with clients and witnesses
- Attended trials, conferences and oral arguments

NASSAU DISTRICT COURT, Hempstead, NY

Intern to the Honorable Claire Weinberg: Summer 1994

Intern to the Honorable John Riordan: Summer 1994

- Researched and drafted memorandums of law on criminal and civil issues including landlord/tenant disputes and small claims matters
- Briefed judges on legal and procedural issues

BAR STATUS

- Admitted to the New York State Bar - 1997

EDUCATION

ST. JOHN'S UNIVERSITY SCHOOL OF LAW, Jamaica, NY

Juris Doctor, 1996

Activities: Moot Court Bar
 Contributing Editor, *The Forum* newspaper
 Criminal Law Society

GEORGE WASHINGTON UNIVERSITY, Washington, DC

Bachelor of Arts, 1993

Major: Political Science **Minor:** Psychology

Activities: G.W.U. College Democrats: Treasurer, Secretary, Community Service Chair
 Miriam's Kitchen for the Homeless: Volunteer

ORGANIZATIONS

New York County Lawyers' Association

Lexington Democratic Club:

President - 2005-2007

POSITIONS

Democratic District Leader, 73rd AD Part B - 2007-2008

Manhattan Community Board 8 Member

New York City Civil Court Small Claims Arbitrator

Volunteer Attorney at the Eviction Intervention Services Housing Resource Center

CARLOS R. PAGÁN, Ed.D.

CONTACT INFORMATION

Corrales, NM 87048,

PROFILE

- Experienced university faculty, school administrator, and educator.
- Able to turn research into practice.
- Strong communication and interpersonal skills.
- Experienced working in low performing schools and with at risk populations.
- Bilingual/biliterate (Spanish/English), multicultural background.

PROFESSIONAL EXPERIENCE

ASSISTANT PROFESSOR (2010- Present)

College of Education, University of New Mexico, Albuquerque, NM

- Teach graduate-level courses in educational leadership.

ADJUNT FACULTY (Summer 2009)

Teachers College, Columbia University, New York, NY

- Co-teach graduate level course in educational administration.
- Coach/Mentor for aspiring principals.

EDUCATIONAL CONSULTANT (SES State Coordinator) (2004-Present)

Northern New Mexico Network, UNM West, Rio Rancho, NM

- Provide technical assistance to rural schools in Northern New Mexico with a focus on schools in corrective action, charter schools, and schools with bilingual (dual language) programs.
- Develop and coordinate Supplemental Educational Services (SES).

ASSOCIATE LEAD AUDITOR (2006-Present)

Phi Delta Kappa International & Curriculum Management Systems, Inc,
Johnston, IA

- Conduct school and district curriculum audits throughout the United States.

FOUNDER AND INTERIM HEAD ADMINISTRATOR (2010- Present)

New Mexico International School (Charter), Albuquerque, NM

FOUNDER AND ADMINISTRATIVE CONSULTANT (2007-2010)

Corrales International School (Charter), Albuquerque, NM

ELEMENTARY SCHOOL PRINCIPAL (1999-2004)

Napa Valley Language Academy (Dual Language, Charter School), Napa, CA

- Managed school's 3.5 million dollar annual budget.
- Supervised, coached, and evaluated certificated and classified staff.
- Wrote school's charter renewal petition.
- Coordinated restructuring of school's curriculum to meet needs of growing English language learner population and to meet program improvement components as required by No Child Left Behind federal legislation.
- Co-authored several school improvement grants including: High Priority School Program and Even Start.
- Raised school's Academic Performance Index (API) scores from 400 in 1999 to 639 in 2004 (met or exceeded state's targets for all sub-groups).

ELEMENTARY SCHOOL PRINCIPAL (1996-1999)

Peach Hill Elementary, Moorpark, CA

- Managed a school of approximately 500 students.
- Supervised, coached, and evaluated certificated and classified staff.
- Oversaw implementation of school's transitional bilingual program.
- Served on the district's contract negotiating team.

MIDDLE SCHOOL ASSISTANT PRINCIPAL (1994-1996)

Bernalillo Middle School, Bernalillo, NM

- Facilitated planning and implementation of state bilingual application and program.
- Served on Administrative Council and School Community Restructuring Team.
- Provided staff professional development.
- Supervised, coached, and evaluated certificated and classified staff.

MODERN AND CLASSICAL LANGUAGES CONSULTANT (1993-1994)

New Mexico Public Education Department, Santa Fe, NM

- Facilitated all modern and classical language activities in state.
- Coordinated and conducted school accreditation visits.
- Analyzed proposed legislation related to foreign language teaching.
- Provided technical assistance to schools/district and foreign language organizations in state.
- Represented unit at state and national conferences.

SELECTED GRANTS AND RECOGNITION

- Grant: Federal Charter Stimulus Grant (\$800,000) (2011)
- Grant: High Priority School Grant (\$800,000) (2002)
- Grant: Even Start Family Literacy (\$1.5 million) (2002)

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- Grant: Reading Excellence Grant (\$400,000) (2001)
- Recognition: Beginning Teacher Support and Assessment (BTSA), Recognition of Support (2003)
- Recognition: Napa County Office of Education, Certificate of Appreciation (2000)
- Recognition: Moorpark Unified Bilingual Programs, Certificate of Appreciation (1997)
- Recognition: Migrant Education Regional Office 105, Certificate of Appreciation (1993)

EDUCATION

ADMINISTRATIVE LICENSES

- Level Three- B K-12 Administrative License (New Mexico)
- Professional Clear Administrative Services Credential (California)
- Clear Bilingual, Cross-cultural, Language and Academic Development Certificate, Target Language: Spanish (California)

Ed. D., EDUCATIONAL ADMINISTRATION, (May 2005)

Teachers College, Columbia University

- Dissertation: "English Learners' Academic Achievement in a Two-Way Versus a Structured English Immersion Program"
- Honors: Recipient, "Minority Group Scholarship"

MASTERS OF INTERNATIONAL ADMINISTRATION, Program in Intercultural Management (1989)

School for International Training, Brattleboro, VT

- Thesis: "The Education of Hispanic High School Students in a Rural and an Urban School"
- Specialization: Organizational Structure and Behavior, Cross-Cultural Communication, Human Resource and Financial Management, Interpersonal Relations, and Proposal Writing and Evaluation

BACHELORS OF ARTS IN POLITICS (1984)

University of California at Santa Cruz, Santa Cruz, CA

- Specialization: International Relations, Political Economic Development, and Latin American Studies
- Honors: Selected to participate in Education Abroad Program (Lund, Sweden) for one academic year.

ADMINISTRATIVE LICENSE COURSES

- Washington State University, Richland, WA
- University of New Mexico, Albuquerque, NM

TEACHING LICENSE COURSES

- Heritage College, Toppenish, WA
- University of California, Irvine

TEACHING EXPERIENCE

SECONDARY BILINGUAL TEACHER (1990-1993)

Pasco High School, Pasco, WA

- Taught social studies in Spanish to predominantly migrant students.
- Wrote economics, United States History, World History, and Northwest History Curriculum in Spanish.
- Served on Staff Development, Human Resources, and Hispanic Concerns Committees.

ELEMENTARY SUMMER SCHOOL SPANISH TEACHER (Summer 1992)

Captain Gray Elementary School, Pasco, WA

- Taught Spanish as a second language to elementary school children (K-5).
- Wrote curriculum for Spanish elementary school classes.

ELEMENTARY BILINGUAL TEACHER (1988-1990)

Madison Elementary School, Santa Ana, CA

- Taught 3rd and 4th grade combination bilingual class.
- Wrote and delivered English as a Second Language curriculum.

SELECTED COMMITTEE WORK

- New Mexico Achievement Gap Solutions Summit 2009: reviewed preliminary report and participated in group discussions leading to final report.
- New Mexico Public Education Department Educational Plan for Student Success (EPSS) Review 2006: reviewed and finalized EPSS template and school improvement framework.

SELECTED PRESENTATIONS

- Mora School District, Mora, NM (2004), "Unwrapping Content Standards"
- Grants School District, Grants, NM (1993), "Teacher Assessment and Competencies"
- Interface Conference, Portland, OR (1992), "Teaching Content in the Native Language"

AFFILIATIONS

- National Association for Bilingual Education
- Phi Delta Kappa International
- Association for Supervision and Curriculum Development

Curriculum Vitae Kathleen I. O'Halleran

Alva, OK 73717

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Academic Background:PhD, ABD, Graduation, Fall 2011, Prescott College: *Sustainability Education*M.A. Liberal Arts Degree 2005, Prescott College: *Environmental Studies: Cultural, Community & International Studies in Sustainability*, Regional Competency: Middle East, Latin AmericaB.A. Prescott College: Jul 2003: *Sustainable Development*, Regional Competency: US & Latin America,

High School: Bellaire High School: 1970-1973

Professional Background:

*Social Sciences Faculty/Social Sciences Teacher Education Program Director: Northwestern Oklahoma State University, 709 Oklahoma Blvd., Alva, OK, Aug 2007-currently employed (teaching Geography, Sociology, Political Science; Global History, Social Sciences Teaching Methods)

*Adjunct Instructor of History, Political Science and Social Sciences: Cameron University & Comanche Nation College; 2004-2007, Lawton, OK.

*Research Consultant & Freelance writer: 1992-2006

Professional/Educational Awards/Honors:

- 2010: Contributor to Northwestern Oklahoma State University's designation on the U.S. Presidential Honor Roll for Community Service
- 2010 Recognition of Outstanding Contribution: *We the People* and the National Centers for Civic Education
- 2010: Certification: National Council for the Accreditation of Teachers of Education Board of Examiners
- 2010: Certification of training: National Council of Economic Education
- 2008-2011: continued certification: National program reviewer for the National Council for the Social Studies
- 2008 and 2009 Recognition Awards from Northwestern Oklahoma State University for grant work and service learning.
- 2008 and 2009 Recognition Awards for achievement in the field of Diversity from Northwestern Oklahoma State University
- 2009 Recognition Award for participation for Assessment Day presentation on Transformative Education and Curriculum at Northwestern Oklahoma State University

Memberships/Affiliations

- National Council for the Social Studies/Oklahoma Council for the Social Studies (NCSS)
- National Social Studies Supervisors Association (NSSSA)
- National Social Science Education Consortium (NSSEC)
- NCSS International Assembly.
- Association of American Geographers (AAG)
- American Political Science Association (APSA)
- Oklahoma Council for the Social Studies (OCSS)
- Oklahoma Association of Colleges of Teacher Education (OACTE)
- Oklahoma Association of Teacher Educators (OATE)
- NWOSU-Masonic Institute for Citizenship Studies: Assistant Review Board member

Presentations:

Platform Presentation: *Implementing a Participant-Observer Study on Social Identity to Connect Students' Heads and Hearts:* 4th Annual State Service Learning Conference, Langston, University, February 2011, Langston, OK.

Presentation Sod House Museum: *Revisiting the Battle of the Washita:* January, 2011.

Platform Presentation: *Annual Teacher Education Faculty Retreat.* "Understanding Our Conceptual Framework: Joint Presentation by Kathleen O'Halleran, Steven Mackie and Sheila Britnall. Alva, OK: Northwestern Oklahoma State University, April 2010

Platform Presentation: 3rd Annual State Service Learning Conference, Langston University, *Creating a Culture for Service Learning on Campus,* February 2010, Langston, OK.

Chair & Facilitator: Oklahoma Political Science Association Annual Conference Symposium and Panel Discussion on *The Oklahoma Voter in the 2008 Presidential Election,* October 2009, Ada, OK

Presentation: *Using Transformative Curricula and Assessment Tools in Service Learning:* Assessment Day April 2009, Northwestern Oklahoma State University, Alva, OK.

Presentation: *Greensburg, Kansas: Measurement and Assessment of a Post-Disaster Sustainability Paradigm Shift,* Prescott College Sustainability Symposium, June 2009, Prescott, AZ

Publications/Policy Consultations & Contributions :

O'Halleran, K. Contributor: *The Columbia Group: Education in Emergencies and Post-Crisis Transition Programme,* Inter-Agency Network for Education in Emergencies: UNHCR, Geneva, Switzerland, August-Sept 2010

O'Halleran, K., Contributor Achieving Sustainable Development. *United Nations Development Group: Millennium Development Goals Network Conference.* 2008, Feb-Mar, New York, NY.
<http://www.un.org/ecosoc/newfunct/Summary_of_eDiscussion_Final.pdf> (see pp. 12-13)

O'Halleran, K., C. Heffelfinger, Eds., (2004) *Arab & Muslim Countries: Profiles in Contrast,* Diana Lady Dougan, author. Washington, DC: Cyber Century Forum & Brookings Institute, 1st & 2nd Ed. ISBN 0967505224 (0-9675052-2-4

Publications also include online contributions in the comparative history of civilizations, including The Age of Imperialism and Its Impact on India, Japan and China ... and has also written extensively on ancient Mesoamerica, which include the following publications: The Birth of Civilization in Ancient Mesoamerica: The Conquest of Mesoamerica: Part One; The Conquest of Mesoamerica: Part Two; Another Mystery of Mesoamerica: The Enigma of the Olmecs; The Mystery of Quetzalcoatl: The Christ of Ancient Mesoamerica?

Publications Pending:

O'Halleran, K. "Social Pressures facing First Peoples" and "Housing Issues," in J. Ross, Ed., *American Indians at Risk Handbook,* Baltimore, MD: ABC-CLIO, 2011

Professional References:

1. Brian Tokar: Director/Faculty Member: Institute for Social Ecology, & author, Plainfield Vermont
Contact information: briant@pshift.com or P.O. Box 48, Plainfield, Vermont 05667 USA

2. Rick Medrick, Program Director/Core Faculty, PhD Program in Sustainability Education, Prescott College, Prescott, AZ.
Contact information: rmedrick@olts-bt.com or 303-320-0372

3. Darien Ripple: Instructor of Philosophy; Chandler-Gilbert Community College, Chandler, Arizona.
Contact information: darien.ripple@cgcmail.maricopa.edu or 480-732-7182

RELEVANT WORK EXPERIENCE

- 2003 - Present **BARCLAYS CAPITAL**, *Director - EM Flow/Structured Credit Trading* New York, NY
- Responsible for the structured credit book. Up until 2010, market making in Arg/Venz CDS and continue to serve as backup for Arg/Venz cash bonds.
 - Correlation trades include bespoke/standardized CSO tranches, and NTD Basket trades.
 - Hybrid trades include trades that combine credit (single-name & FTD) and interest rate derivatives structures.
 - Other structured transactions such as extinguishable swaps, non-payment insurance, leveraged non-recourse financings, and other credit-linked derivative transactions.
 - Positioning based on views of correlation, basis, credit spreads, FX, and interest rates.
- Spring 2003 **ROCKBAY CAPITAL**, *Investment Analyst Intern* New York, NY
- Involved in the generation of event-driven investment strategies involving restructurings, distress, spin-offs, litigation, merger arb, and other value-enhancing corporate events.
 - Performed field investigation and research working with sell-side analysts and analyzing industry reports in evaluating the prospects of an investment strategy and its risks and rewards.
- Summer 2002 **FIDELITY INVESTMENTS**, *Summer Investment Analyst* Hong Kong
- Initiated coverage and published research on companies in the mobile handset sector in Korea and Taiwan, which included handset ODMs, keypad & LCD manufacturers.
 - Developed earnings and cashflow models based on analysis of short and long-term operating trends, industry trends, macroeconomic factors, and discussions with company management.
 - Communicated individual stock recommendations to portfolio managers and research staff.
- 1998 - 1999 **BANC OF AMERICA SECURITIES LLC**, *Analyst - Mergers & Acquisition* Los Angeles, CA
- Developed and utilized valuation techniques via proprietary financial models, including M&A and leveraged acquisition studies and comparable companies/transactions analyses.
 - Prepared all facets of client presentations, offering memorandums and facilitated sell/buy-side transactions by supervising due diligence processes and arranging buyer visits.
 - Represented clients such as Zuka Juice in its sale to Jamba Juice prior to its planned joint IPO.
- 1996 - 1998 **SALOMON SMITH BARNEY**, *Analyst - Fixed Income Securities* Los Angeles, CA
- Facilitated public bond offerings as member responsible for financial/quantitative analysis which entailed structuring and modeling fixed-income transactions totaling \$2.5 billion.
 - Conducted research for credit analyses, developed presentations to investors/rating agencies, prepared for road shows, marketed new issues, and helped negotiate and close transactions.
 - Represented clients such as San Joaquin TCA in its sale of \$1.4Bn Toll Road Revenue Bonds.

OTHER WORK EXPERIENCE

- 2000 - 2001 **DIALPAD COMMUNICATIONS**, *Senior Product Manager* Santa Clara, CA
- Provided product leadership for the Dialpad's consumer IP (Internet Protocol) Phone initiative.
- 1999 - 2000 **ENVERTA, INC.**, *Director of Product Development* Los Angeles, CA
- Provided product leadership for this VC-backed B2B software startup.

EDUCATION

- 2001 - 2003 **COLUMBIA BUSINESS SCHOOL**, New York, NY
MBA, Finance/Economics, May 2003 - GMAT: 780 (99+ Percentile), CFA Charterholder
Robert H. Montgomery Prize in Accounting, Dean's List, Beta Gamma Sigma Honor Society
- 1991 - 1995 **UNIVERSITY OF CALIFORNIA, BERKELEY**
Dual Degrees: B.A. Economics & B.S. Electrical Engineering/Computer Science, December 1995
Lambda Phi Epsilon - Treasurer/House Manager, Young Inspiration Gospel Choir

Boston, MA

MASSACHUSETTS INSTITUTE OF TECHNOLOGY
School of Engineering Faculty Personnel Record

Date: January 2011

Full Name: Cardinal Warde

Department: Electrical Engineering
and Computer Science

1. Date of Birth:

2. Citizenship: U.S.

3. Education:

| <u>School</u> | <u>Degree</u> | <u>Field</u> | <u>Date</u> |
|---------------------------------|---------------|--------------|-------------|
| Stevens Institute of Technology | B. S. | Physics | June 1969 |
| Yale University | M. Phil. | Physics | June 1971 |
| Yale University | Ph.D. | Physics | Dec. 1974 |

4. Title of Thesis for Most Advanced Degree:

Polarization Selection Rules for the Double-Molecule Transitions in Solid α -oxygen

5. Principal Fields of Interest:

Materials, devices and systems for optical information processing, storage, and display.

6. Non-M.I.T. Experience (including military service):

| <u>Employer</u> | <u>Position</u> | <u>Beginning</u> | <u>Ending</u> |
|--------------------------------|---|-------------------------|---------------|
| Melbar Corp. | Vice President | Nov. 1975 | Dec. 1976 |
| Fotec Inc. | Board of Directors | July 1981 | Feb. 1983 |
| Optron Systems, Inc. | COB & President | April 1982 | ----- |
| Fibro Sensors, Inc. | Board of Directors | Jan. 1984 | Dec. 1985 |
| Univ. of CA San Diego | Visiting Assoc. Prof. | Sept. 1984 | Jan. 1985 |
| Optron Systems, Inc. | Director of Research | Jan. 1988 | Aug. 1988 |
| Acad. Tech. Entrepr. & Innov. | Board of Directors | Jun. 1991 | Dec. 1996 |
| MicroIntelligent Systems, Inc. | Board of Directors | Nov. 1991 | Sept. 2000 |
| Web Development Corp. | Scientific Advis. Board | Mar. 1992 | Nov. 1992 |
| Alabama A & M University | Disting. Prof. of Optics | April 1992 | May. 1995 |
| Academic Press | Editorial. Advis. Board (Optical Computing Series) | Dec. 1992 | ----- |
| New England Board of High. Ed. | Advisory Board, Doctoral Scholars Program | March 1993 | ----- |
| New England Board of High. Ed. | Advisory Board, Excellence through Diversity Program | Mar. 1993 April 2003 | ----- |
| Knowledge Development Inst. | Board of Directors | Nov. 1995 | Oct. 1996 |
| Small Bus. High Tech Inst. | Board of Directors | Nov. 1997 | Oct 2004 |
| Board of Trustees | Stevens Inst. of Tech. | June 1999 | May 2009 |
| Univ. Carlos III de Madrid | Visiting Professor | Sept. 1999 | Feb. 2000 |
| Radiant Images, Inc | Chairman of Board | Feb 1999 | Apr. 2004 |
| Univ. of West Indies (T&T) | External Examiner | April 2004 | ----- |

| | | | |
|---------------------------------|--|-----------|----------|
| Univ. of West Indies (Barbados) | Visiting Professor | Jan 2007 | Aug 2007 |
| Hindawi Publishing Corporation | Associate Editor, Optical Technology & Applications | Feb 2007 | ----- |
| Journal of Display Technology | Associate Editor | Sept 2004 | ----- |

7. History of M.I.T. Appointments:

| <u>Rank</u> | <u>Beginning</u> | <u>Ending</u> |
|--|------------------|---------------|
| Assistant Professor | July 1974 | June 1979 |
| Vinton Hayes Res. Fellow (part time) | Sept. 1975 | May 1976 |
| Leave of Absence | July 1979 | June 1980 |
| Staff Member, Lincoln Lab. (part time) | July 1979 | June 1980 |
| Research Associate, CMSE (part time) | July 1979 | June 1980 |
| Associate Professor | July 1979 | June 1982 |
| Associate Professor (with Tenure) | July 1982 | July 1987 |
| Leave of Absence | July 1984 | Jan. 1985 |
| Sabbatical Leave | Jan. 1985 | June 1985 |
| Professor | July 1987 | ----- |
| Leave of Absence | Jan. 1988 | May 1988 |
| Professor | June 1988 | Jan. 1992 |
| Leave of Absence | Jan 1992 | Aug. 1992 |
| Sabbatical Leave | Sept 1992 | Jan. 1993 |
| Professor | Jan. 1993 | ----- |
| Sabbatical Leave | Sept 1999 | Jan. 2000 |
| Leave of Absence | Jan. 2000 | Aug. 2000 |
| Professor | Sept 2000 | ----- |
| Sabbatical Leave | Jan. 2007 | May 2007 |
| Professor | June 2007 | ----- |

8. Consulting Record:

| <u>Firm</u> | <u>Beginning</u> | <u>Ending</u> |
|--|------------------|---------------|
| American Science and Engineering | June 1976 | July 1976 |
| Hamamatsu Corp. (Japan & U.S.A.) | July 1980 | Mar. 1986 |
| Rome Air Devel. Center, Hanscom AFB | July 1981 | Sept. 1985 |
| Aerodyne, Inc. | Oct. 1981 | Jan. 1982 |
| Optra, Inc. | Oct. 1981 | Apr. 1982 |
| Optron Systems, Inc. | April 1992 | ----- |
| General Dynamics | Mar. 1982 | Mar. 1982 |
| SCEEE | Aug. 1983 | Aug. 1983 |
| Government of Barbados | Dec 1987 | ----- |
| Citicorp | Aug. 1989 | May 1990 |
| WEB Development Corp | March 1992 | Nov. 1992 |
| Fish & Neave | March 1995 | Dec. 1996 |
| Diversified Options Ltd. | Nov. 1997 | Oct. 1998 |
| Radiant Images, Inc. | Feb 1999 | Mar. 2006 |
| Paul, Weiss, Rifkind, Wharton & Garrison | Dec. 2000 | Dec 2000 |
| Tellabs, Inc. | July 2002 | Aug 2002 |
| Bingham McCutchen LLP | Dec. 2004 | Jan 2005 |

9. Department or Institute Committees, Other Assigned Duties:

| <u>Activity</u> | <u>Beginning</u> | <u>Ending</u> |
|---|------------------|---------------|
| Freshman Advisor (Inst.) | Sept. 1975 | May 1978 |
| Undergraduate Counselor, VI-1 (Dept.) | Sept. 1975 | May 1979 |
| Coordinator of EECS Optics Seminar | Feb. 1975 | May 1979 |
| Undergraduate Counselor, VI-1 (Dept.) | Sept. 1975 | May 1984 |
| IAP Policy Committee | Sept. 1982 | May 1984 |
| Undergraduate Counselor, VI-1 (Dept.) | Sept. 1985 | May 2000 |
| Undergraduate Admiss. & Fin. Aid Committee | Sept. 1987 | May 1990 |
| Dept. Coordinator, Minority Faculty Initiative | Jan. 1992 | June 1994 |
| Freshman Advisor (Inst.) | Sept. 1991 | May 1992 |
| Graduate Counselor, VI-1 (Dept.) | Sept. 2000 | ----- |
| Freshman Advisor (Inst.) | Sept. 1993 | May 1994 |
| Martin Luther King Committee | March 1995 | Dec 1998 |
| Faculty Director, MITES Program | June 1997 | ----- |
| Faculty Liaison, New England Board of Higher Education (Provost's Office) | October 1990 | ----- |
| Committee on Curricula | Sept. 2006 | Jan. 2007 |

10. Government Committees, Service, Etc.:

| <u>Committee</u> | <u>Beginning</u> | <u>Ending</u> |
|---|------------------|---------------|
| NSF Center Site Visit Committee (Univ. Colorado) | Nov. 1989 | Nov 1989 |
| NSF Presidential Young Investigator Award Comm. | Dec. 1989 | Dec.1989 |
| National Academy of Sciences, Science Expert Advisor (Thailand) | Sept 1990 | Aug 1991 |
| White House Conf. on Small Bus. (Diversity Task Force) | Nov. 1993 | June 1995 |
| NSF Small Business Advisory Committee | Jan 1996 | Dec 2000 |
| NSF Blue Ribbon Panel (Engineering Research Centers) | Nov 1997 | March 1998 |

11. Awards Received:

| <u>Award</u> | <u>Date</u> |
|--|-------------|
| Certificate of Appreciation for Contribution to the Laser-Optics Seminar, University of Lowell | May 1980 |
| Invited Speaker's Plaque - Optical Society of America, New England Section | Feb. 1982 |
| Fellow of Optical Society of America | June 1987 |
| Keynote Speakers Plaque, Naval Surface Warfare Center | Feb. 1992 |
| Renaissance Science and Engineering Award, Stevens Inst. of Tech. | Feb. 1996 |
| Personal Achievement Award, Harrison College-Queens College USA Alumni Association | Sept. 1998 |
| Pride of Barbados Award, National Assoc. of Barbados Organizations | July 2000 |
| Inventor of the Week, Lemelson-MIT Program | Feb. 2001 |
| Innovator of the Year, National Black chamber of Commerce, Washington, DC | Aug. 2001 |
| Companion of Honour (Barbados) | Dec 2003 |
| Outstanding Achievement Award (Barbados Cancer Society, USA) | Sept. 2006 |
| Caribbean Voice Award | Sept 2007 |
| Caribbean Heritage Award | Nov 2007 |

Honorary Doctor of Sciences (Univ. of West Indies)
Doctor Honoris Causa (Universidad. Carlos III de Madrid)

Oct 2008
Jan 2009

12. Current Organization Membership:

Optical Society of America

Offices Held

- Technical Program Committee, Topical Meeting on Quantum-Limited Imaging and Image Processing, April 1985 - April 1986.
- Technical Program Committee Topical Meeting on Photorefractive Materials - February 1987- August 1987.
- Technical Program Committee, of the 1988 Topical Meeting on Spatial Light Modulators and Applications, January 1988-June 1988.
- Guest Editor, Special Issue of Applied Optics on Spatial Light Modulators for Optical Information Processing, Vol. 28, 1989.
- Chairman, 1990 Max Born Award Committee; Committee Member 1989 - 1991.
- Technical Program Committee of the 1990 Topical Meeting on Spatial Light Modulators and Applications, October 1989 - September 1990.
- Technical Program Committee, of the 1991 OSA Topical Meeting on Optical Computing, November 1990 - March 1991.
- Technical Program Committee of the 1993 Topical Meeting on Spatial Light Modulators and Applications, November 1991 - March 1993.
- Technical Program Committee, of the 1993 OSA Topical Meeting on Optical Computing, November 1992 - March 1993.
- Technical Program Committee, of the 1995 OSA Topical Meeting on Spatial Light Modulators, September 1994 - March 1995.

Institute of Electrical and Electronics Engineers

Offices Held

- Technical Program Committee, 1979-1981, Quantum Electronics and Applications Society, Boston Chapter.
- Local Arrangements Chairman, International Optical Computing Conference, April 1983.
- Technical Program Committee, Electro-optic Sensors and Systems, Lasers and Electro-Optics Society, 1993
- Technical Program Committee, Electro-optic Sensors and Systems, Lasers and Electro-Optics Society, 1994 – Present
- Associate Editor, Journal of Display Technology, 2004 - Present

Society of Photo-Optical Instrumentation Engineers

Offices Held

- Guest Editor, Opt. Eng., Special Issue on Atmospheric Optical Communication, January/February 1981.
- Guest Editor, Opt. Eng., Special Issue on Optical Information Processing Components, January/February 1985.
- Guest Editor, Opt. Eng., Special Issue on Materials and Devices for Optical Information Proc., February 1986.
- Instructor, SPIE Tutorial on Spatial Light Modulators, Los Angeles, CA, January 1987.

- Instructor, SPIE Tutorial on Spatial Light Modulators, San Diego, CA, August 1987.
- Instructor, SPIE Tutorial on Spatial Light Modulators, Orlando, FL, April 1988.
- Instructor, SPIE Tutorial on Spatial Light Modulators, San Diego, CA, July 1993.
- Co-Chair, SPIE Conference on Real-Time Signal Processing for Industrial Applications, Detroit, MI, June 1988.
- Program Committee, SPIE Conference on Optical Information Processing Systems and Architectures II, San Diego, CA, July 1990.
- Program Committee, SPIE Conference on Optical Information Processing Systems and Architectures III, San Diego, CA, July 1991.
- Program Committee, SPIE Conference on Optical Information Processing Systems and Architectures IV, San Diego, CA, August 1992.
- Program Committee, SPIE Conference on Optical Information Processing Systems and Architectures V, San Diego, CA, July 1993.
- Instructor, SPIE Tutorial on Spatial Light Modulators for Optical Processing and Displays, San Diego, CA, July 1995.
- Technical Program Committee for Topical Meeting on Spatial Light Modulators, 1997.

Materials Research Society

Offices Held

- Program Organizer and Chair, Symposium N, Materials for Optical Information Processing, May 1991.

Caribbean Diaspora for Science technology and Innovation

Offices Held

- President, September 2008 - Present

Caribbean Science Foundation

Offices Held

- Interim Executive Director, September 2010 - Present

AAAS

Co-organized a workshop for AAAS in 2000 on the economic development problems facing Caribbean Nations, and the role for science and engineering in enhancing such economic development. Delegates were Caribbean Government officials and from supporting organizations such the World Bank and the UN.

13. Patents and Patents Pending

- C. Warde and J. H. Shapiro, "A Microchannel Spatial Light Modulator," U.S. Patent Number: 4, 481,531, November 6, 1984.
- C. Warde and R. Dillon, "Charge Transfer Signal Processor", U.S. Patent No. 840,684, April 27, 1987.
- R. Dillon, and C. Warde, "Completely Cross-talk Free High Spatial Resolution 2-D Bistable Light Modulator," U. S. Patent No. 4,800,263, January 24, 1989.
- R. Dillon and C. Warde, "Low-Cost Substantially Cross-Talk Free High Spatial Resolution 2-D Bistable Light Modulator," U. S. Patent No. 4,822,993, April 18, 1989.

- R. Dillon, and C. Warde, "High Spatial Resolution 2-D Bistable Light Modulator," U.S. Patent No. 4,851,659, July 25, 1989.
- C. Warde, R. Dillon and B. Hill, "Charge Transfer Signal Processor and Charge Transfer Feedthrough Plate Fabrication, Assembly and Method," U.S. Patent No. 4,863,759, September 5, 1989.
- F. Leard, T. N. Tsakiris, and C. Warde, "Improved Spatial Light Modulator Assembly," U.S. Patent No. 5,196,767, March 23, 1993.
- V. Shrauger and C. Warde, "Method and Apparatus for Creating Multiple Phase Level Optical Elements," U.S. Patent No. 5,262,893, November 16, 1993.
- C. Warde, T. N. Horsky, C. Schiller and G. Genetti, "Membrane Light Modulating Systems," U.S. Patent No. 5,287,215, February 15, 1994.
- C. Warde, T. N. Horsky, C. Schiller and G. Genetti, "Membrane Light Modulating Systems," U.S. Patent No. 5,471,341, November 28, 1995.
- X. Wu and C. Warde, "Tunable Optical Filter," U.S. Patent No. 6,822,798, November 23, 2004
- X. Wu and C. Warde, "High Angular Deflection Micromirror System," U.S. Patent No. 7,116,463, October 3, 2006.

14. Teaching Experience

| <u>Term</u> | <u>Subject Number</u> | <u>Title</u> | <u>Role</u> |
|-------------|-----------------------|-------------------------------------|-----------------------|
| FT 74 | 6.011 | Introductory Network Theory | Recitation (2 sects.) |
| ST 75 | 6.011 | Introductory Network Theory | Recitation (2 sects.) |
| FT 75 | 6.161 | Modern Optics Project Laboratory | Lectures, in charge |
| | 6.S08 | Introduction to Modern Optics | Seminar |
| ST 76 | 6.161 | Modern Optics Project Laboratory | Lectures, in charge |
| | 6.S08 | Introduction to Modern Optics | Seminar |
| FT 76 | 6.161 | Modern Optics Project Laboratory | Lectures, in charge |
| | 6.S08 | Introduction to Modern Optics | Seminar |
| IAP 77 | #84 | An Incoherent Optical Comm. system | Project Supervision |
| ST 77 | 6.015 | Signals and Systems | Recitation (2 sects.) |
| FT 77 | 6.161 | Modern Optics Project Laboratory | Lectures, in charge |
| IAP 78 | #129 | Light Show | Project supervision |
| | #129B | Optical Devices and Systems | Project supervision |
| ST 78 | 6.015 | Signals and Systems | Recitation (2 sects.) |
| FT 78 | 6.161 | Modern Optics Project Laboratory | Lectures, in charge |
| IAP 79 | #146 | Projects in Modern Optics | Project supervision |
| ST 79 | 6.611 | Introduction to Optical Electronics | Lectures |
| FT 80 | 6.161 | Modern Optics Project Laboratory | Lectures, in charge |
| ST 81 | 6.071 | Introduction to Electronics | Recitation (2 sects.) |
| FT 81 | 6.161 | Modern Optics Project Laboratory | Lectures, in charge |
| ST 82 | 6.071 | Introduction to Electronics | Recitation (2 sects.) |
| FT 82 | 6.161 | Modern Optics Project Laboratory | Lectures, in charge |
| ST 83 | 6.012 | Electronic Devices and Circuits | Recitation (2 sects.) |
| FT 83 | 6.161 | Modern Optics Project Laboratory | Lectures, in charge |
| FT 83 | 6.637 | Optical Information Processing | Lectures, in charge |
| ST 84 | 6.003 | Circuits, Signals and Systems | Recitation (2 sects.) |
| FT 85 | 6.161 | Modern Optics Project Laboratory | Lectures, in charge |
| FT 85 | 6.637 | Optical Information Processing | Lectures, in charge |
| ST 86 | 6.014 | Electrodynamics | Recitation (2 Sects.) |
| FT 86 | 6.161 | Modern Optics Project Laboratory | Lectures, in charge |
| ST 87 | 6.637 | Optical Information Processing | Lectures, in charge |
| FT 87 | 6.161 | Modern Optics Project Laboratory | Lectures, in charge |
| ST 88 | 6.637 | Optical Information Processing | Lectures, in charge |
| FT 88 | 6.161 | Modern Optics Project Laboratory | Lectures, in charge |
| ST 89 | 6.637 | Optical Information Processing | Lectures, in charge |
| FT 89 | 6.161 | Modern Optics Project Laboratory | Lectures, in charge |
| ST 90 | 6.637 | Optical Information Processing | Lectures, in charge |
| FT 90 | 6.161 | Modern Optics Project Laboratory | Lectures, in charge |
| ST91 | 6.637 | Optical Information Processing | Lectures, in charge |
| FT 91 | 6.161 | Modern Optics Project Laboratory | Lectures, in charge |
| FT 91 | 6.A08 | Black Inventors | Seminar |
| ST 93 | 6.637 | Optical Information Processing | Lectures, in charge |
| FT 93 | 6.161 | Modern Optics Project Laboratory | Lectures, in charge |
| FT 93 | 6.A08 | Black Inventors | Seminar |

| | | | |
|-------|-------|---------------------------------------|-----------------------|
| ST 94 | 6.014 | Electrodynamics | Recitation (2 Sects.) |
| FT 94 | 6.161 | Modern Optics Project Laboratory | Lectures, in charge |
| ST 95 | 6.637 | Optical Information Processing | Lectures, in charge |
| FT 95 | 6.161 | Modern Optics Project Laboratory | Lectures, in charge |
| ST 96 | 6.014 | Electrodynamics | Recitation (2 Sects.) |
| FT 96 | 6.161 | Modern Optics Project Laboratory | Lectures, in Charge |
| ST 97 | 6.637 | Optical Information Processing | Lectures, in Charge |
| FT 97 | 6.161 | Modern Optics Project lab | Lectures, in charge |
| ST 98 | 6.014 | Electrodynamics | Recitation (2 Sect.) |
| FT 98 | 6.161 | Modern Optics Project Laboratory | Lectures, in Charge |
| ST 99 | 6.637 | Optical Information Processing | Lectures, in Charge |
| ST 01 | 6.637 | Optical Information Processing | Lectures, in Charge |
| FT 01 | 6.161 | Modern Optics Project lab | Lectures, in charge |
| ST 02 | 6.014 | Electrodynamics | Recitation (2 Sect.) |
| FT 02 | 6.161 | Modern Optics Project Laboratory | Lectures, in Charge |
| ST 03 | 6.637 | Optical Signals, Devices and Systems | Lectures, in Charge |
| FT 03 | 6.161 | Modern Optics Project Laboratory | Lectures, in Charge |
| ST 04 | 6.161 | Modern Optics Project Laboratory | Lectures, in Charge |
| ST 04 | 6.637 | Optical Signals, Devices and Systems | Lectures, in Charge |
| FT 05 | 6.003 | Signals and Systems | Recitation (2 Sect.) |
| ST05 | 6.637 | Optical Signals, Devices and Systems | Lectures, in Charge |
| FT05 | 6.161 | Modern Optics Project Laboratory | Lectures, in Charge |
| ST06 | 6.UAT | Prep. for Undergrad. Advanced Project | Recitation (2 Sect.) |
| FT06 | 6.161 | Modern Optics Project Laboratory | Lectures, in Charge |
| FT06 | 6.637 | Optical Signals, Devices and Systems | Lectures, in Charge |
| FT07 | 6.161 | Modern Optics Project Laboratory | Lectures, in Charge |
| FT07 | 6.637 | Optical Signals, Devices and Systems | Lectures, in Charge |
| ST08 | 6.003 | Signals and Systems | Recitation (2 Sect.) |
| FT08 | 6.161 | Modern Optics Project Laboratory | Lectures, in Charge |
| FT08 | 6.637 | Optical Signals, Devices and Systems | Lectures, in Charge |
| ST09 | 6.003 | Signals and Systems | Recitation (2 Sect.) |
| FT09 | 6.161 | Modern Optics Project Laboratory | Lectures, in Charge |
| FT09 | 6.637 | Optical Signals, Devices and Systems | Lectures, in Charge |
| ST10 | 6.UAT | Prep. for Undergrad. Advanced Project | Recitation (4 Sect.) |
| FT10 | 6.161 | Modern Optics Project Laboratory | Lectures, in Charge |
| FT10 | 6.637 | Optical Signals, Devices and Systems | Lectures, in Charge |
| ST11 | 6.UAT | Prep. for Undergrad. Advanced Project | Recitation (4 Sect.) |

Publications of Prof. Cardinal Warde

1. Books and Book Chapters

1. Warde, C. and A. D. Fisher, "Spatial Light Modulators: Applications and Functional Capabilities" in **Optical Signal Processing**, J. L. Horner, Editor, Academic Press, pp. 477-523, 1987.
2. Warde, C., J. Stamatoff, and W. I. Wang, Editors, **Materials for Optical Information Processing**, Materials Research Society Symposium Proceedings, Vol. 228, 1992.
3. Warde, C., "Spatial Light Modulators for Optically Controlled Phase Array Radar Signal Processors," in **Photonics Aspects of Modern Radar**, H. Zmuda and E.N. Toughlian, Editors, Artech House, PP. 163-200, 1994.
4. Warde, C., "Charge-Transfer-Plate Membrane Mirror Light Modulators," in **Spatial Light Modulator Technology**, U. Efron, Editor, Marcel Dekker, pp391-414, 1994.
5. Warde, C. "**Optical Signals, Devices and Systems**" Class notes for 6.161 and 6.637, January 2008 (13 Chapters in progress).

2. Papers in Refereed Journals

1. Warde, C., "Lummer-Gehrcke Interferometer Modified for the Spectroscopy of Thin Dielectric Films," *Applied Optics* **15**, 2730-2735, November 1976.
2. Warde, C., and R. G. Wheeler, "Optical and Structural Properties of Solid Oxygen Films," *J. Phys. C* **11**, 1717-1732, 1978.
- *3. Warde, C., A. D. Fisher, D. M. Cocco, M. Y. Burmawi, "Microchannel Spatial Light Modulator," *Optics Letters* **3**, 196-198, November 1978.
- *4. Reilly, D. M., and C. Warde, "Temporal Characteristics of Single-Scatter Radiation," *J. Opt. Soc. Am.* **69**, 464-470, March 1979.
- *5. Fisher, A. D., and C. Warde, "Simple Closed-Loop System for Real-Time Optical Phase Measurement," *Optics Letters* **4**, 131-133, May 1979.
6. Warde, C., "MIT's Modern-Optics Project Laboratory," *IEEE Trans. Education* **E23**, 105-108, May 1980.
7. Warde, C., "Atmospheric Optical Communication," Guest Editorial, *Optical Engineering* **20**, 62, 1981.
8. Shapiro, J. H., and C. Warde, "Optical Communication through Low-Visibility Weather," *Optical Engineering* **20**, 76-83, 1981.
- *9. Warde, C., A. M. Weiss, A. D. Fisher, and J. I. Thackara, "Optical Information Processing Characteristics of the Microchannel Spatial Light Modulator," *Applied Optics* **20**, 2066-2074, 1981.
10. Warde, C., and J. I. Thackara, "Oblique-Cut LiNbO₃ Microchannel Spatial Modulator," *Optics Letters* **7**, 344-346, 1982.
11. Fisher, A. D. and C. Warde, "Technique for Real-Time High-Resolution Adaptive Phase Compensation," *Optics Letters* **8**, 353-355, 1983.
- *12. Warde, C., and J.I. Thackara, "Operating Modes of the Microchannel Spatial Light Modulator," *Optical Engineering* **22**, 695-702, 1983.
13. Warde, C. "Applications of Ferroelectrics in Optical Information Processing," *Ferroelectrics* **49**, 127-139, 1983.

* Outgrowth of Supervised Thesis

14. Warde, C., H. J. Caulfield, F. T. S. Yu and J. E. Ludman, "Real-Time Joint Spectral-Spatial Matched Filtering," *Optics Communications* **49**, 241-244, 1984.
- *15. Wong, C. M., S. R. Rotman and C. Warde, "Optical Studies of Cerium Doped YAG Single Crystals," *Appl. Phys. Lett.* **44**, 1083-1085, 1984.
16. Tanguay, A. R. Jr. and C. Warde, "Optical Information Processing Components," Guest Editorial, *Optical Engineering* **24**, 91, January/February, 1985.
- *17. Schwartz, A., X. Y. Wang and C. Warde, "Electron Beam Addressed Microchannel Spatial Light Modulator," *Optical Engineering* **24**, 119-123, 1985.
- *18. Rotman S. R. and C. Warde, "Defect Luminescence of Yttrium Aluminum Garnet," *J. Appl. Phys.* **58**, 522-525, 1985.
19. Warde, C. and U. Efron, "Materials and Devices for Optical Information Processing," Guest Editorial, *Optical Engineering* **25**, 197, February 1986.
20. Dillon, R. F. and C. Warde, "X-ray Imaging Characteristics of the Vacuum-Demountable Microchannel Spatial Light Modulator," *Optical Engineering* **25**, 269-273, February 1986.
- *21. Temple, D. and C. Warde, "Anisotropic Scattering in Photorefractive Crystals," *J. Opt. Soc. Am.* **B3**, 337-341, 1986.
- *22. Warde, C. and J. Kottas, "Hybrid Optical Inference Machines: Architectural Considerations," *Applied Optics* **26**, 940-947, 1986.
- *23. Liu, L. Y. and C. Warde, "Surface-Charge-Induced Electric Fields in Anisotropic Crystals," *IEEE Trans. on Electron Devices*, **ED-33**, 1593, 1986.
- *24. Temple, D. and C. Warde, "Anisotropic Scattering in Photorefractive Crystals: Response to Comments," *J. Opt. Soc. Am.* **B4**, 1335, 1987.
- *25. Hathcock, R. S., D. A. Temple and C. Warde, "Photorefractive Properties of BaTiO₃:Cr," *IEEE J. Quantum Electron.* **QE-23**, 2122, 1987.
- *26. Temple, D. A., Chang, J., and C. Warde, "Amplified Reflection via Anisotropic Scattering in BaTiO₃," *Optics Letters* **13**, 764, 1988.
- *27. Lau, S. and C. Warde, "Bistable Operation of the Microchannel Spatial Light Modulator," *Applied Optics* **27**, 2954, 1988.
- *28. Temple, D. A. and C. Warde, "High-Order Anisotropic Scattering in Photorefractive Crystals," *JOSA* **B5**, 1800, 1988.
29. Schunemann, P. G., D. A. Temple, R. S. Hathcock, H. L. Tuller, H. P. Jessen, D. R. Gabbe and C. Warde, "Role of Iron Centers in the Photorefractive Effect in Barium Titanate", *J.O.S.A.*, **B5**, 1682, 1988.
30. Rotman, S. R., M. Roth, and H. Tuller and C. Warde, "Defect-Property Correlations in Garnet Crystals. IV: Optical Properties of Ni-Doped Yttrium Aluminum Garnet," *J. Appl. Phys.* **66**, 1366, 1989.
31. Rotman, S. R., C. Warde, H. L. Tuller, and J. Haggerty, "Defect-Property Correlations in Garnet Crystals: V. Energy Transfer in Luminescent Yttrium Aluminum-Yttrium Iron Garnet Solid Solutions," *J. Appl. Phys.*, **66**, 3207, 1989.
- *32. Temple, D. A., R. S. Hathcock and C. Warde, "Intensity-Dependent Photorefractive Properties of BaTiO₃:Fe," *J. Appl. Phys.* **67**, 6667, 1990.

*Outgrowth of Supervised Thesis

- *33. Temple, D. A., and C. Warde, "Photo-Induced Optical Absorption in BaTiO₃:Fe," *Appl. Phys. Lett.* **59**, 4, 1991.
34. Rotman, S. R., H. L. Tuller and C. Warde, "Defect-Property Correlations in Garnet Crystals: VI. The Electrical Conductivity, Defect Structure and Optical Properties of Luminescent Calcium, Cerium-Doped Yttrium Aluminum Garnet," submitted *J. Appl. Phys.* 1991.
35. Garrett, M. H., J.Y. Chang, H.P. Jenssen and C. Warde, "A method for poling Barium Titanate, BaTiO₃," *Ferroelectrics*, **120**, 167-173, 1991.
36. Garrett, M.H., J.Y. Chang, H.P. Jenssen, C. Warde "Fast Cat Conjugation in a 45° cut Barium Titanate Crystal," submitted to *Appl. Phys. Lett.*, 1991.
37. Garrett, M. H., J.Y. Chang, H.P. Jenssen and C. Warde, "High Photorefractive Sensitivity in an n-type 450-cut BaTiO₃ Crystal," *Opt. Lett.* **17**, 103-105, 1992.
38. Garrett, M. H., J.Y. Chang, H.P. Jenssen and C. Warde, "High Beam-Coupling Gain in Cobalt-Doped Barium Titanate, BaTiO₃:Co," *JOSA B***8**, 1407, 1992.
39. Melnik, G. A., G. C. Gilbreath, T. N. Horsky, D. M. O'Mara, T. N. Tsakiris, R. Jurgilewicz, and C. Warde, "Operating Modes of the Electron-Beam-Addressed Liquid Crystal Phase Modulator," *Appl. Opt.* **31**, 3892-3897, 1992.
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Invited Lectures of Prof. Cardinal Warde

- Aug. 1974 "Optical and Electronic Properties of Thin Films of Solid α' -Oxygen," at the Thomas J. Watson Research Center, I.B.M., Yorktown Heights, NY.
- July 1977 "Cathodo-optical Signal Processing Devices," at Pilkington Brothers Ltd., Lothom, Ormskirk, Lancashire, England.
- Jul-Aug77 "Electron-Beam-Addressed Optical Devices for Phase Control and Optical Signal Processing," at the Allen Clark Research Centre, Plessey Company Ltd., Caswell, Towcester, Northants, England.
Brown Boveri Company, Baden, Switzerland.
- Jan. 1978 "Cathodo-optic Adaptive Optical Devices and Systems," at the ILP Symposium on Electronic Materials and Devices, Los Angeles.
- May 1978 "Spatial Light Modulation in Electro-Optic Materials: New Devices and Applications," at the CMSE Colloquium, M.I.T.
- Dec. 1978 "Adaptive Optical Signal Processing Devices and Systems," at the ILP Symposium on Electronic Materials and Devices, M.I.T.
- May 1979 "Educational and Business Sides of Optics," Panelist, Laser-Optics I, University of Lowell, Lowell, MA.
- Apr. 1980 "Optical Signal Processing Features of the MSLM," at the International Optical Computing Conference, Washington D.C.
- May 1980 "Microchannel Spatial Light Modulator for Optical Processing," at Laser-Optics II, University of Lowell, Lowell, MA.
- May 1980 "Spatial Light Modulators for Real-Time Optical Processing," Discussion Leader, Workshop on Future Directions for Optical Information Processing, Texas Tech University, Lubbock, TX.
- Jun. 1980 "Microchannel Spatial Light Modulator," at:
Laboratories D'Electronique et de Physique Applique, Limiel-Brevannes, France. Messerschmitt-Blokow-Blohm GMBH (MBB), Ottobrunn, Fed. Rep. of Germany. Physikalisches Institut der Universitat Erlangen-Nuremberg, Erlangen, Fed. Rep. of Germany.
The General Electric Company, Wembly, England.
The British Post Office Research Centre, Ipswich, England.
Ferranti Limited, Edinburgh, Scotland.
- July 1980 "Microchannel Spatial Light Modulator for Optical Processing," at:
The Nippon Telegraph & Telephone Public Corp., Tokyo, Japan
The Nippon Electric Company Ltd., Kawasaki-City, Japan
Kokusai Denshin Denwa Co., Ltd., Tokyo, Japan
The Fujitsu Company, Kawasaki, Japan
The Toshiba Company, Kawasaki, Japan
The Mitsushita Electric Industrial Co., Ltd., Osaka, Japan.
The Mitsubishi Electric Corporation, Nagasaki, Japan.
- July 1980 "Incoherent to Coherent Spatial Light Converter," at the Institute of Industrial Science, University of Tokyo, Tokyo, Japan.
- Jan. 1981 "Image Processing Applications of the Microchannel Spatial Light Modulator," at Galileo Electro-Optics Corp., Sturbridge, MA.

- May 1981 "Adaptation of Technology in Technological Universities," at the Symposium of the Opening Ceremonies of Anambra State University of Technology, Enugu, Anambra State, Nigeria.
- May 1981 "The Microchannel Spatial Light Modulator and its Applications to Image Processing," at Westinghouse Research and Development Center, Pittsburgh, PA.
- Aug. 1981 "Image Processing with the Microchannel Spatial Light Modulator," at the Congress and Twelfth Assembly of the International Commission for Optics, Graz, Austria.
- Feb. 1982 "Space Domain Image Processing with the Microchannel Spatial Light Modulator," at the Annual Joint Meeting of the Boston Chapter of the IEEE Quantum Electronics and Applications Society, and the New England Section of the Optical Society of America, Lexington, MA.
- Mar. 1982 "Space Domain Image Processing by Secondary Electron Emission," at the Pennsylvania State University, State College, PA.
- Mar. 1982 "Optical Information Processing with the Microchannel Spatial Light Modulator," at the Applications of Opto-Electronics, BMD/ATC Technical Interchange Meeting, La Jolla Institute, La Jolla, CA.
- Mar. 1982 "Space Domain Image Processing with the MSLM," at Stanford University, Palo Alto, CA.
- Apr. 1983 "Microchannel Spatial Light Modulators," Applications to Optical Signal Processing," at the Tenth International Optical Computing Conference, Cambridge, MA.
- June 1983 "Applications of Ferroelectrics in Optical Information Processing," at the IEEE International Symposium on Applications of Ferroelectrics, Gaithersburg, MD.
- Aug. 1983 "Nonlinear Processing Characteristics of the E-Beam and Photo MSLM," at NASA-Langley, Hampton, VA.
- Oct. 1983 "Defects in Optical Materials: Applications to Information Processing," at the Modern Optics and Spectroscopy Seminar Series, MIT.
- Jan. 1984 "Techniques for High Resolution Phase Modulation," at the 14th Winter Colloquium on Quantum Electronics, Snowbird, Utah.
- Jan. 1984 "Characterization of Defects in Photorefractive Materials," at the Los Angeles Technical Symposium of the Society of Photographic Instrumentation Engineers, Los Angeles, CA.
- Feb. 1984 "All-Optical, High-Resolution Adaptive Phase Compensation," at the HELRG/propagation Sub-panel/DARPA Adaptive Optics Workshop, Air Force Weapons Laboratory, Kirtland AFB, NM.
- Feb. 1984 "Light Valves," at the Institute for Modern Optics, University of New Mexico, Albuquerque, NM.
- Mar. 1984 "Materials and Devices for Optical Information Processing," at the Institute of Optics, University of Rochester, Rochester, NY.
- Mar. 1984 "All-Optical Adaptive Phase Compensation," at Xerox Corp. Webster, NY.
- May 1984 "Lasers in Medicine," at the 13th Annual Convention and Scientific Assembly of the National Medical Association, Region I, St. Thomas, USVI.
- Aug. 1984 "Recent Developments in 2-D Spatial Light Modulators," at ILP Seminars at:
 Keidanren Hall, Tokyo, Japan
 Fuji Photo Film, Tokyo, Japan
 Hamamatsu Photonics, Hamamatsu City, Japan
 Nippon Electric Company, Kawasaki, Japan
 Nippon Sheet Glass Co., Tokyo Japan
- Aug. 1984 "Versatile Optical Circuits" at:

- Tsinghua University, Beijing, People's Republic of China
Nankai University, Tianjin, People's Republic of China
- Aug. 1984 "Recent Developments in 2-D Spatial Light Modulators" at:
Tsinghua University, Beijing, People's Republic of China
Nankai University, Tianjin, People's Republic of China
- Nov. 1984 "2-D Spatial Light Modulators: Materials Limitations," at the University of California, San Diego, CA
- Nov. 1984 "Microchannel Spatial Light Modulators and their Applications," at the Naval Ocean Systems Center, San Diego, CA
- Jan. 1985 "Materials Requirements for Spatial Light Modulators," at Celanese Research Company, Summit, NJ.
- Feb. 1985 "Infrared-Sensitive Spatial Light Modulator," at Eglin Air Force Base, Florida
- June 1985 "Applications of Optical Signal Processing," at GTE Sylvania Research Laboratories, Waltham, MA.
- Oct. 1985 "New Directions in Optical Information Processing," at the EECS/RLE Optics Seminar, MIT
- Feb. 1986 "Hybrid Optical Inference Engines," at the Database Program Lecture Series, Microelectronics and Computer Technology Corporation, Austin, Texas
- Oct. 1986 "Materials and Devices for Optical Information Processing" at the Electrochemical Society Meeting, San Diego, CA
- Aug. 1987 "Image Wavelength Conversion with the MSLM," at the Annual Meeting SPIE, San Diego, CA.
- Aug. 1987 "Photorefractive Properties of BaTiO₃," at the Annual Meeting SPIE, San Diego, CA.
- Oct. 1987 "Future Directions in Materials for Optical Information Processing," at the Electrochemical Society, Honolulu, HI.
- Jan. 1988 "Materials for Optical Information Processing," at the MIT Materials Processing Center Industry Collegium Symposium on Advanced Electrical and Optical Materials: Fabrication, Characterization and Optimization, Cambridge, MA.
- Mar. 1988 "On the Photorefractive Effect in BaTiO₃," at the Annual DARPA optics Review, Leesberg, VA.
- June 1988 "Adaptive Multispectral Image Correlator," at the IS&T Optics Program Review, Washington, DC.
- June 1988 "Solid State and Intensified Bistable Optical Devices," at the IS&T Optics Program Review, Washington, DC.
- June 1988 "Microchannel Spatial Light Modulators," at the SPIE Conference on Real-Time Signal Processing for Industrial Applications, Detroit, MI.
- July 1988 "Spatial Light Modulators: Functions and Applications," at E. I. DuPont DeNemours & Co., Wilmington, Delaware
- Sep. 1988 "Impact of Materials Properties on Photorefractive Characteristics," at the SPIE Conference, Boston, MA.
- Feb. 1989 "Applications of Optical Processors," at NASA/Goddard, Greenbelt, MD.
- Mar. 1989 "On Materials and Devices for Optical Information Processing," at NASA/Langley Research Center, Hampton, VA.
- Apr. 1989 "Devices for Optical Information Processing," at the Institute of Modern Optics, University of Modern Optics, Albuquerque, NM.
- June 1989 "Impact of Scientific Trends on Career Choices in 2000 and Beyond," at the Barbadian Cultural Committee of Boston, Boston, MA.

- June 1989 "E-Beam Charge-Transfer Spatial Light Modulators for Infrared Target Simulations Systems," at the Second SDIO workshop on Infrared Scene Simulation, Arnold Air Force Base, TN.
- July 1989 "Instrumentation for Infrared Imaging and Image Processing," at the Electronics and Control Division Seminar, Jet Propulsion Laboratory, Pasadena, CA.
- Aug. 1989 "Reconfigurable Optical Interconnection Device," at the Annual DARPA Optics Review, Reston, VA.
- Oct. 1989 "Knowledge-Base Processing Using Optical Computing Techniques," at the University of Connecticut, Storrs, CT.
- Feb. 1990 "Optical Wavefront Computer," at the Navy Unconventional Imaging Workshop, San Diego, CA.
- Feb. 1990 "Photorefractive Properties of Barium Titanate," at the University of Colorado Workshop on Optical Neural Networks, Jackson Hole, Wyoming.
- Mar. 1990 "Photorefractive 3-D Memory," at the AFOSR/RADC Workshop on 3-D Memories, Snowbird, UT.
- Apr. 1990 "Optical Processing with Limit Cycles," at the NSF/KOSEF Joint Workshop on Neural Works, Seoul, Korea
- July 1990 "Membrane Light-Modulator-Based Infrared Target Simulation System," at the Third SDIO Workshop on Infrared Scene Simulation, Arnold Air Force Base, TN.
- Sep. 1990 "Trends in Optical Information Processing," at the University of Khon Kaen, Khon Kaen, Thailand.
- Oct. 1990 "Reconfigurable Optical Interconnection Device," at the DARPA Annual Optics Program Review, Reston VA.
- Oct. 1990 Panelist on Science and Engineering Forum, at the New England Board of Higher Education, Cambridge, MA.
- Nov. 1990 "Photorefractive Properties of Doped Barium Titanate Crystals," at the Workshop of the National Center for Integrated Photonic Technology, Cambridge, MA.
- Nov. 1990 "Optical 3-D Memories and their Applications to Large Knowledge Bases," at Griffiss Air Force Base, Rome, NY.
- Nov. 1990 "Success by using the Bureaucracy to realize your Ideas and minimize the Risks," at the Federal High Tech 1991 Conference, Boston, MA.
- Dec. 1990 Lecture on "Building of a High Tech Business in Optics in the Information Age," at the Smithsonian Campus-on-the-Mall lecture series on Afro-American Entrepreneurs, Washington, DC.
- Mar. 1991 "Optically Addressed Light Valves: Recent Advances," at the International Congress on Optical Science & Engineering, The Hague, Netherlands.
- Apr. 1991 "Access, Involvement and Influence on the Systems of Society," Keynote Address at Building Workforce 2000, University of Virginia, Charlottesville, VA.
- July 1991 "Reconfigurable Optical Interconnection Device Technologies," at the 1992 SPIE International Symposium on Optical Applied Science and Engineering.
- July 1991 "Charge-Transfer-Plate Spatial Light Modulators," at the 1992 SPIE International Symposium on Optical Applied Science and Engineering.
- Sep. 1991 "Partnerships in Science, Engineering and Technology," Panelist at the Congressional Black Caucus Foundation's 21st Annual Legislative Weekend, Capitol Hill, DC.
- Nov. 1991 "Endowing Minorities with Economic power," Keynote Address at the Second Annual Meeting of the New England Role Model Network, New England Board of Higher Education, Cambridge MA.

- Jan. 1992 "Minding Your Own Business: Entrepreneurial Opportunities in the 90's," Panelist at the Sixth Annual Conference on Making the Right Moves Minority Business and Career Conference, Leonard N. Stern Graduate School of Business, New York University, New York, NY.
- Feb. 1992 "Achieving Success in the Space Age," at African Roots Explore New Worlds: Pre-Columbus to the Space Age, Keynote Address at Naval Surface Warfare Center, Dahlgren, Virginia and Silver Spring, Maryland facilities.
- Apr. 1992 "Photorefractive properties of BaTiO₃" at the Student Materials Research Society Symposium, Alabama A&M University, Normal, Alabama.
- July 1992 "Photorefractive materials for interconnection networks," at the Annual review of the National Center for Integrated Photonic Technology, Newport Beach, CA.
- Sep. 1992 "Spatial Light Modulators: Specific imperfections and their influence on optical processor performance," Invited talk at the 1992 Annual Meeting of the Optical Society of America, Albuquerque NM.
- Nov. 1992 "Optoelectronic integrated-circuit Spatial Light Modulators," Invited talk at the IEEE LEOS symposium, OPTCON 92, Boston MA.
- Feb. 1993 "Liquid Crystal Spatial Light Modulators," at the Naval Research Laboratory, DC.
- Mar. 1993 "Photorefractive BaTiO₃" at the Student Materials Research Society Symposium, Alabama A&M University, Normal, Alabama.
- Apr. 1994 "Scanning Electron Readout Imaging Detector" at SPIE International Symposium on Aerospace Sensing, Orlando, Florida.
- Oct. 1994 "Optically-Addressed Charge-Transfer Plate Spatial Light Modulators," Invited Talk at the 1994 Annual Meeting of the Optical Society of America, Dallas, TX.
- Nov. 1994 "Advances in Optoelectronic Spatial Light Modulators," Invited Talk at the IEEE Lasers and Electro-Optics Systems Symposium, Boston, 1994.
- Feb. 1995 "Membrane-mirror Light valves" at IS&T/SPIE Symposium on Electronic Imaging: Science and Technology, San Jose, California.
- Apr. 1995 "Membrane-mirror-SLM Infrared Scene Projector technology," at SPIE International Symposium on Aerospace/Defense Sensing and Dual-Use Photonics, Orlando, Florida.
- July 1995 "Periodic Structures in Spatial Light Modulators: Current Status," at SPIE Optical Science, Engineering, and Instrumentation Conference, San Diego, CA.
- Feb. 1996 "Structure and Applications of Optoelectronic Integrated Circuit arrays," Stevens Institute of Technology, Hoboken, NJ.
- Mar. 1997 "Succeeding in High Technology Entrepreneurship," National Society of Black Engineers Annual Conference, Boston MA
- Mar. 1997 "Optoelectronic Integrated Circuit Smart-Pixel Devices and Systems Research at MIT", Tenth Meeting on Optical Engineering in Israel, Jerusalem, Israel.
- Nov. 1997 "Potential Impact of Science and Technology on Economic Development in Caribbean Nations in the Twenty-first Century," Jamaica Science and Technology Conference, Kingston, Jamaica.
- April 1998 "Smart-pixel optoelectronic processors", Brown University, Providence, RI.
- Sept. 1998 "Communications and Information Technologies: Opportunities for Economic Development in the Caribbean", 10th annual meeting of the Caribbean Academy of Sciences, Port-of-Spain, Trinidad and Tobago.
- Nov. 1998 "Optoelectronic Neural Network Processor", XIII Design of Circuits and Integrated Systems Conference, Madrid, Spain.

- Dec. 1998 "Opto-electronic Smart-Pixels for Information Processing Display", International Conference on Optics and Optoelectronics, Dehradun, India.
- Nov 1999 Technology-Enhanced Education Reform for Economic Development in the Caribbean, Commonwealth of Learning Conference, Barbados.
- Aug. 1999 Role of Technology in the Transformation of Africa and the Conditions of People of African Descent, Association of Black Psychologists convention, South Carolina.
- Dec. 1999 "Compact Optoelectronic Signal Processors", *IEEE LEOS '99*, San Francisco, USA.
- Feb. 2000 "Computer-generated holography and trends in microdisplays and optical information processing," DaimlerChrysler Imaging Sensors & Signal Processing Unit, Munich, Germany.
- Aug. 2000 "Role of Technology in the Economic Development of the Caribbean," University of Guyana, Guyana
- April 2000 "The Role Of Science And Technology In The Economic Development Of The Caribbean," Habana, Cuba.
- Mar. 2001 "Compact Modular Optoelectronic Integrated Circuit (OEIC) Processor," National University of Singapore, Singapore
- April 2001 "Trends in Optical Technologies: Servicing the Information Technology and Telecom Industries," University of the West Indies, St. Augustine, Trinidad.
- April 2001 "Trends in Optical Technologies: Servicing the Information Technology and Telecom Industries," University of the West Indies, Bridgetown, Barbados.
- Oct. 2002 "Compact Optoelectronic Neural Co-processor Project," International Conf. on Optoelectronics and Laser Applications, Jakarta, Indonesia.
- Nov. 2002 "Prototype Optoelectronic Neural Network for Artificial Vision Systems," at the 28th Annual Conference of the IEEE Industrial Electronics Society, Sevilla, Spain.
- Nov 2002 "Functionality Evaluation of a Hybrid Electronic-optoelectronic Implementation of a Neuroprocessor," at the XVII Design of Integrated Circuits and Systems, Santander, Spain.
- Oct. 2005 "Devices for Optical Information Processing: Challenges and Limitations" Annual meeting of the IEEE LEOS, Sydney Australia
- Dec 2005 "Possible Role of Technology in Education Reform and Economic Development in the Caribbean," Harvard University, Cambridge, MA, USA.
- June 2006 "Architecture of the Compact Optoelectronic Integrated Neural (COIN) Coprocessor" at the 5th International Workshop on Information Optics, Toledo, Spain.
- Oct 2006 "ICT Transforming Caribbean Society: Economic Development Perspectives," at the Information Society of Barbados, Annual Meeting, Barbados.
- June 2007 "*Role and Challenges of Developing a Foundation for Science and Technology*," at Conference on the Caribbean: A 20/20 Vision, Washington DC, June 2007.
- April 2008 "Transforming the CCST into the Caribbean Science Foundation," at the High Level CARICOM Meeting to Discuss the Mokhele Report, St. Georges, Grenada
- May 2009 "Stimulating Economic Development in the Caribbean," 6th Annual Olive Trotman Memorial Lecture of the Barbados Public Workers' Co-operative Credit Union Limited, Bridgetown, Barbados.
- Jan. 2010 "S & T and Economic Development: The Caribbean Science Foundation," at CARISCIENCE Workshop on Strengthening the Research Culture in the Caribbean, Ocho Rios, Jamaica.

Theses Supervised by Prof. Cardinal Warde

S.B. Theses

- ⇒Kuzmenko, Paul, "Secondary Electron Emission Characteristics of LiNbO_3 ," May 1976.
- ⇒Watkins, Edward, "Observation of the Franz-Keldysh Effect in KTaO_3 ," May 1976.
- ⇒Lang, Stephen, "Spatial Resolution of Charge-Addressed Electro-Optic Modulators," June 1977.
- ⇒Hughes, Charles, "Wavefront Shaping Using Voltage-Addressed Electro-Optic Devices," June 1977.
- ⇒Smith, Mark, "Development of a Voltage-Addressed Electro-Optic Spatial Phase Modulator," June 1978.
- ⇒Tannen, Mark, "Growth of High Optical Quality Potassium Tantalate Niobate (KTN) Single Crystals and a Comparative Examination of Its Electro-Optical Characteristics," September 1978 (Physics).
- ⇒DeCesaris, Robert, "Photoconductivity Studies of Thin Films of Amorphous Selenium and PVK:TNF," May 1979.
- ⇒Jones, William Lee, "Construction and Testing of a Hollow-Cathode Copper Vapor Laser," May 1980.
- ⇒Black, Thomas, "Charged Thin-Film Alkali Halides as Photocathodes," May 1980.
- ⇒Berger, Ronald, "Two Dimensional Electro-optic Light Beam Deflection in Single Crystals," May 1981.
- ⇒Dillon, Robert F., "A Vacuum Transfer System Design for Photocathode Creation," May 1982.
- ⇒Malallieu, Kim I, "Electro-Optic and Polarization Properties of Oblique-Cut LiNbO_3 ," May 1982.
- ⇒Jenson, Patrick, "Angle Measurement with an Interferometer," May 1982.
- ⇒Whittle, Tamara, "Visible-Light Photocathode Microchannel Spatial Light with Electrical Erasure," May 1982.
- ⇒Wooten, Edward, "Real-time Adaptive Phase Compensation with Discrete Electric-Optic Modulator," May 1982.
- ⇒Peevers, Alan, "Phase Conjugation in $\text{Bi}_{12}\text{SiO}_{20}$ Crystals", June 1982.
- ⇒Grycewicz, Thomas J., "Cathodoluminescence of Bismuth Silicon Oxide," May 1983 – (Physics).
- ⇒Duffey, Thomas, "Laser Beam Steering and the Photorefractive Effect in $\text{Bi}_{12}\text{SiO}_{20}$," May 1983.
- ⇒Lin, Chi-Leih, "On the Electro-Optic Coefficients of Lithium Niobate," May 1983.
- ⇒Olsen, Clifford I., "Multifaceted Holographic Optical Elements for Wavefront Transformation," May 1983.
- ⇒DiMilia, Edward S., "Techniques for Producing Large Uniform Area Liquid Crystal Devices," May 1983.
- ⇒Bour, David P. "Improving the Ludman Interferometer," May 1983.
- ⇒Becker, Daniel, "Control Circuitry for an Electron-Beam-Addressed Microchannel Spatial Light Modulator," May 1984.
- ⇒Lyman, Dan C., "Wavelength Dependence of the Photorefractive Process in Bismuth Silicon Oxide," May 1984.
- ⇒Young, Shirley S., "Photoconductivity Studies of InSb," January 1985.
- ⇒Lui, Ling Yi, "The Transverse-Field Effects on the Resolution of an Electrooptic Crystal," January 1985.

- ⇒Wright, Gregory, "Design of a High Voltage Controller for E-Beam and Optical MSLM," May 1985.
- ⇒Mak, Phillip, "Compact Design of an Electron-Beam-Addressed Microchannel Spatial Light Modulator," January 1987.
- ⇒Nandakumar, Ramanujam, "Measurement of the Electro-Optic Properties of Photorefractive Crystals," May 1987.
- ⇒Frey, Michael, "A Translation, Rotation, and Scale-Invariant Photodetection System," May 1988.
- ⇒Roberts, James, "Control Methods used to observe the Temperature Dependence of Two-Beam Coupling in BaTiO₃," May 1988.
- ⇒Chang, Thomas Fong-Jen, "Analysis of PVDF-TrFE for its Application as a Thin Film Spatial Light Modulator," May 1989.
- ⇒Garrett, Michael, "Intensity-Dependent Refractive Index Changes in Photorefractive BaTiO₃," May 1990.
- ⇒Feltman, Andrew, "Computer Generated Holograms for Optical Interconnects," May 1990
- ⇒Rolle, James, "Characterization of High Purity Photorefractive BaTiO₃," May 1990.
- ⇒Nenninger, Garet, "ROBS-2: Agile Beam Steering Using Binary Optics Microlens Arrays," May 1991.
- ⇒Iwai, Kyle, "Opto-digital Information Processing System," May 1991.
- ⇒Conahan, Steven, "Optical Holographic Data Storage Using Fe-Doped BaTiO₃," May 1993.
- ⇒Williams, Lon, "Beam Coupling and Intensity Dependent Absorption in BaTiO₃," May 1993.
- ⇒Le, Viet Nam, "A Fiber-optic Multichannel Communications System," September 1993.
- ⇒Komarcevic, Milos, "Production of Holographic Optical Interconnection Elements," September, 2000
- ⇒Harton, Renee M, "Characterization Of Polygrama Green Photopolymer For Compact Optoelectronic Integrated Neural (Coin) Coprocessor Applications," May, 2008.

S.M. Theses

- ⇒Reilly, David, "Atmospheric Optical Communications in the Middle Ultraviolet," May 1976.
- ⇒Sheppard, John, "Resolution of Voltage-Addressed Electro-Optic Spatial Phase Modulators," July 1976.
- ⇒Burmawi, Mohammed, "Resolution and Imaging Characteristics of a Proximity-Addressed Electro-Optic Plate," August 1976.
- ⇒Cocco, Dennis, "Speed and Resolution of a Microchannel-Addressed Optical Modulator," August 1977.
- ⇒Jarve, John, "A Digitized Wavefront Twyman-Green Interferometer," January 1979.
- ⇒Harton, Austin, "Apodization by Defocusing in Infrared Detecting Systems," February 1979 – (Also used for B. S. degree).
- ⇒Timp, Gregory, "Photoemission of Excess Electrons from Caesium Iodide," August 1979.
- ⇒Weiss, Aryeh Moshe, "Development of the Microchannel Spatial Light Modulator," December 1980.
- ⇒DeSmith, Michael, "Transistor-Addressed Membrane Light Modulator for Projection Display," May 1981 (Also used for B. S. degree).
- ⇒Thackara, John, "Image Processing Characteristics of the Microchannel Spatial Light Modulator," August 1982.

- ⇒Wong, Chon Meng, "Cathodoluminescence and Photoluminescence of Undoped and Ce-Doped YAG," May 1982.
- ⇒Schwartz, Andrew, "Electron-Beam-Addressed Microchannel Spatial Light Modulator," October 1983.
- ⇒Nicoli, Anthony Michael, "Dynamic Range of Microchannel Plate Photomultipliers, Sept. 1985.
- ⇒Kottas, James, "Optical Pattern Processors for Matrix Multiplication and Symbolic Inference," February 1986.
- ⇒Lau, Suzanne, "Variable-Gamma Spatial Light Modulator," May 1987.
- ⇒Douwes, Alexander Inigo Xavier, "The Design of a Microchannel Plate Imaging Detector," June 1989.
- ⇒Hinman, Roderick Thornton, "Dynamic Range Behavior of a Microchannel Plate Detector Utilizing a Hybrid Measurement Scheme," June 1989.
- ⇒Chin, Brenda L., "Contact Properties of Hydrogenated Amorphous Silicon for a Photoconductive Array Used in an Artificial Neural Network," June 1989.
- ⇒Feng, Xiaodan, "Defect and Cerium Ion Luminescence of Electrically Charged Ce:YAG," September 1989.
- ⇒Polley, Michael, "A real-time joint transform correlator implemented with the DMD light modulator," June 1990.
- ⇒McNamara, Thomas, "Photorefractive Bistable Optical Devices," June 1991.
- ⇒Shrauger, Vernon, "Development and Applications of Computer-generated Phase-only Optical interconnection Elements," September 1991.
- ⇒Toudeh-Fellah, Farzam, "Laser Anisotropic Scattering in Photorefractive Materials," September 1991.
- ⇒Israni, Vivek, "Ferroelectric Liquid-Crystal-Based Optical Ring Rotator Image Preprocessor for Automatic Pattern Recognition," September 1991.
- ⇒Orondo, Peter, "Response Linearization in Electro-optic Modulators," February 1997.
- ⇒Gebbru Sofia, "Performance of Uncooled 1.3 μm FP and DFB Lasers in Hybrid Fiber-Coax (HFC) Networks, February 1997.
- ⇒Ging, Justin, "Modeling Fluorescence in a Spectral Filter for a Photon-counting Sensor." May 1999.
- ⇒Dunmeyer, David R., "Laser Speckle Modeling for Three-Dimensional Metrology and LADAR," June 2001.
- ⇒Wise, Raydiance, "Optoelectronic Implementations of Pulse-Coupled Neural Networks: Challenges and Limitations," May 2007.

Doctoral Theses, Supervisor

- ⇒Fisher, Arthur, "Techniques and Devices for High Resolution Adaptive Optics," August 1981.
- ⇒Rotman, Stanley, "Defect Structure of Luminescent Garnets," September 1985.
- ⇒Temple, Doyle Anthony, "Photo-Induced Absorption and Photorefractive Grating in Barium Titanate," September 1988.
- ⇒Hathcock, Ronald Scott, "Optical and Photorefractive Properties of Iron-Doped Barium Titanate," September 1989 (Materials Science & Engineering).
- ⇒Kottas, James, "Limit Cycles in Optical Neural Networks," September 1991.
- ⇒Chang, Jenq-Yang, "Effects of Cobalt-Doping, Oxygen Reduction, and Crystallographic Orientation on the Photorefractive Properties of Barium Titanate," June 1992.
- ⇒McNamara, Thomas, "Non-volatile Hologram Storage in Barium Titanate," September 1996.

- ⇒Shrauger, Vernon, "Development of a Silicon VLSI Optically Addressed Liquid Crystal Smart Spatial Light Modulator," June 1997.
- ⇒Dong-Hyun Kim, "Design, Development and Characterization of an Integrated Multispectral Polarimetric Sensor System," May 2001
- ⇒Ruedlinger, Ben, "Fundamental Building Blocks for a Compact, Optoelectronic, Neural Network Processor," May 2003
- ⇒Simpkins, Travis, "Architecture and Circuits for the Compact Optoelectronic Neural Coprocessors", September 2005.
- ⇒Dunmeyer, David, "Polarization Dependent Wavelength Selective Structures for Multispectral Polarimetric Infrared Imaging," January 2007.
- ⇒Herrington, William F, "Micro-Optic Elements for a Compact Opto-electronic Integrated Neural Co-processor," (exp May 2012).

Doctoral Theses, Reader

- ⇒Paik, Woo H., "Optical Frequency Hopping for High Data Rate Optical Communication Through Scattering Channels," May 1978.
- ⇒Lam, Hon Wai, "Optical Waveguide Spectroscopy," February 1979.
- ⇒Tebyani, Mahmoud, "Spatio-Temporal Optical Signal Processing," August 1979.
- ⇒Quint, D. W., "Optical Modulation by Induced Absorption in Tellurium," October 1979.
- ⇒Ross, Warren, "Angular and Temporal Characteristics of Middle Ultraviolet Propagation through Fog," August 1980.
- ⇒Wyatt, Karl W., "Electronic Avalanche Instabilities in Ionizing Gases," May 1985.
- ⇒Weiss, Aryeh Moshe, "Real Time Characterization of Deformable Membranes Using Fluorescence Techniques," May 1986.
- ⇒St. Hilaire, Pierre, "Scalable Optical Architectures for Electronic Holography," September 1994.
- ⇒Lucente, Mark, "Diffraction-Specific Fringe Computation for Electro-Holography," September 1994.
- ⇒Tamura, Kohichi R., "Additive Pulse Mode-Locked Erbium-Doped Fiber Lasers," October 1994.
- ⇒Royter, Yacov, "Monolithic Integration of Etched Facet Lasers with GaAs VLSI Circuits", January 1998.
- ⇒Ustundag, Afsin, "Kerr Electro-optic Tomography for Determination of Non-uniform Electric Field Distributions in Dielectrics, February 1999.
- ⇒Chen, Carl, "Beam Alignment and Image Metrology for Scanning Beam Interference Lithography: Fabricating Gratings with Nanometer Phase Accuracy," June 2003.
- ⇒Sinha, Arnab, "Volume Holographic Imaging in the Transmission Geometry," Department of Mechanical Engineering, May 2004.
- ⇒Moss, Chris, "Numerical Methods for Electromagnetic Wave Propagation and Scattering in Complex Media," May 2004.
- ⇒Eric Wade, "A Body-Area Network for Wearable Health Monitoring: Conductive Fabric Garment Utilizing DC-Powerline Carrier Communication," Department of Mechanical Engineering, January 2007.
- ⇒Domínguez-Caballero, José Antonio, "Optimization of the Holographic Process for Imaging and Lithography," Department of Mechanical Engineering, November 2009.
- ⇒Volynskaya, Zoya, "Multimodal Spectroscopy: Real-time Diagnosis of Breast cancer during Core Needle Biopsy," February 2010.

- ⇒Lee, Alan, Wei Min, "Terahertz Imaging and Quantum Cascade Laser Based Devices," May 2010.
- ⇒Waller, Laura, "Applied Complex Field Tomography," Department of Mechanical Engineering, May, 2010.
- ⇒Kong, Chae-Ryon, "Clinical Application of Raman Spectroscopy for Quantitative Blood Analyte Measurement." (exp. May 2011)

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| ST 94 | 6.014 | Electrodynamics | Recitation (2 Sects.) |
| FT 94 | 6.161 | Modern Optics Project Laboratory | Lectures, in charge |
| ST 95 | 6.637 | Optical Information Processing | Lectures, in charge |
| FT 95 | 6.161 | Modern Optics Project Laboratory | Lectures, in charge |
| ST 96 | 6.014 | Electrodynamics | Recitation (2 Sects.) |
| FT 96 | 6.161 | Modern Optics Project Laboratory | Lectures, in Charge |
| ST 97 | 6.637 | Optical Information Processing | Lectures, in Charge |
| FT 97 | 6.161 | Modern Optics Project lab | Lectures, in charge |
| ST 98 | 6.014 | Electrodynamics | Recitation (2 Sect.) |
| FT 98 | 6.161 | Modern Optics Project Laboratory | Lectures, in Charge |
| ST 99 | 6.637 | Optical Information Processing | Lectures, in Charge |
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| FT 01 | 6.161 | Modern Optics Project lab | Lectures, in charge |
| ST 02 | 6.014 | Electrodynamics | Recitation (2 Sect.) |
| FT 02 | 6.161 | Modern Optics Project Laboratory | Lectures, in Charge |
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| FT 03 | 6.161 | Modern Optics Project Laboratory | Lectures, in Charge |
| ST 04 | 6.161 | Modern Optics Project Laboratory | Lectures, in Charge |
| ST 04 | 6.637 | Optical Signals, Devices and Systems | Lectures, in Charge |
| FT 05 | 6.003 | Signals and Systems | Recitation (2 Sect.) |
| ST05 | 6.637 | Optical Signals, Devices and Systems | Lectures, in Charge |
| FT05 | 6.161 | Modern Optics Project Laboratory | Lectures, in Charge |
| ST06 | 6.UAT | Prep. for Undergrad. Advanced Project | Recitation (2 Sect.) |
| FT06 | 6.161 | Modern Optics Project Laboratory | Lectures, in Charge |
| FT06 | 6.637 | Optical Signals, Devices and Systems | Lectures, in Charge |
| FT07 | 6.161 | Modern Optics Project Laboratory | Lectures, in Charge |
| FT07 | 6.637 | Optical Signals, Devices and Systems | Lectures, in Charge |
| ST08 | 6.003 | Signals and Systems | Recitation (2 Sect.) |
| FT08 | 6.161 | Modern Optics Project Laboratory | Lectures, in Charge |
| FT08 | 6.637 | Optical Signals, Devices and Systems | Lectures, in Charge |
| ST09 | 6.003 | Signals and Systems | Recitation (2 Sect.) |
| FT09 | 6.161 | Modern Optics Project Laboratory | Lectures, in Charge |
| FT09 | 6.637 | Optical Signals, Devices and Systems | Lectures, in Charge |
| ST10 | 6.UAT | Prep. for Undergrad. Advanced Project | Recitation (4 Sect.) |
| FT10 | 6.161 | Modern Optics Project Laboratory | Lectures, in Charge |
| FT10 | 6.637 | Optical Signals, Devices and Systems | Lectures, in Charge |
| ST11 | 6.UAT | Prep. for Undergrad. Advanced Project | Recitation (4 Sect.) |

EDMUND W. GORDON

Pomona, New York 10970

Current Positions

Director Emeritus, Institute for Urban and Minority Education, Teachers College,
Columbia University
Senior Scholar in Residence, SUNY Rockland Community College
Richard March Hoe Professor of Psychology and Education, Emeritus
Teachers College, Columbia University
John M. Musser Professor of Psychology, Emeritus, Yale University

Education

1964 Stanford University
 Stanford, CA
 Fellow, Research Conference on Learning and The Educational Process

1957 Teachers College, Columbia University
 New York, NY
 Major: Child Development and Guidance
 Degree: Ed.D.

1955 Supervised Training in Psychotherapy
 Control Therapist: Dr. Stella Chess, Professor of Child Psychiatry
 New York Medical College, New York

1952 Jefferson School of Social Sciences (An Institute for Marxist Studies)
 New York

1950 The American University

Graduate School of Social Sciences and Public Administration
Washington, D.C.
Major: Social Psychology
Degree: M.A.

1945 Howard University
Graduate School of Religion
Washington, D.C.
Major: Social Ethics
Degree: B.D.

1942 Howard University
College of Liberal Arts
Washington, D.C.
Major: Zoology
Degree: B.S.

Honorary Degrees

1998 Howard University
Washington, D.C.
Degree: Honoris Causa, Doctor of Humane Letters

1994 Mount Holyoke College
South Hadley, MA
Degree: Honoris Causa, Doctor of Science

1993 Teachers College, Columbia University
New York, NY
Degree: TC Medal for Distinguished Service to Education

1992 Bank Street College
New York, New York
Degree: Honoris Causa, Doctor of Humane Letters

1989 Brown University
Providence, RI
Degree: Honoris Causa, Doctor of Humane Letters

1986 Yeshiva University
New York, NY
Degree: Honoris Causa, Doctor of Humane Letters

1979 Yale University
New Haven, CT
Degree: Honoris Causa, Master of Art

Professional Positions

- 2001-Present Director, Institute for Urban Education
Teachers College, Columbia University
- 2000-2001 Vice-President of Academic Affairs and Interim Dean of the College
Teachers College, Columbia University
- 1993-Present Senior Scholar in Residence
The College Board, New York, NY
- 1992-1996 Distinguished Professor of Educational Psychology
City University of New York
- 1987-1991 John M. Musser Professor of Psychology; Yale Professor, Program of African
and African American Studies; Professor Institution for Social Policy and
Studies; Yale College and Graduate School; Professor of Child Psychology,
Child Study Center; and Professor of Epidemiology and Public Health; Yale
University School of Medicine, New Haven, Connecticut
- 1984-1996 Advisor to the President, City College
City University of New York, New York, NY
- 1983-1985 Distinguished Visiting Professor, City College
City University of New York, New York, NY
- 1980-1985 Editor, *Review of Research in Education*
(The official Journal of the American Educational Research Association)
- 1982-1983 Visiting Fellow, Learning Research and Development Center
University of Pittsburgh
- 1979-1991 Professor of Psychology & African and African-American Studies;
Professor of Pediatric Psychology
Yale University, New Haven, CT
- 1978-1983 Editor, *American Journal of Orthopsychiatry*
(The official Journal of the American Orthopsychiatric Association)
- 1978-1979 Richard March Hoe Professor of Psychology
Psychology and Education; Professor of Pediatric Psychology
Columbia University, New York, NY
- 1977-1978 Visiting Professor of Psychology and Afro-American Studies
Yale University, New Haven, CT
- 1974-1975 Visiting Fellow
National Institute of Education, Washington, D. C.

- 1970-1978 Professor and Director Division of Health Services Science, and Education
Teachers College, Columbia University, NY
- 1970-1978 Director of Institute for Urban and Minority Education; Professor of Education,
Teachers College; Professor of Pediatric Psychology
College of Physicians and Surgeons, Columbia University, New York
- 1968-1973 Professor and Chairman, Department of Guidance
Teachers College, Columbia University
New York, NY
- 1966 Visiting Professor of Psychology
Division of Behavioral Sciences
Harvard University, Cambridge, MA
- 1965-1967 Director, Division of Research and Evaluation
Project Head Start, Office of Economic Opportunity
Washington, D.C.
- 1960-1968 Associate Professor (1960-1965);
Associate Research Professor of Pediatric Psychology (1961-1968)
Albert Einstein College of Medicine
Professor and Chairman, Educational Psychology and Guidance (1965-1968)
Ferkau Graduate School
Yeshiva University, New York, NY
- 1959-1961 Adjunct Assistant Professor of Psychology
Long Island University, Brooklyn, NY
- 1954-1959 Clinical Associate to Clinical Assistant Professor of Psychology
New York Medical College
- 1952-1959 Staff Psychologist to Senior Psychologist Department of Pediatric Psychiatry
The Jewish Hospital of Brooklyn
- 1952-1959 Co-Founder and Director of the Harriet Tubman Clinic for Children
Harlem Community, New York, NY
- 1951-1952 Assistant Director and Assistant Minister
The Morningside Community Center and Church of the Master, New York, NY
- 1946-1950 Assistant Dean of Men
Howard University, Washington, DC
- 1945-1946 Field Missionary, Board of National Missions, Presbyterian Church USA

Professional Organizational Memberships

American Association for the Advancement of Science (Fellow and Life Member)
American Educational Research Association (Twice candidate for President)
American Orthopsychiatric Association (Fellow, Life Member and Former Editor of the Journal of the American Orthopsychiatric Association)
American Psychological Society (Fellow)
National Association of Black Psychologists (Life Member)
National Academy of Education
New York Academy of Science

Book Publications

1966

Gordon, E. W., & Wilkerson, D. (1966). *Compensatory education for the disadvantaged: Programs and practices -- preschool through college*. New York: College Entrance Examination Board.

1974

Miller, L. & Gordon, E. W. (Eds.). (1974). *The political economy of effective schooling in equality of educational opportunity: Handbook for research*. New York: AMS Press, Inc.

1982

Zigler, E. & Gordon, E.W. (Eds.). (1982). *Day care: Scientific and social policy issues*. Boston: Auburn House.

1988

Gordon, E.W. (Ed.). (1988). *Human diversity and pedagogy*. New Haven, CT: Yale University, Center for Research in Education, Culture Ethnicity; Institution for Social Policy Studies.

1990

Jones, E.P. (with Gordon, Edmund. W.). (1990). *Where is home? Living through foster care*. New York, NY: Four Windows.

1991

Gordon, E. W. & Roberts, F. (1991). *One nation, many peoples: A declaration of cultural interdependence*. New York: New York State Board of Regents.

1994

Wang, M. Y. & Gordon, E. W. (Eds.). (1994). *Educational resilience in inner-city America: Challenges and prospects*. Hillsdale, New Jersey: Lawrence Erlbaum Publishers.

1999

Gordon, E. W. (1999). *Education and justice: A view from the back of the bus*. New York: Teachers College Press.

2005

Gordon, E. W., Bridglall, B. L. & Meroe, A. S. (Eds.). (2005). *Supplementary education: The hidden curriculum of high academic achievement*. Boulder, CO: Rowman and Littlefield Publishers, Inc.

2007

Gordon, E. W. & Bridglall, B. L. (Eds.). (2007). *Affirmative Development: Cultivating Academic Ability*. Boulder, CO: Rowman and Littlefield Publishers, Inc.

2009

Varenne, H. & Gordon, E. W. (Eds.). (2009). *Perspectives on Comprehensive Education Series. Theoretical Perspectives on Comprehensive Education: The Way Forward*. Volume Two. Lewiston, NY: The Edwin Mellen Press.

In Development

Gordon, E. W. & Gordon, E. T. *Defiers: Development in African American males*.

Book Chapters & Essays

1960

Gordon, E. W. (1960). Autonomic reactivity in mentally defective and normal infants and children. In E. Bowman & H. Mautner (Eds.), *Mental retardation* (p. 329). New York: Grune and Stratton.

1963

Gordon, E. W. (1963). Social status differences: Counseling and guidance for disadvantaged groups. In D. Schreiber (Ed.), *Guidance and the school dropout*. Washington, DC: National Education Association.

1964

Gordon, E. W. (1964). Counseling socially disadvantaged children. In F. Reissman, J. Cohen, & A. Pearl (Eds.), *Mental health of the poor; new treatment approaches for low income people* (pp. 275-282). New York: Free Press of Glencoe.

1965

Gordon, E. W. (1965). Opportunities in higher education for socially disadvantaged youth. In *From high school to college, readings for counselors* (pp. 53-61). Work Conference on Guidance for School-College Transition (Teachers College, Columbia University, 1964). New York: College Entrance Examination Board.

1966

Gordon, E. W. (1966). Desired teacher behavior in schools for socially disadvantaged children. In M. Usdan & F. Bertolaet (Eds.), *Teachers for the disadvantaged*. Chicago: Follet Publishing Co.

1967

Gordon, E. W. (1967). The human aspects of racial conflicts. In R. Stagner, *The dimensions of human conflict*. Detroit, MI: Wayne State University Press.

Gordon, E. W. (1967). The culturally different, deprived, or economically marginal student: A challenge to education. In L. B. Mayhew (Ed.), *Higher education in revolutionary decades*, Section V-10, (pp. 367-385). Berkeley, CA: McCutchan Publishing Corp.

1968

Gordon, E. W. (1968). Disadvantaged child: Head Start and early childhood intervention. In J. Hellmuth (Ed.), *Disadvantaged child, Vol. 2*. Seattle, WA: Special Child Publications.

Gordon, E. W. (1968). Programs of compensatory education. In M. Deutsch, I. Katz, & A. Jensen (Eds.), *Social class, race, and psychological development*. New York: Holt, Rinehart, and Winston, Inc.

Gordon, E. W. (1968). Education for socially disadvantaged children. In S. Chess, & A. Thomas (Eds.), *Annual progress in child psychiatry and child development*. New York: Brunner/Mazel Publications.

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Gordon, E. W. (1970). Impact of interests on socio-cultural factors and community mental health – Some definitions and some doubts. In H. E. Rie, *Perspectives on child psychology*. Chicago: Aldine-Atherton, Inc.

Gordon, E. W. (1970). Some theoretical and practical problems in compensatory education as an antidote to poverty. In V. Allen (Ed.), *Psychological factors in poverty* (pp. 318-325). Chicago: Markham Publishing Co.

1971

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Gordon, E. W. (1971). Inertia and higher education. In P. R. Rever (Ed.), *Open admissions and equal access to education*. Iowa City, IA: American College Testing Program.

Gordon, E. W. (1971). Methodological problems and pseudo issues in the nature-nurture controversy. In R. Cancro (Ed.), *Intelligence: Genetic and environmental influences* (pp. 240-251). New York: Grune and Stratton.

1973

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1976

Gordon, E. W. (1976). Child care and public policy: Summarization of the conference proceedings. . In Goldman, K., Shepard, & L. Michael (Eds.), *Child care and public policy: A Case Study*. Princeton, NJ: Institute for Research in Human Development, Educational Testing Service.

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Gordon, E. W. (1976). Group differences vs. individual development in educational design. In S. Messick & Associates (Eds.), *Individuality in learning*. San Francisco: Jossey-Bass Publishers.

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In J. Flannagan, (Ed.), *Improving American education: Implications from analyzing the development and quality of life of 1000 30-Year-Olds*. Palo Alto, CA: American Institutes of Research.

1979

Gordon, E. W. (1979). Implications for compensatory education drawn from reflections of teaching and learning of reading. In L. Resnick and P. Weaver (Eds.), *Theory and practice of early reading Vol. 2*. Mahwah, NJ: Erlbaum Associates.

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Gordon, E. W. (1979). New perspectives on old issues: Educating the poor in the USA. In D. Wilkerson (Ed.), *Educating all our children*. Westport, CT: Mediax, Inc.

1982

Gordon, E. W. (1982). Culture and ethnicity: Implications for development and intervention. In M. D. Levine, W. B. Carey, A. C. Crocker, R. Gross (Eds.), *Textbook of behavioral and developmental pediatrics*. Philadelphia: W. B. Saunders.

Gordon, E. W. & Yeakey, C. C. (1982). Policy implications of status variables in schooling. In A. Lieberman & M. McLaughlin (Eds.), *Policy making in education* (pp. 105-132). Chicago Press.

1983

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1985

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1988

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Gordon, E. W. & Armour-Thomas, E. (1991). Culture and cognitive development. In R. Sternberg and L. Okagaki (Eds.), *Directors of development: Influences on the development of children's thinking* (pp. 83-100). New Jersey: Erlbaum Associates.

1992

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Gordon, E. W. & Yowell, C. (1993). Cultural diversity as a risk factor in the development of students. In R. Rossi (Ed.), *Educational reforms for students at risk*. New York: Teachers College Press.

Gordon, E. W. & Bonilla, C. (1993). Equity in the achievement of a basic education. In R. Berne (Ed.), *Financing educational equity*. Evergreen, CO: American Education Finance Association.

1994

Gordon, E. W. & Song, L. D. (1994). Variations in the experience of resilience. In M. C. Wang & E. W. Gordon (Eds.), *Educational resilience: challenges and prospects* (pp.27-44). Mahwah, NJ: Lawrence Erlbaum Publishers.

Gordon, E. W. & Bhattacharya, M. (1994). Race and intelligence. In R. Sternberg (Ed.), *Encyclopedia of human intelligence*. New York: MacMillan Publishing Company.

1996

Gordon, E. W. (1996). Can performance-based assessments contribute to the achievement of educational equity? In D. Boykoff, B. Palmer Wolf, & D. Palmer Wolf (Eds.), *Performance-based student assessment: Challenges and possibilities*. Chicago: National Society for the Study of Education.

Gordon, E. W. (1996). Commentary: Renewing familial and democratic commitments. In L. C. Rigsby, M. C. Reynolds, & M. C. Wang (Eds.), *School community connections: Exploring issues for research and practice*. San Francisco: Jossey-Bass.

1997

Gordon, E. W. & Lemons, M. P. (1997). An interactionist perspective on the genesis of intelligence. In R. J. Sternberg & E. Grigorenko (Eds.), *Intelligence, heredity, and the environment* (pp.323-340). New York: Cambridge University Press.

Gordon, E. W. (1997). Introduction: The resilience phenomenon in ethnic minority adolescent development. In R. W. Taylor & M. C. Wang (Eds.), *Social and emotional adjustment and family relations in ethnic minority families*. Mahwah, NJ: Lawrence Erlbaum Associates, Inc.

1998

Arroyo, C. & Gordon, E.W. (1998). Risk & protective processes among minority children: A meta-analytic review. In S. Luthar, J. Burack, D. Cicchetti & J. Weisz (Eds.), *Developmental perspectives on risk and psychopathology*. New York: Cambridge University Press.

1999

Gordon, E.W. (1999). Human diversity and equitable assessment. In S.J. Messick (Ed), *Assessment in higher education: Issues of access, quality, student development, and public policy* (pp. 203-211). Mahwah, NJ: Lawrence Erlbaum Associates.

2000

Gordon, E.W. (2000). Production of knowledge and pursuit of understanding. C. C. Yeakey (Ed.), *Edmund W. Gordon: Producing knowledge, pursuing understanding* (pp. 301-318). Stamford, CT: Jai Press, Inc.

Gordon, E.W. (2000). The myths and realities of African-American fatherhood. In R.D. Taylor, & M.C. Wang (Eds.), *Resilience across contexts: Family, work, culture, and community* (pp. 217-232). Mahwah, NJ: Lawrence Erlbaum Associates.

2004

Gordon, E.W. (2004) The State of Education in Black America. In *The State of Black America 2004: The Complexity of Black Progress*. New York, NY: National Urban League

2005

Gordon, E.W. (2005). The idea of supplementary education. In E.W. Gordon; B.L. Bridglall, & A.S. Meroe (Eds.), *Supplementary education*. Boulder CO: Rowman and Littlefield Publishers.

Gordon, E.W. and Bridglall, B.L. (2005). The challenge, context, and preconditions of academic development at high levels. In E.W. Gordon; B.L. Bridglall, & A.S. Meroe (Eds.), *Supplementary education*. Boulder CO: Rowman and Littlefield Publishers.

Gordon, E.W. and Bridglall, B.L. (2005). The institutionalization of supplementary education. In E.W. Gordon; B.L. Bridglall, & A.S. Meroe (Eds.), *Supplementary education*. Boulder CO: Rowman and Littlefield Publishers.

Gordon, E.W. and Bridglall, B.L. (2005). Conceptual and practical issues in evaluating supplementary education programs. In E.W. Gordon; B.L. Bridglall, & A.S. Meroe (Eds.), *Supplementary education*. Boulder CO: Rowman and Littlefield Publishers.

Gordon, E.W. and Bridglall, B.L. (2005). The nurturance of variety in intellectual competence and giftedness.” In R. E. Sternberg & J. Davidson (Eds.), *Conceptions of giftedness* New York: Cambridge University Press.

Gordon, E.W. & Mejia, B. X. (2005). Resilience as a factor in overcoming obstacles to high academic achievement. In R. Sternberg & R. Subotnik (Ed.). *Optimizing success in schools with the other three R's: Reasoning, resilience, and responsibility* (pp.143-176). CT: Information Age Publishing.

Gordon, E.W. & Meroe, A.S. (2005). Supplementation and supplantation as alternative education strategies. In E.W. Gordon; B.L. Bridglall, & A.S. Meroe (Eds.), *Supplementary education*. Boulder CO: Rowman and Littlefield Publishers.

2006

Gordon, E.W. (2006) Establishing a System of Public Education in Which All Children Achieve At High Levels and Reach Their Full Potential. In *The Covenant with Black America*. Chicago, IL: Third World Press

Gordon, E.W. The Affirmative Development of Academic Ability: In Pursuit of Social Justice. A. Ball (Ed). *National Society for the Study of Education Yearbook 2006*. Ames, IA: Blackwell Publishing

2007

Gordon, E.W. (2007) A context for the Birth of *The Journal of Negro Education*. *The Journal of Negro Education*, 76(3), 198-203.

2009

Gordon E.W. & Vergara, M. (2009) Supplements to Schooling. In *Perspectives on Comprehensive Education Series. Theoretical Perspectives on Comprehensive Education: The Way Forward*. Volume Two.
Lewiston, NY: The Edwin Mellen Press.

Book Chapters in Press

Journal Articles

1956

Gordon, E.W., & Ulman, M. (1956). Reactions of parents to problems of mental retardation in children. *American Journal of Mental Deficiency*, 61, 158-63.

1960

Gordon, E.W., Gordon, S., & Lore, J. (1960). Hypothermia and cardiac arrest in a 12-day old child with survival. *New York State Journal of Medicine*, 60.

Gordon, E.W. & Pollack, M. (1960). The face-hand test in retarded and non-retarded emotionally disturbed children. *American Journal of Mental Deficiency*, 64, 758-760.

1962

Gordon, E.W., Turkewitz, G., & Birch, H. (1962). Head movement in human neonates. *American Zoologist*, 2(4). (Abstract read at the American Association for the Advancement of Science Annual Meeting, December 1962).

1963

Gordon, E.W. (1963). Psychological appraisal and the socially disadvantaged children. *American Child*, 45(2).

1965

Turkewitz, G., Gordon, E.W., & Birch, H.G. (1965). Head turning in the human neonate: Spontaneous patterns. *Journal of Genetic Psychology*, 107(1), 143-158.

Turkewitz, G., Gordon, E.W., & Birch, H.G. (1965). Head turning in the human neonate: Effect of prandial condition and lateral preference. *Journal of Comparative & Physiological Psychology*. 59(2), 189-192.

Gordon, E.W. (1965). Characteristics of socially disadvantaged children. *Review of Educational Research*, 35(5), 377-388.

1966

Gordon, E.W. (1966). Head Start or false start? *American Child*, 48(2).

1968

Gordon, E.W. & Jablonsky, A. (1968). Compensatory education in the equalization of educational opportunity, II: An organizational model for compensatory education. *The Journal of Negro Education*, 37(3), 280-290.

Gordon, E.W. (1969). Counseling the disadvantaged: Avenues of effectiveness. *CAPS CAPSULE* 2(2).

1970

Gordon, E.W. (1970). Perspectives on counseling and other approaches to guided behavior change. *Counseling Psychologist*, 2(2), 105-114.

Gordon, E.W. (1970). Admissions policy: Implications and consequences. *Liberal Education*, 56(2), 270-77.

1971

Gordon, E.W. (1971, January 11). Are our schools too conservative to teach minorities effectively? *New York Times Annual Education Review*, p. 75.

Gordon, E.W. (1971). Democratization of educational opportunity: An essay review. *Children*, 18(3), 109-110.

Gordon, E.W. (1971). 'Parent and child centers: Their basis in the behavior and educational sciences': An invited critique. *American Journal of Orthopsychiatry*, 41(1), 39-42.

1972

Gordon, E.W. (1972). A Black educator's case for ethnic studies. *College Board Review*, 85, 24-28.

1973

Gordon, E.W. (1973). Broadening the concept of career education. *New Generation*, 55(1), 22-25.

Gordon, E.W. (1973). Free to learn: Unlocking and upgrading American education. *Teachers College Record*, 74(3), 448-450.

Gordon, E.W. (1973). A new kind of joy (Review of Theodore Sizer's *Places for learning, place for joy*). *Learning Today*, 6(3), 102.

1974

Gordon, E.W., & Green, D. (1974). An affluent society's excuses for inequality: Developmental, economic, and educational. *American Journal of Orthopsychiatry*, 44(1), 4-18.

1976

Gordon, E.W. (1976). Contradictions in open admissions. *Review of Education*, 2(3), 314-321.

1978

Gordon, E.W. (1978). Human diversity, program evaluation and pupil assessment. *Annual Progress in Child Psychiatry & Child Development*, 598-612.

1979

Gordon, E.W., & Shipman, S. (1979). Human diversity, pedagogy, and educational equity. *American Psychologist*, 34(10), 1030-1036.

1980

Gordon, E.W., & Rubain, T.J. (1980). Bias and alternatives in psychological testing. *Journal of Negro Education*, 49(3), 350-360.

Gordon, E.W. (1980). First and foremost an artist: Commentary of the life and work of Charles White. *Freedomways*, 20(3), 134-140.

1981

Gordon, E.W., & Terrell, M.D. (1981). The changed social context of testing. *American Psychologist*, 36(1), 1167-71.

1985

Gordon, E.W. (1985). Social science knowledge production and minority experiences. *The Journal of Negro Education*, 54(2), 117-133.

1986

Gordon, E.W. (1986). Training, educating, and democratization. *Readings: Journal of Reviews and Commentary in Mental Health*, 1(3).

DeStefano, L. & Gordon, E.W. (1986). Issues and considerations in designing, implementing, and evaluating programs to facilitate cognitive development. *Special Services in the Schools*, 3(1-2), 171-91.

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1988

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1989

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1990

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1991

Gordon, E.W., & Meroe, A.S. (1991). Common destinies -- continuing dilemmas. *Psychological Science*, 2(1), 23-30.

Gordon, E.W. (1991). Human diversity and pluralism. *Educational Psychologist*, 26(2), 99.

1992

Gordon, E.W., & Bhattacharya, M. (1992). Human diversity, cultural hegemony, and the integrity of the academic canon. *Journal of Negro Education*, 61(3), 405-18 (Edmund W. Gordon, Guest Editor).

1994

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1995

Gordon, E.W. (1995). Culture and the sciences of pedagogy. *Teachers College Record*, 97(1), 32-46.

Gordon, E. W. (1995). Putting them in their place: A review of "The Bell Curve." *Reading: Journal of Reviews and Commentary in Mental Health*, 10 (1),8-14.

Gordon, E.W. (1995). The promise of accountability and standards in the achievement of equal educational opportunity. *Teachers College Record*, 96(4), 751-56.

Gordon, E.W. (1995). Toward an equitable system of educational assessment. *The Journal of Negro Education*, 64(3), 360-372.

Okagaki, L., Frensch, P., & Gordon, E.W. (1995). Encouraging school achievement in Mexican American children. *Hispanic Journal of Behavioral Sciences*, 17(2), 160-179.

1996

Yowell, C.M., & Gordon, E.W. (1996). Youth empowerment and human service institutions. *Journal of Negro Education*, 65(1), 19-29.

1997

Gordon, E.W. (1997). Cultural identity and behavioral change. *Case Western Reserve Law Review*, 47(2), 389-398.

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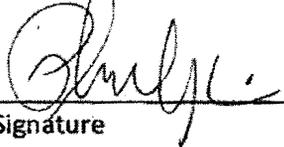
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Attachment 8: Statement of Assurances for Each Board Member Applicant

A Statement of Assurance must be signed by and submitted for each Board Member Applicant.

I, Phillip Kim, (print name of board member applicant) state that I am the applicant for board member approval and I have read the questionnaire and any supporting documents and know the contents thereof; that the same is true to my knowledge except as to the matters therein stated to be alleged upon information and belief, and as to those matters I believe it to be true and further acknowledge that I am aware of the fact that, pursuant to the New York Penal Law, a person who knowingly offers a false instrument for filing to a public official or public servant may be subject to criminal prosecution, including for the crimes of Offering a False Instrument for Filing in the 2nd Degree, a Class A Misdemeanor, or, if there is intent to defraud, of Offering a False Instrument for Filing in the 1st Degree, a Class E felony.

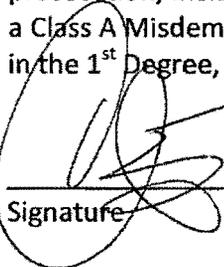

Signature

3/18/11
Date

Attachment 8: Statement of Assurances for Each Board Member Applicant

A Statement of Assurance must be signed by and submitted for each Board Member Applicant.

I, CARLOS R. PAGÁN, (print name of board member applicant) state that I am the applicant for board member approval and I have read the questionnaire and any supporting documents and know the contents thereof; that the same is true to my knowledge except as to the matters therein stated to be alleged upon information and belief, and as to those matters I believe it to be true and further acknowledge that I am aware of the fact that, pursuant to the New York Penal Law, a person who knowingly offers a false instrument for filing to a public official or public servant may be subject to criminal prosecution, including for the crimes of Offering a False Instrument for Filing in the 2nd Degree, a Class A Misdemeanor, or, if there is intent to defraud, of Offering a False Instrument for Filing in the 1st Degree, a Class E felony.


Signature

3/30/2011
Date

Attachment 8: Statement of Assurances for Each Board Member Applicant

A Statement of Assurance must be signed by and submitted for each Board Member Applicant.

I, Cardinal Warde, (print name of board member applicant) state that I am the applicant for board member approval and I have read the questionnaire and any supporting documents and know the contents thereof; that the same is true to my knowledge except as to the matters therein stated to be alleged upon information and belief, and as to those matters I believe it to be true and further acknowledge that I am aware of the fact that, pursuant to the New York Penal Law, a person who knowingly offers a false instrument for filing to a public official or public servant may be subject to criminal prosecution, including for the crimes of Offering a False Instrument for Filing in the 2nd Degree, a Class A Misdemeanor, or, if there is intent to defraud, of Offering a False Instrument for Filing in the 1st Degree, a Class E felony.



Signature

Date

March 30, 2011

Attachment 8: Statement of Assurances for Each Board Member Applicant

A Statement of Assurance must be signed by and submitted for each Board Member Applicant.

I, John J Kelley, (print name of board member applicant) state that I am the applicant for board member approval and I have read the questionnaire and any supporting documents and know the contents thereof; that the same is true to my knowledge except as to the matters therein stated to be alleged upon information and belief, and as to those matters I believe it to be true and further acknowledge that I am aware of the fact that, pursuant to the New York Penal Law, a person who knowingly offers a false instrument for filing to a public official or public servant may be subject to criminal prosecution, including for the crimes of Offering a False Instrument for Filing in the 2nd Degree, a Class A Misdemeanor, or, if there is intent to defraud, of Offering a False Instrument for Filing in the 1st Degree, a Class E felony.

Signature

Date

3/31/10

Attachment 8: Statement of Assurances for Each Board Member Applicant

A Statement of Assurance must be signed by and submitted for each Board Member Applicant.

I, ANISA KEITH, (print name of board member applicant) state that I am the applicant for board member approval and I have read the questionnaire and any supporting documents and know the contents thereof; that the same is true to my knowledge except as to the matters therein stated to be alleged upon information and belief, and as to those matters I believe it to be true and further acknowledge that I am aware of the fact that, pursuant to the New York Penal Law, a person who knowingly offers a false instrument for filing to a public official or public servant may be subject to criminal prosecution, including for the crimes of Offering a False Instrument for Filing in the 2nd Degree, a Class A Misdemeanor, or, if there is intent to defraud, of Offering a False Instrument for Filing in the 1st Degree, a Class E felony.

Anisa Keith

Signature

3/23/11

Date

Attachment 8: Statement of Assurances for Each Board Member Applicant

A Statement of Assurance must be signed by and submitted for each Board Member Applicant.

I, Arif T. Joshi, (print name of board member applicant) state that I am the applicant for board member approval and I have read the questionnaire and any supporting documents and know the contents thereof; that the same is true to my knowledge except as to the matters therein stated to be alleged upon information and belief, and as to those matters I believe it to be true and further acknowledge that I am aware of the fact that, pursuant to the New York Penal Law, a person who knowingly offers a false instrument for filing to a public official or public servant may be subject to criminal prosecution, including for the crimes of Offering a False Instrument for Filing in the 2nd Degree, a Class A Misdemeanor, or, if there is intent to defraud, of Offering a False Instrument for Filing in the 1st Degree, a Class E felony.

Arif T. Joshi
Signature

March 30, 2011
Date

Attachment 8: Statement of Assurances for Each Board Member Applicant

A Statement of Assurance must be signed by and submitted for each Board Member Applicant.

I, EDMUND W. GORDON, (print name of board member applicant) state that I am the applicant for board member approval and I have read the questionnaire and any supporting documents and know the contents thereof; that the same is true to my knowledge except as to the matters therein stated to be alleged upon information and belief, and as to those matters I believe it to be true and further acknowledge that I am aware of the fact that, pursuant to the New York Penal Law, a person who knowingly offers a false instrument for filing to a public official or public servant may be subject to criminal prosecution, including for the crimes of Offering a False Instrument for Filing in the 2nd Degree, a Class A Misdemeanor, or, if there is intent to defraud, of Offering a False Instrument for Filing in the 1st Degree, a Class E felony.

Edmund W. Gordon
Signature

3/30/11
Date

Attachment 8: Statement of Assurances for Each Board Member Applicant

A Statement of Assurance must be signed by and submitted for each Board Member Applicant.

I, Alexander Tisch, (print name of board member applicant) state that I am the applicant for board member approval and I have read the questionnaire and any supporting documents and know the contents thereof; that the same is true to my knowledge except as to the matters therein stated to be alleged upon information and belief, and as to those matters I believe it to be true and further acknowledge that I am aware of the fact that, pursuant to the New York Penal Law, a person who knowingly offers a false instrument for filing to a public official or public servant may be subject to criminal prosecution, including for the crimes of Offering a False Instrument for Filing in the 2nd Degree, a Class A Misdemeanor, or, if there is intent to defraud, of Offering a False Instrument for Filing in the 1st Degree, a Class E felony.



Signature

3/29/11

Date

Attachment 9: Request for Information from Prospective Charter School Board Members

Each Prospective Charter School Board Member must provide the information requested in the next three pages.

Name: Phillip Kim
(Include preferred honorific.)

Daytime Telephone: _____

Home Mailing Address: 19E
New York, NY 10282

Personal E-Mail/Fax: _____ om

Business Address: 74
New York

Business E-Mail/Fax: _____ om

Charter School Name: Harlem Preparatory Charter School (STEM)

Charter School Address: _____

To which charter school board position and/or office are you asking to be appointed? (e.g., parent representative, vice-president, Finance subcommittee, etc.):

As you may know, serving on a public charter school board of trustees ("board") is a position of great trust and responsibility. As a member of a public charter school's board, you would be charged with overseeing the education of all students enrolled in the school, as well as the expenditure of public monies directed to the charter school.

The Department's consent is required before any new member may serve on the board. Accordingly, and in order to properly evaluate potential new board members, we ask that you please provide full and complete answers to each of the items below and provide the required assurance indicated. Note that providing false, misleading, and/or incomplete information may lead to a withdrawal of the Department's approval, nullifying your appointment to the board.

Background

1. Please provide your educational and employment history. You may do so by attaching a résumé. Resume Attached
2. Please affirm that you are or will be at least eighteen years old at the time of your appointment/election to the board. I affirm.
3. Please indicate how you became aware of the charter school and the opportunity to serve as a member of its board.

I was referred to the founder, Milagros Garcia, by a friend. Milagros was looking for prospective board members who were well versed in financial matters, including budgeting and fundraising.

4. Please explain why you wish to serve on the board.

I have always been interested in issues related to education. This also provides me an opportunity to serve the underserved community of Harlem.

5. Please indicate whether you have previously served or are currently serving on a board of a school district, a non-public school or any not-for-profit corporation (to the extent not otherwise indicated in your response to Item 1, above). In addition, please describe any other experience, knowledge or skills you feel is relevant to service on the charter school board. This does not apply to me. Yes. (Include description here):

I have previously served on the board of the Korean American Coalition roughly from 1996-2001 in Los Angeles and San Francisco. I am not currently serving on any board. I have finance, budgeting and fundraising knowledge which is relevant.

6. Please indicate whether or not you have ever been convicted of a misdemeanor and/or felony in state or federal court in any jurisdiction.

This does not apply to me. Yes.

If the answer to this question is yes, please provide the following details regarding your conviction(s): (1) the name of the criminal offense(s); (2) whether the criminal offense(s) was a misdemeanor or felony; (3) the facts and circumstances surrounding your conviction(s); (4) the date(s) of your conviction(s); and (5) the date(s) of disposition(s).

Your response to question six may also include any relevant written information that you wish to be considered in support of your application, including, but not limited to: certificates of conviction; any parole and/or probation documentation; any certificates, including any certificate of relief from disabilities; any proof of counseling and/or rehabilitation; any documentation attesting to your good conduct or your good character; and any letters of support from friends, family, co-workers, employers, etc.

7. Please indicate if you currently have any criminal charge(s) pending against you in state or federal court in any jurisdiction.

This does not apply to me. Yes.

If the answer to this question is yes, please provide an explanation.

Conflict of Interest

8. Please indicate whether you, your spouse, or other family member knows any of the other prospective or current board members.

I / we do not know any such persons. Yes.

If your answer is yes, please indicate the precise nature of your relationship here:

9. Please indicate whether you, your spouse, or other family member knows any person who is a prospective or current charter school employee.

I / we do not know any such persons. Yes.

If yes, please indicate the precise nature of your relationship here:

10. Please indicate if you, your spouse, or other family member or any corporation, business or other entity in which you, your spouse or other family member serve as an employee, officer, or director or own a controlling interest in, contracts or does business with, or plans to contract or do business with, the charter school, including but not limited to, the lease of real or personal property to the charter school.

No. Yes:

If yes, please describe the nature of the contract or business and, if applicable, the relationship of the person to the corporation, business or entity involved:

11. If the charter school is partnered with an educational service provider (a management company, whether for-profit or not-for-profit), please indicate whether you, your spouse, or any family member knows any employees, officers, owners, directors or agents of that provider. If your answer is in the affirmative, please describe any such relationship.

Not applicable because the School does not/will not contract with a management company or charter management organization.

I / we do not know any such persons. Yes:

12. If the charter school is partnered with an educational service provider, please indicate whether you, your spouse or other family member has a direct or indirect ownership, employment, contractual or management interest in the provider. For any interest indicated, please provide a detailed description.

Not applicable because the School does not/will not contract with a management company or charter management organization.

I / we have no such interest. Yes:

13. If the charter school is partnered with an educational services provider, please indicate if you, your spouse or other family member anticipates conducting, or is conducting, any business with the provider. If so, please indicate the precise nature of the business that is being or will be conducted.

Not applicable because the School does not/will not contract with a management company

or charter management organization.

I / we do not anticipate conducting any such business. Yes:

14. Please indicate whether you, your spouse or other family member is a director, officer, employee, partner or member of, or is otherwise associated with, any organization which filed an application in conjunction with the charter school, i.e., is partnered with the charter school. To the extent you have provided this information in response to items 9-12, you may so indicate. This does not apply to me, my spouse or other family members. Yes:
15. Please indicate the potential ethical or legal conflicts of interests (if any) that would, or are likely to, exist should you be approved for service on the charter school's board. None. Yes:
16. Please explain how you would handle a situation in which you believe one or more members of the charter school's board are involved in working for their own benefit, or the benefit of their friends and family.

I would consult with the board chair for consideration.

Educational Philosophy

17. Please explain your understanding of the charter school's mission and/or philosophy.

The Harlem Preparatory Charter School for Science, Technology, Engineering and Mathematics (HPCS) will prepare the next generation of engineers and applied scientists for a challenging college education. By providing a robust active-learning, inquiry-based, and college-bound educational experience, HPCS students will embrace higher education, become leaders in their communities, attain their career of choice, and remain inquisitive, life-long learners.

18. Please explain your understanding of the educational program of the charter school.

Implementation of robust, national and state standards-aligned courses based upon the International Baccalaureate (IB) integrative and interactive curriculum framework. The IB seeks to foster positive attitudes and a love of learning in both teachers and students.

The infusion of Science, Technology, Engineering and Mathematics (STEM) as a coordinated, thematic strategy involving collaboration between different departments. STEM will provide our students with significant efficacy across the curriculum, and also will provide for them distinctly realizable higher education and career opportunities. (The U.S. will need 400,000 graduates with STEM backgrounds by 2015).

Adherence to the Universal Design for Learning (UDL) methodology, which incorporates multiple intelligences and varied assessments.

19. Please indicate what you believe to be the characteristics of a successful charter school. In particular, please provide the specific steps you think the board of the charter school will need to take to ensure that this charter school is and remains successful.

A successful charter school is one that has a high commitment to accountability. All the stakeholders are constantly working towards helping students achieve excellence in their studies. In addition, we cannot forget the parents/family role in a child's education. They have to be a significant source of the student's motivation to succeed in school. The board needs to evaluate from the ground up, every interaction that the student has with the school, their family, and the community to ensure that we don't let students fall through the cracks. I think board members should spend a significant amount of time in the classroom to better understand the teacher/student dynamics and be intimately involved in personnel decisions. They should spend time with parents to better understand their goals for their children and receive feedback about how the school can better serve them. They should also figure out the best measure of student achievement that reflects the school's mission. Also they should spend time developing relationships with community organizations that can become partners.

Other

20. Please explain your understanding of the appropriate role of a public charter school board member.

The board members role is to ensure the integrity of the school which includes, but not limited to, fulfillment of the mission statement, execution of academic programs, its financial health, and organizational pride exhibited by administration and teachers.

21. Please affirm that you have read and understand the charter school application, the charter school board's by-laws and all proposed policies.

I affirm

22. Please provide any other information that you feel is pertinent to the Department's review.

None.

19. Please indicate what you believe to be the characteristics of a successful charter school. In particular, please provide the specific steps you think the board of the charter school will need to take to ensure that this charter school is and remains successful.

A successful charter school is one that has a high commitment to accountability. All the stakeholders are constantly working towards helping students achieve excellence in their studies. In addition, we cannot forget the parents/family role in a child's education. They have to be a significant source of the student's motivation to succeed in school. The board needs to evaluate from the ground up, every interaction that the student has with the school, their family, and the community to ensure that we don't let students fall through the cracks. I think board members should spend a significant amount of time in the classroom to better understand the teacher/student dynamics and be intimately involved in personnel decisions. They should spend time with parents to better understand their goals for their children and receive feedback about how the school can better serve them. They should also figure out the best measure of student achievement that reflects the school's mission. Also they should spend time developing relationships with community organizations that can become partners.

Other

20. Please explain your understanding of the appropriate role of a public charter school board member.

The board members role is to ensure the integrity of the school which includes, but not limited to, fulfillment of the mission statement, execution of academic programs, its financial health, and organizational pride exhibited by administration and teachers.

21. Please affirm that you have read and understand the charter school application, the charter school board's by-laws and all proposed policies.

I affirm

22. Please provide any other information that you feel is pertinent to the Department's review.

None.

Attachment 9: Request for Information from Prospective Charter School Board Members

Each Prospective Charter School Board Member must provide the information requested in the next three pages.

Name: Alexander M. Tisch
(Include preferred honorific.)

Daytime Telephone: _____

Home Mailing Address: NEW YORK, NY 10028

Personal E-Mail/Fax: _____

Business Address: 2 10004

Business E-Mail/Fax: _____

Charter School Name: Harlem Preparatory Charter School for Science, Technology, Engineering + Mathematics

Charter School Address: ~~_____~~

To which charter school board position and/or office are you asking to be appointed? (e.g., parent representative, vice-president, Finance subcommittee, etc.):
n/a

As you may know, serving on a public charter school board of trustees ("board") is a position of great trust and responsibility. As a member of a public charter school's board, you would be charged with overseeing the education of all students enrolled in the school, as well as the expenditure of public monies directed to the charter school.

The Department's consent is required **before** any new member may serve on the board. Accordingly, and in order to properly evaluate potential new board members, we ask that you please provide full and complete answers to each of the items below and provide the required assurance indicated. Note that providing false, misleading, and/or incomplete information may lead to a withdrawal of the Department's approval, nullifying your appointment to the board.

Background

1. Please provide your educational and employment history. You may do so by attaching a résumé. Resume Attached
2. Please affirm that you are or will be at least eighteen years old at the time of your appointment/election to the board. I affirm.
3. Please affirm that you have read Article 56 of the New York State Education Law, and understand the relationship between a charter school and the authorized chartering entity as defined in that statute. I affirm.
4. Please indicate how you became aware of the charter school and the opportunity to serve as a member of its board. *A friend asked and encouraged me to serve in this capacity.*
5. Please explain why you wish to serve on the board.
I wish to help enhance educational opportunities for students.
6. Please indicate whether you have previously served or are currently serving on a board of a school district, a non-public school or any not-for-profit corporation (to the extent not otherwise indicated in your response to Item 1, above). In addition, please describe any other experience, knowledge or skills you feel is relevant to service on the charter school board. This does not apply to me. Yes. (Include description here):
7. Please indicate whether or not you have ever been convicted of a misdemeanor and/or felony in state or federal court in any jurisdiction.
 This does not apply to me. Yes.
If the answer to this question is yes, please provide the following details regarding your conviction(s): (1) the name of the criminal offense(s); (2) whether the criminal offense(s) was a misdemeanor or felony; (3) the facts and circumstances surrounding your conviction(s); (4) the date(s) of your conviction(s); and (5) the date(s) of disposition(s).

Your response to question six may also include any relevant written information that you wish to be considered in support of your application, including, but not limited to: certificates of conviction; any parole and/or probation documentation; any certificates, including any certificate of relief from disabilities; any proof of counseling and/or rehabilitation; any documentation attesting to your good conduct or your good character; and any letters of support from friends, family, co-workers, employers, etc.
7. Please indicate if you currently have any criminal charge(s) pending against you in state or federal court in any jurisdiction.
 This does not apply to me. Yes.
If the answer to this question is yes, please provide an explanation.

Conflict of Interest

8. Please indicate whether you, your spouse, or other family member knows any of the other prospective or current board members.
 I / we do not know any such persons. Yes.
If your answer is yes, please indicate the precise nature of your relationship here:
Friendship
9. Please indicate whether you, your spouse, or other family member knows any person who is a prospective or current charter school employee.
 I / we do not know any such persons. Yes.
If yes, please indicate the precise nature of your relationship here:
10. Please indicate if you, your spouse, or other family member or any corporation, business or other entity in which you, your spouse or other family member serve as an employee, officer, or director or own a controlling interest in, contracts or does business with, or plans to contract or do business with, the charter school, including but not limited to, the lease of real or personal property to the charter school.
 No. Yes.
If yes, please describe the nature of the contract or business and, if applicable, the relationship of the person to the corporation, business or entity involved:
11. If the charter school is partnered with an educational service provider (a management company, whether for-profit or not-for-profit), please indicate whether you, your spouse, or any family member knows any employees, officers, owners, directors or agents of that provider. If your answer is in the affirmative, please describe any such relationship.
 Not applicable because the School does not/will not contract with a management company or charter management organization.
 I / we do not know any such persons. Yes.
12. If the charter school is partnered with an educational service provider, please indicate whether you, your spouse or other family member has a direct or indirect ownership, employment, contractual or management interest in the provider. For any interest indicated, please provide a detailed description.
 Not applicable because the School does not/will not contract with a management company or charter management organization.
 I / we have no such interest. Yes.
13. If the charter school is partnered with an educational services provider, please indicate if you, your spouse or other family member anticipates conducting, or is conducting, any business with the provider. If so, please indicate the precise nature of the business that is being or will be conducted.
 Not applicable because the School does not/will not contract with a management company or charter management organization.
 I / we do not anticipate conducting any such business. Yes.

14. Please indicate whether you, your spouse or other family member is a director, officer, employee, partner or member of, or is otherwise associated with, any organization which filed an application in conjunction with the charter school, i.e., is partnered with the charter school. To the extent you have provided this information in response to items 9-12, you may so indicate. This does not apply to me, my spouse or other family members. Yes.

15. Please indicate the potential ethical or legal conflicts of interests (if any) that would, or are likely to, exist should you be approved for service on the charter school's board. None. Yes.

16. Please explain how you would handle a situation in which you believe one or more members of the charter school's board are involved in working for their own benefit, or the benefit of their friends and family.

I would report it to the Board and/or other proper authorities.

Educational Philosophy

17. Please explain your understanding of the charter school's mission and/or philosophy.

The school will prepare aspiring scientists and engineers for college.

18. Please explain your understanding of the educational program of the charter school.

The educational programs of the school are designed to focus on math and science.

19. Please indicate what you believe to be the characteristics of a successful charter school. In particular, please provide the specific steps you think the board of the charter school will need to take to ensure that this charter school is and remains successful.

Make sure the school provides a safe and secure educational atmosphere with good teachers.

Other

20. Please explain your understanding of the appropriate role of a public charter school board member.

To have a fiduciary duty to the school and ensure proper governance.

21. Please affirm that you have read and understand the charter school application, the charter school board's by-laws and all proposed policies.

I affirm.

22. Please provide any other information that you feel is pertinent to the Department's review.

SCHOOL TRUSTEE BACKGROUND INFORMATION

Name: Dr. Carlos R. Pagán
(Include preferred honorific.)

Daytime Telephone: (____) _____

Home Mailing Address: _____ 7048

Personal E-Mail/Fax: (____) _____

F _____

Business E-Mail/Fax: (____) _____

Charter School Name: The Harlem Preparatory Charter School for Science, Technology, Engineering, and Mathematics

Charter School Address: _____

To which charter school board position and/or office are you asking to be appointed? (e.g., parent representative, vice-president, Finance subcommittee, etc.):

General Member

As you may know, serving on a public charter school board of trustees (“board”) is a position of great trust and responsibility. As a member of a public charter school’s board, you would be charged with overseeing the education of all students enrolled in the school, as well as the expenditure of public monies directed to the charter school.

The Department’s consent is required **before** any new member may serve on the board. Accordingly, and in order to properly evaluate potential new board members, we ask that you please provide full and complete answers to each of the items below and provide the required assurance indicated. Note that providing false, misleading, and/or incomplete information may lead to a withdrawal of the Department’s approval, nullifying your appointment to the board.

Background

1. Please provide your educational and employment history. You may do so by attaching a résumé. X Resume Attached
2. Please affirm that you are or will be at least eighteen years old at the time of your appointment/election to the board. X I affirm.
3. Please indicate how you became aware of the charter school and the opportunity to serve as a member of its board. *I have been working with Ms. Milagros Garcia on the initial charter school application. Ms. Garcia and I met at Teachers College, Columbia University where I was co-teaching an educational leadership class in the college's Summer Principal Academy program.*
4. Please explain why you wish to serve on the board. *I believe consistency and good leadership is important in successfully opening a new charter school. I want to provide The Harlem Preparatory Charter School my skills, knowledge, and experience in opening charter schools.*
5. Please indicate whether you have previously served or are currently serving on a board of a school district, a non-public school or any not-for-profit corporation (to the extent not otherwise indicated in your response to Item 1, above). In addition, please describe any other experience, knowledge or skills you feel is relevant to service on the charter school board. This does not apply to me. X Yes. (Include description here): I am currently a Board member for World Experience, a not for profit, teenage students exchange organization based in Hacienda Heights, CA.
6. Please indicate whether or not you have ever been convicted of a misdemeanor and/or felony in state or federal court in any jurisdiction.
X This does not apply to me. Yes.

If the answer to this question is yes, please provide the following details regarding your conviction(s): (1) the name of the criminal offense(s); (2) whether the criminal offense(s) was a misdemeanor or felony; (3) the facts and circumstances surrounding your conviction(s); (4) the date(s) of your conviction(s); and (5) the date(s) of disposition(s).

Your response to question six may also include any relevant written information that you wish to be considered in support of your application, including, but not limited to: certificates of conviction; any parole and/or probation documentation; any certificates, including any certificate of relief from disabilities; any proof of counseling and/or rehabilitation; any documentation attesting to your good conduct or your good character; and any letters of support from friends, family, co-workers, employers, etc.

7. Please indicate if you currently have any criminal charge(s) pending against you in state or federal court in any jurisdiction.
X This does not apply to me. Yes.
If the answer to this question is yes, please provide an explanation.

Conflict of Interest

8. Please indicate whether you, your spouse, or other family member knows any of the other prospective or current board members.
X I / we do not know any such persons. Yes.
If your answer is yes, please indicate the precise nature of your relationship here:
9. Please indicate whether you, your spouse, or other family member knows any person who is a prospective or current charter school employee.
X I / we do not know any such persons. Yes.
If yes, please indicate the precise nature of your relationship here:
10. Please indicate if you, your spouse, or other family member or any corporation, business or other entity in which you, your spouse or other family member serve as an employee, officer, or director or own a controlling interest in, contracts or does business with, or plans to contract or do business with, the charter school, including but not limited to, the lease of real or personal property to the charter school.
X No. Yes:
If yes, please describe the nature of the contract or business and, if applicable, the relationship of the person to the corporation, business or entity involved:
11. If the charter school is partnered with an educational service provider (a management company, whether for-profit or not-for-profit), please indicate whether you, your spouse, or any family member knows any employees, officers, owners, directors or agents of that provider. If your answer is in the affirmative, please describe any such relationship.
X Not applicable because the School does not/will not contract with a management company or charter management organization.
 I / we do not know any such persons. Yes:
12. If the charter school is partnered with an educational service provider, please indicate whether you, your spouse or other family member has a direct or indirect ownership, employment, contractual or management interest in the provider. For any interest indicated, please provide a detailed description.
X Not applicable because the School does not/will not contract with a management company or charter management organization.
 I / we have no such interest. Yes:
13. If the charter school is partnered with an educational services provider, please indicate if you, your spouse or other family member anticipates conducting, or is conducting, any business with the provider. If so, please indicate the precise nature of the business that is being or will be conducted.
X Not applicable because the School does not/will not contract with a management company or charter management organization.
 I / we do not anticipate conducting any such business. Yes:
14. Please indicate whether you, your spouse or other family member is a director, officer, employee, partner or member of, or is otherwise associated with, any organization which filed an application in conjunction with the charter school, i.e., is partnered with the charter

school. To the extent you have provided this information in response to items 9-12, you may so indicate. X This does not apply to me, my spouse or other family members.
 Yes:

15. Please indicate the potential ethical or legal conflicts of interests (if any) that would, or are likely to, exist should you be approved for service on the charter school's board.

X None. Yes:

16. Please explain how you would handle a situation in which you believe one or more members of the charter school's board are involved in working for their own benefit, or the benefit of their friends and family. *Immediately report my knowledge of the situation to other board members during meeting and ask that it be reviewed by the school's legal counsel.*

Educational Philosophy

17. Please explain your understanding of the charter school's mission and/or philosophy. *The Harlem Preparatory Charter School (HPCS) seeks to prepare students in grades 6-12 in the science, technology, engineering, and mathematics content areas. The school will achieve its mission by applying best practices and instructional strategies that have proven successful in schools throughout the country. These include the STEM conceptual framework, Universal Design for Learning, and International Baccalaureate Middle Years and Diploma Programmes.*

18. Please explain your understanding of the educational program of the charter school. *The HPCS program will focus on the STEM conceptual framework, Universal Design for Learning, and the IB Middle and Diploma Programmes. Students in grades 6-12 from the East and West areas of Harlem will have the opportunity, in small classroom settings, to engage in a "robust active-learning, inquiry-based, and college-bound educational experience."*

19. Please indicate what you believe to be the characteristics of a successful charter school. In particular, please provide the specific steps you think the board of the charter school will need to take to ensure that this charter school is and remains successful. *Successful charter schools are noted for the following: 1) Remaining focused on their mission/vision statements; 2) Applying majority of available resources to the classroom/program; 3) Establishing monitoring systems to ensure weaknesses in the educational program are identified and addressed immediately; 4) Hiring of caring and highly qualified staff; 5) Providing clean and safe learning environments for all students; and 6) Assuring responsible and ethical behavior for all staff members. It is the responsibility of all Board members to monitor implementation of the school's charter and to ensure compliance with all applicable local, state, and federal regulations. In addition, the Board must closely monitor the school's budget and other resources.*

Other

20. Please explain your understanding of the appropriate role of a public charter school board

member. *As a Board member, I would take the following steps to ensure HPCS is successful: 1) Attend and actively participate in all Board meetings; 2) Read Board packets (information) sent before meetings; 3) Advocate for the school; 4) Respond to requests by school administration for review and approval of documents; and 5) Behave in an ethical and responsible manner.*

21. Please affirm that you have read and understand the charter school application, the charter school board's by-laws and all proposed policies. *I affirm that I have read and understand the charter school application, the charter school board's by-laws, and all proposed policies.*
22. Please provide any other information that you feel is pertinent to the Department's review. *Despite my physical location in Corrales, New Mexico, I am prepared to travel to Harlem to fulfill my responsibilities as a Board member of HPCS.*

Attachment 9: Request for Information from Prospective Charter School Board Members

Each Prospective Charter School Board Member must provide the Information requested in the next three pages.

Name: Prof. Cardinal Warde
(Include preferred honorific.)

Daytime Telephone: _____

Home Mailing Address: _____

Personal E-Mail/Fax: _____

Business Address: _____
_____ 77 _____ 139 USA

Business E-Mail/Fax: _____

Charter School Name: Harlem Preparatory Charter School for Science, Technology, Engineering and Mathematics

Charter School Address: _____

To which charter school board position and/or office are you asking to be appointed? (e.g., parent representative, vice-president, Finance subcommittee, etc.):
Board of Trustees

As you may know, serving on a public charter school board of trustees ("board") is a position of great trust and responsibility. As a member of a public charter school's board, you would be charged with overseeing the education of all students enrolled in the school, as well as the expenditure of public monies directed to the charter school.

The Department's consent is required **before** any new member may serve on the board. Accordingly, and in order to properly evaluate potential new board members, we ask that you please provide full and complete answers to each of the items below and provide the required assurance indicated. Note that providing false, misleading, and/or incomplete information may lead to a withdrawal of the Department's approval, nullifying your appointment to the board.

Background

1. Please provide your educational and employment history. You may do so by attaching a résumé. Resume Attached
2. Please affirm that you are or will be at least eighteen years old at the time of your appointment/election to the board. I affirm.
3. Please affirm that you have read Article 56 of the New York State Education Law, and understand the relationship between a charter school and the authorized chartering entity as defined in that statute. I affirm.
4. Please indicate how you became aware of the charter school and the opportunity to serve as a member of its board. **A phone call from Ms. Milagros Garcia**
5. Please explain why you wish to serve on the board. **I believe that getting more minority students to embrace the STEM disciplines will give them opportunities for better careers and will strengthen our nation relative to other countries in the world.**
6. Please indicate whether you have previously served or are currently serving on a board of a school district, a non-public school or any not-for-profit corporation (to the extent not otherwise indicated in your response to Item 1, above). In addition, please describe any other experience, knowledge or skills you feel is relevant to service on the charter school board. This does not apply to me. Yes. (Include description here): **I am a professor of electrical engineering at MIT, and I serve as the faculty advisor to the MITES program (an MIT 6-week summer residential program in science and engineering for high-school seniors).**
7. Please indicate whether or not you have ever been convicted of a misdemeanor and/or felony in state or federal court in any jurisdiction.
 This does not apply to me. Yes.
If the answer to this question is yes, please provide the following details regarding your conviction(s): (1) the name of the criminal offense(s); (2) whether the criminal offense(s) was a misdemeanor or felony; (3) the facts and circumstances surrounding your conviction(s); (4) the date(s) of your conviction(s); and (5) the date(s) of disposition(s).
Your response to question seven may also include any relevant written information that you wish to be considered in support of your application, including, but not limited to: certificates of conviction; any parole and/or probation documentation; any certificates, including any certificate of relief from disabilities; any proof of counseling and/or rehabilitation; any documentation attesting to your good conduct or your good character; and any letters of support from friends, family, co-workers, employers, etc.
8. Please indicate if you currently have any criminal charge(s) pending against you in state or federal court in any jurisdiction.
 This does not apply to me. Yes.
If the answer to this question is yes, please provide an explanation.

Conflict of Interest

9. Please indicate whether you, your spouse, or other family member knows any of the other prospective or current board members.
√ I / we do not know any such persons. Yes.
If your answer is yes, please indicate the precise nature of your relationship here:
10. Please indicate whether you, your spouse, or other family member knows any person who is a prospective or current charter school employee.
√ I / we do not know any such persons. Yes.
If yes, please indicate the precise nature of your relationship here:
11. Please indicate if you, your spouse, or other family member or any corporation, business or other entity in which you, your spouse or other family member serve as an employee, officer, or director or own a controlling interest in, contracts or does business with, or plans to contract or do business with, the charter school, including but not limited to, the lease of real or personal property to the charter school.
√ No. Yes.
If yes, please describe the nature of the contract or business and, if applicable, the relationship of the person to the corporation, business or entity involved:
12. If the charter school is partnered with an educational service provider (a management company, whether for-profit or not-for-profit), please indicate whether you, your spouse, or any family member knows any employees, officers, owners, directors or agents of that provider. If your answer is in the affirmative, please describe any such relationship.
 Not applicable because the School does not/will not contract with a management company or charter management organization.
√ I / we do not know any such persons. Yes.
13. If the charter school is partnered with an educational service provider, please indicate whether you, your spouse or other family member has a direct or indirect ownership, employment, contractual or management interest in the provider. For any interest indicated, please provide a detailed description.
 Not applicable because the School does not/will not contract with a management company or charter management organization.
√ I / we have no such interest. Yes.
14. If the charter school is partnered with an educational services provider, please indicate if you, your spouse or other family member anticipates conducting, or is conducting, any business with the provider. If so, please indicate the precise nature of the business that is being or will be conducted.
 Not applicable because the School does not/will not contract with a management company or charter management organization.
√ I / we do not anticipate conducting any such business. Yes.

15. Please indicate whether you, your spouse or other family member is a director, officer, employee, partner or member of, or is otherwise associated with, any organization which filed an application in conjunction with the charter school, i.e., is partnered with the charter school. To the extent you have provided this information in response to items 9-12, you may so indicate. This does not apply to me, my spouse or other family members. Yes.

16. Please indicate the potential ethical or legal conflicts of interests (if any) that would, or are likely to, exist should you be approved for service on the charter school's board. None. Yes.

17. Please explain how you would handle a situation in which you believe one or more members of the charter school's board are involved in working for their own benefit, or the benefit of their friends and family.

Ask for a special meeting of the Board to discuss the matter. Investigate the allegations. Recommend removal from the Board and seek a vote to do the same if the allegations are proven to be true.

Educational Philosophy

18. Please explain your understanding of the charter school's mission and/or philosophy. ***To prepare the next generation of engineers and applied scientists for a challenging college education.***

19. Please explain your understanding of the educational program of the charter school. ***A rigorous International Baccalaureate curriculum with emphasis on the STEM disciplines and that: (1) has state-of-the-art science labs, (2) mirrors our middle and high school programs at MIT, (3) has a robust Rosetta language lab, and (4) has a liberal arts after-school program.***

20. Please indicate what you believe to be the characteristics of a successful charter school. In particular, please provide the specific steps you think the board of the charter school will need to take to ensure that this charter school is and remains successful.

A successful charter school must have highly trained, competent and totally dedicated teachers. The leaders of the school must set the goals and the scope of the academic programs so that each and every student is challenged to learn at their full potential. Rote learning must be discouraged, understanding of the fundamentals reinforced, and the parents must be enthusiastically supportive of the school and its mission. Financial support is important as well, but financing will easier to secure if the school is truly outstanding.

Other

21. Please explain your understanding of the appropriate role of a public charter school board member.

Charter school board members should provide oversight and guidance in all critical matters, work closely with the administrators of the school to provide the vision and direction of the school, and help to secure the resources needed to make sure the school is always successful.

22. Please affirm that you have read and understand the charter school application, the charter school board's by-laws and all proposed policies. ***I affirm***
23. Please provide any other information that you feel is pertinent to the Department's review.

Attachment 9: Request for Information from Prospective Charter School Board Members

Each Prospective Charter School Board Member must provide the Information requested in the next three pages.

Name: _____ John Joseph Kelley _____
(Include preferred honorific.)

Daytime Telephone: _____

Home Mailing Address: _____

Personal E-Mail/Fax: _____

Business Address: _____

Business E-Mail/Fax: _____

Charter School Name: Harlem Preparatory charter School for Science, Technology, Engineering and Mathematics

Charter School Address: TBA

To which charter school board position and/or office are you asking to be appointed? (e.g., parent representative, vice-president, Finance subcommittee, etc.):

As you may know, serving on a public charter school board of trustees (“board”) is a position of great trust and responsibility. As a member of a public charter school’s board, you would be charged with overseeing the education of all students enrolled in the school, as well as the expenditure of public monies directed to the charter school.

The Department’s consent is required **before** any new member may serve on the board. Accordingly, and in order to properly evaluate potential new board members, we ask that you please provide full and complete answers to each of the items below and provide the required assurance indicated. Note that providing false, misleading, and/or incomplete information may lead to a withdrawal of the Department’s approval, nullifying your appointment to the board.

Background

1. Please provide your educational and employment history. You may do so by attaching a résumé. Resume Attached
2. Please affirm that you are or will be at least eighteen years old at the time of your appointment/election to the board. I affirm.
3. Please affirm that you have read Article 56 of the New York State Education Law, and understand the relationship between a charter school and the authorized chartering entity as defined in that statute. I affirm.
4. Please indicate how you became aware of the charter school and the opportunity to serve as a member of its board. Through a recommendation
5. Please explain why you wish to serve on the board. I wish to serve on this board to help contribute my expertise and knowledge.
6. Please indicate whether you have previously served or are currently serving on a board of a school district, a non-public school or any not-for-profit corporation (to the extent not otherwise indicated in your response to Item 1, above). In addition, please describe any other experience, knowledge or skills you feel is relevant to service on the charter school board. This does not apply to me. Yes. (Include description here):

7. Please indicate whether or not you have ever been convicted of a misdemeanor and/or felony in state or federal court in any jurisdiction.
 This does not apply to me. Yes.

If the answer to this question is yes, please provide the following details regarding your conviction(s): (1) the name of the criminal offense(s); (2) whether the criminal offense(s) was a misdemeanor or felony; (3) the facts and circumstances surrounding your conviction(s); (4) the date(s) of your conviction(s); and (5) the date(s) of disposition(s).

Your response to question six may also include any relevant written information that you wish to be considered in support of your application, including, but not limited to: certificates of conviction; any parole and/or probation documentation; any certificates, including any certificate of relief from disabilities; any proof of counseling and/or rehabilitation; any documentation attesting to your good conduct or your good character; and any letters of support from friends, family, co-workers, employers, etc.

7. Please indicate if you currently have any criminal charge(s) pending against you in state or federal court in any jurisdiction.

This does not apply to me. Yes.

If the answer to this question is yes, please provide an explanation.

Conflict of Interest

8. Please indicate whether you, your spouse, or other family member knows any of the other prospective or current board members.
√ I / we do not know any such persons. Yes.
If your answer is yes, please indicate the precise nature of your relationship here:
9. Please indicate whether you, your spouse, or other family member knows any person who is a prospective or current charter school employee.
√ I / we do not know any such persons. Yes.
If yes, please indicate the precise nature of your relationship here:
10. Please indicate if you, your spouse, or other family member or any corporation, business or other entity in which you, your spouse or other family member serve as an employee, officer, or director or own a controlling interest in, contracts or does business with, or plans to contract or do business with, the charter school, including but not limited to, the lease of real or personal property to the charter school.
√ No. Yes.
If yes, please describe the nature of the contract or business and, if applicable, the relationship of the person to the corporation, business or entity involved:
11. If the charter school is partnered with an educational service provider (a management company, whether for-profit or not-for-profit), please indicate whether you, your spouse, or any family member knows any employees, officers, owners, directors or agents of that provider. If your answer is in the affirmative, please describe any such relationship.
√ Not applicable because the School does not/will not contract with a management company or charter management organization.
 I / we do not know any such persons. Yes.
12. If the charter school is partnered with an educational service provider, please indicate whether you, your spouse or other family member has a direct or indirect ownership, employment, contractual or management interest in the provider. For any interest indicated, please provide a detailed description.
√ Not applicable because the School does not/will not contract with a management company or charter management organization.
√ I / we have no such interest. Yes.
13. If the charter school is partnered with an educational services provider, please indicate if you, your spouse or other family member anticipates conducting, or is conducting, any business with the provider. If so, please indicate the precise nature of the business that is being or will be conducted.
√ Not applicable because the School does not/will not contract with a management company or charter management organization.
 I / we do not anticipate conducting any such business. Yes.

14. Please indicate whether you, your spouse or other family member is a director, officer, employee, partner or member of, or is otherwise associated with, any organization which filed an application in conjunction with the charter school, i.e., is partnered with the charter school. To the extent you have provided this information in response to items 9-12, you may so indicate. This does not apply to me, my spouse or other family members.
 Yes.

15. Please indicate the potential ethical or legal conflicts of interests (if any) that would, or are likely to, exist should you be approved for service on the charter school's board.
 None. Yes.

16. Please explain how you would handle a situation in which you believe one or more members of the charter school's board are involved in working for their own benefit, or the benefit of their friends and family. I would inform the board chair.

Educational Philosophy

17. Please explain your understanding of the charter school's mission and/or philosophy.
The Harlem Preparatory Charter School For Science, Technology, Engineering and Mathematics is to prepare students for careers in engineering and attend a 4 year college.

18. Please explain your understanding of the educational program of the charter school.
The educational program will offer the International Baccalaureate program, A stem program that will mirror the MITES (Minority Introduction to Engineering Science) program, offer a language program, community service program and mentorship with professionals in the field.

19. Please indicate what you believe to be the characteristics of a successful charter school.
In particular, please provide the specific steps you think the board of the charter school will need to take to ensure that this charter school is and remains successful.

The characteristics of a successful charter school shall ensure that the governing functions of the board is committed and complies with the charter, by laws, code of ethics, and schools mission and vision. The specific steps of a board will follow a regular process to review student achievement data to ensure continuous improvement, Participates in work sessions to better understand needed changes in curriculum and instruction based on related data, adopts board policies that support continuous improvement. Furthermore, the board will be responsible for attending public meetings twelve times a year. Board committees will meet regularly and contingent on organizational needs. They will also ensure board meeting are publicized in advance and confirm to the state's open meeting laws

Other

20. Please explain your understanding of the appropriate role of a public charter school board member. The appropriate role of a public charter school board is to ensure a strong and sustainable operation that will produce high academic outcomes on a yearly basis. The board will spent a considerable time on reviewing data, education programs, and establishing any school wide policies

21. Please affirm that you have read and understand the charter school application, the charter school board's by-laws and all proposed policies. I affirm.

22. Please provide any other information that you feel is pertinent to the Department's review. None at this time

Attachment 9: Request for Information from Prospective Charter School Board Members

Each Prospective Charter School Board Member must provide the Information requested in the next three pages.

Name: ANISA KEITH
(Include preferred honorific.)

Daytime Telephone: _____

Home Mailing Address: _____

Personal E-Mail/Fax: _____

Business Address: _____

Business E-Mail/Fax: _____

Charter School Name: HPCS (Harkem Preparatory Charter for Science, Technology, Engineering & Mathematics)

Charter School Address: TBD

To which charter school board position and/or office are you asking to be appointed? (e.g., parent representative, vice-president, Finance subcommittee, etc.):

FINANCE

As you may know, serving on a public charter school board of trustees ("board") is a position of great trust and responsibility. As a member of a public charter school's board, you would be charged with overseeing the education of all students enrolled in the school, as well as the expenditure of public monies directed to the charter school.

The Department's consent is required **before** any new member may serve on the board. Accordingly, and in order to properly evaluate potential new board members, we ask that you please provide full and complete answers to each of the items below and provide the required assurance indicated. Note that providing false, misleading, and/or incomplete information may lead to a withdrawal of the Department's approval, nullifying your appointment to the board.

Background

1. Please provide your educational and employment history. You may do so by attaching a résumé. Resume Attached
2. Please affirm that you are or will be at least eighteen years old at the time of your appointment/election to the board. I affirm.
3. Please affirm that you have read Article 56 of the New York State Education Law, and understand the relationship between a charter school and the authorized chartering entity as defined in that statute. I affirm.
4. Please indicate how you became aware of the charter school and the opportunity to serve as a member of its board. *COLUMBIA BUSINESS SCHOOL*
5. Please explain why you wish to serve on the board. *A DESIRE TO CONTRIBUTE*
6. Please indicate whether you have previously served or are currently serving on a board of a school district, a non-public school or any not-for-profit corporation (to the extent not otherwise indicated in your response to Item 1, above). In addition, please describe any other experience, knowledge or skills you feel is relevant to service on the charter school board. This does not apply to me. Yes. (Include description here):
7. Please indicate whether or not you have ever been convicted of a misdemeanor and/or felony in state or federal court in any jurisdiction.
 This does not apply to me. Yes.
If the answer to this question is yes, please provide the following details regarding your conviction(s): (1) the name of the criminal offense(s); (2) whether the criminal offense(s) was a misdemeanor or felony; (3) the facts and circumstances surrounding your conviction(s); (4) the date(s) of your conviction(s); and (5) the date(s) of disposition(s).

Your response to question six may also include any relevant written information that you wish to be considered in support of your application, including, but not limited to: certificates of conviction; any parole and/or probation documentation; any certificates, including any certificate of relief from disabilities; any proof of counseling and/or rehabilitation; any documentation attesting to your good conduct or your good character; and any letters of support from friends, family, co-workers, employers, etc.
7. Please indicate if you currently have any criminal charge(s) pending against you in state or federal court in any jurisdiction.
 This does not apply to me. Yes.
If the answer to this question is yes, please provide an explanation.

Conflict of Interest

8. Please indicate whether you, your spouse, or other family member knows any of the other prospective or current board members.

I / we do not know any such persons. Yes.

If your answer is yes, please indicate the precise nature of your relationship here:

9. Please indicate whether you, your spouse, or other family member knows any person who is a prospective or current charter school employee.

I / we do not know any such persons. Yes.

If yes, please indicate the precise nature of your relationship here:

10. Please indicate if you, your spouse, or other family member or any corporation, business or other entity in which you, your spouse or other family member serve as an employee, officer, or director or own a controlling interest in, contracts or does business with, or plans to contract or do business with, the charter school, including but not limited to, the lease of real or personal property to the charter school.

No. Yes.

If yes, please describe the nature of the contract or business and, if applicable, the relationship of the person to the corporation, business or entity involved:

11. If the charter school is partnered with an educational service provider (a management company, whether for-profit or not-for-profit), please indicate whether you, your spouse, or any family member knows any employees, officers, owners, directors or agents of that provider. If your answer is in the affirmative, please describe any such relationship.

Not applicable because the School does not/will not contract with a management company or charter management organization.

I / we do not know any such persons. Yes.

12. If the charter school is partnered with an educational service provider, please indicate whether you, your spouse or other family member has a direct or indirect ownership, employment, contractual or management interest in the provider. For any interest indicated, please provide a detailed description.

Not applicable because the School does not/will not contract with a management company or charter management organization.

I / we have no such interest. Yes.

13. If the charter school is partnered with an educational services provider, please indicate if you, your spouse or other family member anticipates conducting, or is conducting, any business with the provider. If so, please indicate the precise nature of the business that is being or will be conducted.

Not applicable because the School does not/will not contract with a management company or charter management organization.

I / we do not anticipate conducting any such business. Yes.

14. Please indicate whether you, your spouse or other family member is a director, officer, employee, partner or member of, or is otherwise associated with, any organization which filed an application in conjunction with the charter school, i.e., is partnered with the charter school. To the extent you have provided this information in response to items 9-12, you may so indicate. This does not apply to me, my spouse or other family members. Yes.

15. Please indicate the potential ethical or legal conflicts of interests (if any) that would, or are likely to, exist should you be approved for service on the charter school's board. None. Yes.

16. Please explain how you would handle a situation in which you believe one or more members of the charter school's board are involved in working for their own benefit, or the benefit of their friends and family. *I WOULD INFORM THE BOARD CHAIR ? WORK TO RESOLVE CONFLICT.*

Educational Philosophy

17. Please explain your understanding of the charter school's mission and/or philosophy. *THE SCHOOL WILL EDUCATE CHILDREN TO PURSUE CAREERS IN SCIENCE.*

18. Please explain your understanding of the educational program of the charter school. *THE SCHOOL WILL PREPARE CHILDREN FOR HIGHER ED IN SCIENCE & MATH.*

19. Please indicate what you believe to be the characteristics of a successful charter school. In particular, please provide the specific steps you think the board of the charter school will need to take to ensure that this charter school is and remains successful. *THE BOARD WILL HELP DIRECT POLICY & OVERSEE FINANCE & OPERATIONS OF THE SCHOOL WHILE ENSURING THAT IT DELIVERS ON ITS MISSION.*

20. Please explain your understanding of the appropriate role of a public charter school board member. *ACCOUNTIBILITY, ACTIVE PARTICIPATION, OVERSIGHT & ADVOCACY TO CHARTER LAWS AND DELIVERING ON THE SCHOOL MISSION.*

21. Please affirm that you have read and understand the charter school application, the charter school board's by-laws and all proposed policies. *YES*

22. Please provide any other information that you feel is pertinent to the Department's review. *NA*

Attachment 9: Request for Information from Prospective Charter School Board Members

Each Prospective Charter School Board Member must provide the information requested in the next three pages.

Name: Arif T. Joshi
(Include preferred honorific.)

Daytime Telephone: _____

Home Mailing Address: _____

Personal E-Mail/Fax: _____

Business Address: 3 _____

Business E-Mail/Fax: _____

Charter School Name: Harlem Preparatory Charter School for Science, Technology, Engineering & Mathematics

Charter School Address: Harlem

To which charter school board position and/or office are you asking to be appointed? (e.g., parent representative, vice-president, Finance subcommittee, etc.):

Finance Subcommittee

As you may know, serving on a public charter school board of trustees ("board") is a position of great trust and responsibility. As a member of a public charter school's board, you would be charged with overseeing the education of all students enrolled in the school, as well as the expenditure of public monies directed to the charter school.

The Department's consent is required **before** any new member may serve on the board. Accordingly, and in order to properly evaluate potential new board members, we ask that you please provide full and complete answers to each of the items below and provide the required assurance indicated. Note that providing false, misleading, and/or incomplete information may lead to a withdrawal of the Department's approval, nullifying your appointment to the board.

Background

1. Please provide your educational and employment history. You may do so by attaching a résumé. Resume Attached
2. Please affirm that you are or will be at least eighteen years old at the time of your appointment/election to the board. I affirm.
3. Please affirm that you have read Article 56 of the New York State Education Law, and understand the relationship between a charter school and the authorized chartering entity as defined in that statute. I affirm.
4. Please indicate how you became aware of the charter school and the opportunity to serve as a member of its board.

I became aware of the charter school through my colleague Phillip Kim, who has recently taken a board position with the school.

5. Please explain why you wish to serve on the board.

I have been an advocate for education for most of my career with a specific focus on low-income / underserved areas on the East Coast.

6. Please indicate whether you have previously served or are currently serving on a board of a school district, a non-public school or any not-for-profit corporation (to the extent not otherwise indicated in your response to Item 1, above). In addition, please describe any other experience, knowledge or skills you feel is relevant to service on the charter school board. This does not apply to me. Yes. (Include description here):
7. Please indicate whether or not you have ever been convicted of a misdemeanor and/or felony in state or federal court in any jurisdiction.

This does not apply to me. Yes.

If the answer to this question is yes, please provide the following details regarding your conviction(s): (1) the name of the criminal offense(s); (2) whether the criminal offense(s) was a misdemeanor or felony; (3) the facts and circumstances surrounding your conviction(s); (4) the date(s) of your conviction(s); and (5) the date(s) of disposition(s).

Your response to question six may also include any relevant written information that you wish to be considered in support of your application, including, but not limited to: certificates of conviction; any parole and/or probation documentation; any certificates, including any certificate of relief from disabilities; any proof of counseling and/or rehabilitation; any documentation attesting to your good conduct or your good character; and any letters of support from friends, family, co-workers, employers, etc.

7. Please indicate if you currently have any criminal charge(s) pending against you in state or federal court in any jurisdiction.

This does not apply to me. Yes.

If the answer to this question is yes, please provide an explanation.

Conflict of Interest

8. Please indicate whether you, your spouse, or other family member knows any of the other prospective or current board members.
 I / we do not know any such persons. Yes.
If your answer is yes, please indicate the precise nature of your relationship here:
9. Please indicate whether you, your spouse, or other family member knows any person who is a prospective or current charter school employee.
 I / we do not know any such persons. Yes.
If yes, please indicate the precise nature of your relationship here:
10. Please indicate if you, your spouse, or other family member or any corporation, business or other entity in which you, your spouse or other family member serve as an employee, officer, or director or own a controlling interest in, contracts or does business with, or plans to contract or do business with, the charter school, including but not limited to, the lease of real or personal property to the charter school.
 No. Yes.
If yes, please describe the nature of the contract or business and, if applicable, the relationship of the person to the corporation, business or entity involved:
11. If the charter school is partnered with an educational service provider (a management company, whether for-profit or not-for-profit), please indicate whether you, your spouse, or any family member knows any employees, officers, owners, directors or agents of that provider. If your answer is in the affirmative, please describe any such relationship.
 Not applicable because the School does not/will not contract with a management company or charter management organization.
 I / we do not know any such persons. Yes.
12. If the charter school is partnered with an educational service provider, please indicate whether you, your spouse or other family member has a direct or indirect ownership, employment, contractual or management interest in the provider. For any interest indicated, please provide a detailed description.
 Not applicable because the School does not/will not contract with a management company or charter management organization.
 I / we have no such interest. Yes.
13. If the charter school is partnered with an educational services provider, please indicate if you, your spouse or other family member anticipates conducting, or is conducting, any business with the provider. If so, please indicate the precise nature of the business that is being or will be conducted.
 Not applicable because the School does not/will not contract with a management company or charter management organization.
 I / we do not anticipate conducting any such business. Yes.

14. Please indicate whether you, your spouse or other family member is a director, officer, employee, partner or member of, or is otherwise associated with, any organization which filed an application in conjunction with the charter school, i.e., is partnered with the charter school. To the extent you have provided this information in response to items 9-12, you may so indicate. This does not apply to me, my spouse or other family members. Yes.
15. Please indicate the potential ethical or legal conflicts of interests (if any) that would, or are likely to, exist should you be approved for service on the charter school's board. None. Yes.
16. Please explain how you would handle a situation in which you believe one or more members of the charter school's board are involved in working for their own benefit, or the benefit of their friends and family.

I would consult with the chairperson of the board for further action.

Educational Philosophy

17. Please explain your understanding of the charter school's mission and/or philosophy.

The Harlem Preparatory Charter School for Science, Technology, Engineering and Mathematics (HPCS) aims to prepare the next generation of engineers and applied scientists for a challenging college education. By providing a robust, active-learning, inquiry-based and college-bound educational experience, HPCS students will embrace higher education, become leaders in their communities, attain their career choice and remain inquisitive, live-long learners.

18. Please explain your understanding of the educational program of the charter school.

The educational program will implement robust, national and state standard-aligned courses based on the International Baccalaureate (IB) integrative and interactive curriculum framework. The IB seeks to foster positive attitudes and a love of learning in both teachers and students. The infusion of Science, Technology, Engineering and Mathematics (STEM) as a coordinated, thematic strategy involving collaboration between different departments will provide our students with significant efficacy across the curriculum and also will provide distinctly realizable higher education and career opportunities. (The US will need 400k graduates with STEM backgrounds by 2015). The educational program will adhere to the Universal Design for Learning (UDL) methodology, which incorporates multiple intelligences and varied assessments.

19. Please indicate what you believe to be the characteristics of a successful charter school. In particular, please provide the specific steps you think the board of the charter school will need to take to ensure that this charter school is and remains successful.

A successful charter school needs to have both commitment and accountability. Furthermore, all stakeholders need to constantly endeavor to help students achieve excellence in their studies. Finally, we cannot forget the parent(s)/family role is a child's education. These stakeholders have to be a significant source of motivation to the student in order to succeed in school. The board needs to evaluate every interaction that the student has with the school, their family and the community to ensure that we do not let students fall through the cracks. Board members will spend a large amount of time in the classroom to better understand student/teacher dynamics and be intimately involved in personnel decisions. Board members ought to spend time with parents to better understand their goals for their children and receive feedback about how the school can better serve them. Board members should also determine the best measure of student achievement that reflects the school's mission. Finally, board members should spend time developing and deepening relationships with community organizations that can become partners.

Other

20. Please explain your understanding of the appropriate role of a public charter school board member.

The board member's role is to ensure the integrity of the school which includes but is not limited to (a) fulfillment of the mission statement, (b) execution of academic programs, (c) school's financial health and (d) the organizational pride exhibited by the administration and teachers.

21. Please affirm that you have read and understand the charter school application, the charter school board's by-laws and all proposed policies.

Affirmed

22. Please provide any other information that you feel is pertinent to the Department's review.

None

Attachment 9: Request for Information from Prospective Charter School Board Members

Each Prospective Charter School Board Member must provide the information requested in the next three pages.

Name: EDMUND W. GORDON
 (Include preferred honorific.)

Daytime Telephone: _____

Home Mailing Address: _____

Personal E-Mail/Fax: _____

Business Address: SAME

Business E-Mail/Fax: _____

Charter School Name: _____

Charter School Address: _____

To which charter school board position and/or office are you asking to be appointed? (e.g., parent representative, vice-president, Finance subcommittee, etc.):

As you may know, serving on a public charter school board of trustees ("board") is a position of great trust and responsibility. As a member of a public charter school's board, you would be charged with overseeing the education of all students enrolled in the school, as well as the expenditure of public monies directed to the charter school.

The Department's consent is required before any new member may serve on the board. Accordingly, and in order to properly evaluate potential new board members, we ask that you please provide full and complete answers to each of the items below and provide the required assurance indicated. Note that providing false, misleading, and/or incomplete information may lead to a withdrawal of the Department's approval, nullifying your appointment to the board.

Background

1. Please provide your educational and employment history. You may do so by attaching a résumé. Resume Attached
2. Please affirm that you are or will be at least eighteen years old at the time of your appointment/election to the board. I affirm.
3. Please affirm that you have read Article 56 of the New York State Education Law, and understand the relationship between a charter school and the authorized chartering entity as defined in that statute. I affirm.
4. Please indicate how you became aware of the charter school and the opportunity to serve as a member of its board. *Invited*
5. Please explain why you wish to serve on the board. *RESPECT FOR IDEA*
6. Please indicate whether you have previously served or are currently serving on a board of a school district, a non-public school or any not-for-profit corporation (to the extent not otherwise indicated in your response to Item 1, above). In addition, please describe any other experience, knowledge or skills you feel is relevant to service on the charter school board. This does not apply to me. Yes. (Include description here): *Greenburgh School District 2004-8*
7. Please indicate whether or not you have ever been convicted of a misdemeanor and/or felony in state or federal court in any jurisdiction.

This does not apply to me. Yes.

If the answer to this question is yes, please provide the following details regarding your conviction(s): (1) the name of the criminal offense(s); (2) whether the criminal offense(s) was a misdemeanor or felony; (3) the facts and circumstances surrounding your conviction(s); (4) the date(s) of your conviction(s); and (5) the date(s) of disposition(s).

Your response to question six may also include any relevant written information that you wish to be considered in support of your application, including, but not limited to: certificates of conviction; any parole and/or probation documentation; any certificates, including any certificate of relief from disabilities; any proof of counseling and/or rehabilitation; any documentation attesting to your good conduct or your good character; and any letters of support from friends, family, co-workers, employers, etc.
7. Please indicate if you currently have any criminal charge(s) pending against you in state or federal court in any jurisdiction.

This does not apply to me. Yes.

If the answer to this question is yes, please provide an explanation.

Conflict of Interest

8. Please indicate whether you, your spouse, or other family member knows any of the other prospective or current board members.
 I / we do not know any such persons. Yes.
If your answer is yes, please indicate the precise nature of your relationship here:
9. Please indicate whether you, your spouse, or other family member knows any person who is a prospective or current charter school employee.
 I / we do not know any such persons. Yes.
If yes, please indicate the precise nature of your relationship here:
10. Please indicate if you, your spouse, or other family member or any corporation, business or other entity in which you, your spouse or other family member serve as an employee, officer, or director or own a controlling interest in, contracts or does business with, or plans to contract or do business with, the charter school, including but not limited to, the lease of real or personal property to the charter school.
 No. Yes.
If yes, please describe the nature of the contract or business and, if applicable, the relationship of the person to the corporation, business or entity involved:
11. If the charter school is partnered with an educational service provider (a management company, whether for-profit or not-for-profit), please indicate whether you, your spouse, or any family member knows any employees, officers, owners, directors or agents of that provider. If your answer is in the affirmative, please describe any such relationship.
 Not applicable because the School does not/will not contract with a management company or charter management organization.
 I / we do not know any such persons. Yes.
12. If the charter school is partnered with an educational service provider, please indicate whether you, your spouse or other family member has a direct or indirect ownership, employment, contractual or management interest in the provider. For any interest indicated, please provide a detailed description.
 Not applicable because the School does not/will not contract with a management company or charter management organization.
 I / we have no such interest. Yes.
13. If the charter school is partnered with an educational services provider, please indicate if you, your spouse or other family member anticipates conducting, or is conducting, any business with the provider. If so, please indicate the precise nature of the business that is being or will be conducted.
 Not applicable because the School does not/will not contract with a management company or charter management organization.
 I / we do not anticipate conducting any such business. Yes.

14. Please indicate whether you, your spouse or other family member is a director, officer, employee, partner or member of, or is otherwise associated with, any organization which filed an application in conjunction with the charter school, i.e., is partnered with the charter school. To the extent you have provided this information in response to items 9-12, you may so indicate. This does not apply to me, my spouse or other family members. Yes.

15. Please indicate the potential ethical or legal conflicts of interests (if any) that would, or are likely to, exist should you be approved for service on the charter school's board.
 None. Yes.

16. Please explain how you would handle a situation in which you believe one or more members of the charter school's board are involved in working for their own benefit, or the benefit of their friends and family. *CALL FOR OPEN DISCUSSION TO RESOLVE ISSUE*

Educational Philosophy

17. Please explain your understanding of the charter school's mission and/or philosophy.
PURSUIT OF EXCELLENCE & EQUITY IN EDUCATIONAL OPPORTUNITY & ACHIEVEMENT

18. Please explain your understanding of the educational program of the charter school.
N/A

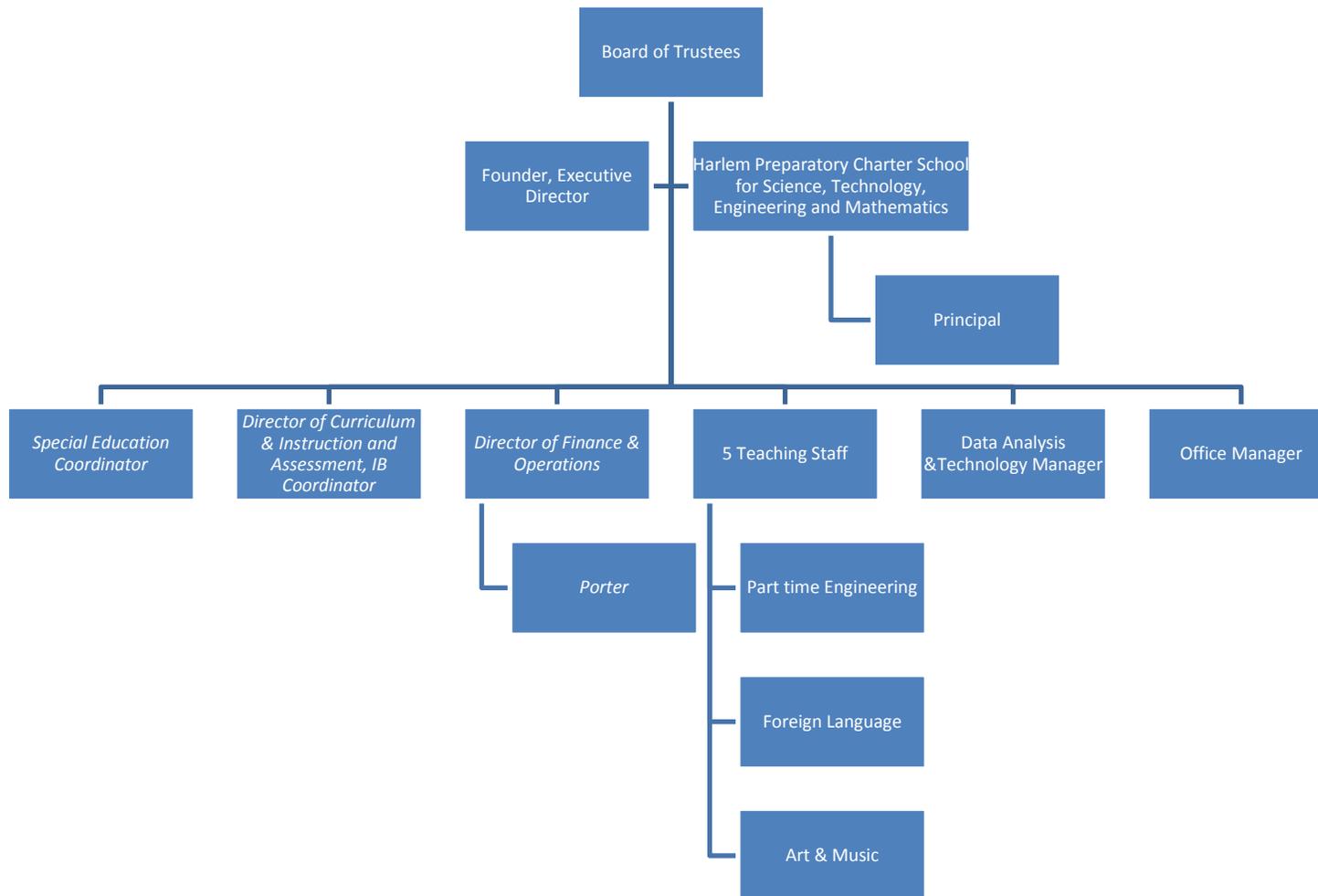
19. Please indicate what you believe to be the characteristics of a successful charter school. In particular, please provide the specific steps you think the board of the charter school will need to take to ensure that this charter school is and remains successful.

- ① CONCEPTUAL SOUNDNESS
- ② STRONG + QUALIFIED LEADERSHIP
- ③ OPEN ACCOUNTABILITY
- ④ RIGOROUS STANDARDS
- ⑤ CUSTOMIZED SUPPORT FOR STUDENTS + TEACHERS
- ⑥ DATA DRIVEN DECISION MAKING
- Other

20. Please explain your understanding of the appropriate role of a public charter school board member. ① POLICY DIRECTION ② PROGRAM & STAFF OVERSIGHT ③ ACCESS RESOURCES ④ MONITOR OPERATION + ACCOUNTABILITY

21. Please affirm that you have read and understand the charter school application, the charter school board's by-laws and all proposed policies. *I HAVE*

22. Please provide any other information that you feel is pertinent to the Department's review.



ATTACHMENT 11: KEY POSITION DESCRIPTIONS

The Executive Director (ED) will be the education strategist for the school, reporting directly to the Board of Trustees. S/he is responsible for managing the school building, data systems and professional development education programs. The ED manages school finances and operations, ensures compliance with the charter authorizers and that documents are updated, manages all hiring needs, evaluates staff and assures all employees meet daily work obligations and collaborates with the IB organization on education program compliance and teacher training. The ED conducts meetings with staff members, articulates policy changes, ensures the mission is delivered daily, develops multiple forms of evaluating the school, and guides education programs for continuous improvement. The ED will make sure that the after-school student support system leads to academic progress; participates in all school-wide events and involves parents. Grant oversight and fundraising activities, school compliance with all applicable laws, and participation in the hiring of teachers are also responsibilities. We expect our ED to be a motivational leader who leads with enthusiasms and passion and who builds a culture of excellence and respect.

The Principal will be the education leader of the school. Responsibilities include: Acting as primary spokesperson for the school; serving as liaison between faculty and the Executive Director; developing a teaching staff that functions as a team; creating and overseeing curriculum development; assuring continuous improvement through multiple evaluation instruments; involving parents in school-wide activities; building community outreach and parent relations; conducting staff meetings; conducting daily observation of teachers; participating in staff and teacher hiring, ensuring school compliance with special education laws, developing students schedules, leading ethically and motivating staff with enthusiasm and passion; managing students behavior; developing awards/recognition systems for students and staff, conducting professional development; managing school budget and control expenditures, providing a safe environment; managing community-based education programs including the community service project, and participating in all strategic development of the school.

The Director of Instruction and Curriculum will be the instructional coach, working closely with teachers to attain and maintain exemplary student achievement, curriculum and instruction. Responsibilities include communicating and aligning organizational goals; supporting and mentoring of classroom teachers; collecting lessons plan and provide evaluation feedback; developing student academic plans; aligning curriculum development with IB programs; monitoring instructional programs and making recommendations; using research-based methodologies to develop curriculum; assuring alignment with college requirements; developing and implementing testing instruments; overseeing the school calendar and student schedules; evaluating and assessing teaching staff, participating in professional development; assuring special education classroom services are provided, participating in grade team meetings weekly; collaborating with principal and ensuring the school adheres to the schools charter.

The Director of Finance and Operations will work closely and collaboratively with the principal and executive director to maintain the budget and provide monthly reports to the Principal and Executive Director. Responsibilities include ensuring accounting books and financial records of the school are fiscally sound; maintaining payroll; managing purchase systems; updating data systems and student information systems (websites); making payments to contractors; ensuring a safe, clean and environmentally friendly physical space and school compliance with health department and building inspections; participating in and managing school capital improvement projects, supervising student transportation, food services, food staffing and office management operations; managing school-wide medical issues and injuries, working with the school nurse, and performing other special duties as required to meet our mission.

The Data Analyst and Technology Manager will work closely and collaboratively with the Executive Director and Principal. Responsibilities include analyzing schools data and all assessment instruments; managing students grading systems; creating multiple evaluation reports of teachers test scores and education programs; running the school website; initiating employee email accounts; creating student profiles; and staffing and managing other special duties to accomplish the mission of the school.

The Special Education Coordinator will work closely with the Director of Curriculum and Instruction and will serve as a liaison between home and school to assure student academic and behavioral progress. Responsibilities include working closely with classroom teachers; ensuring implementation of IEPs; managing administration of special education and ELL programs; providing observation, guidance, evaluation, analysis and educational assessment of students' academic performance and learning characteristics; reporting assessment findings; maintaining confidential records on all referred students and student/parent contacts in accordance with federal and state law; communicating students' needs and progress; playing a key role in providing students with necessary skills to be productive students and citizens; serving as a resource and/or consultant to school personnel; and any other matters relating to special needs and IEPs.

The Teachers will possess exceptional expertise in their subject areas and have extensive teaching experience. Responsibilities include providing an academically stimulating environment; involving parents in the academic process; documenting student progress through data driven instruction; assuring their instructional strategies, methods and materials align with the IB program and all common core standards; attending professional development training; teaching an ambitious daily schedule program; developing quarterly academic goals for each student; developing classroom reward systems; creating research-based programs to address behavioral problems in the classroom; conducting 20 hours of professional development with staff members; teaching as needed in the summer program; advising students' community service projects, ensuring that college writing is infused in daily classroom assignments; creating a professional portfolio and meeting HPCS professional development standards; providing regular academic student progress reports; reporting failing students to the Principal and Executive Director; attending meetings with parents, including but not limited to parent-teacher conference night; instilling a culture of excellence; fostering student achievement; and other special duties required to accomplish our mission.

The Office Manager will be bilingual, & oversee the non-academic affairs of the school. Responsibilities include managing all daily operations, including monitoring the front desk; tracking employee and student attendance; answering the phone; managing deliveries and mail, supporting staff, students, and parents. Each employee must participate in a criminal background check and attend a child abuse training course before first day of employment. 38

**Harlem Preparatory Charter School For Science, Technology, Engineering and Mathematics
PROJECTED BUDGET / OPERATING PLAN FOR PRE-OPENING PERIOD
September 1, 2011 to June 30, 2012**

| | | |
|--------------------------------------|----------------|-----------------------------------|
| Total Revenue | 260,000 | DESCRIPTION OF ASSUMPTIONS |
| Total Expenses | 201,134 | |
| Net Income | 58,866 | |
| Actual Student Enrollment | - | |
| Total Paid Student Enrollment | - | |

No student enrollment during the pre-opening period.

**START-UP
PERIOD**

REVENUE

REVENUES FROM STATE SOURCES

| Per Pupil Revenue | CY Per Pupil Rate | |
|---|-------------------|---|
| NEW YORK CITY | 13,527 | - |
| School District 2 (Enter Name) | - | - |
| School District 3 (Enter Name) | - | - |
| School District 4 (Enter Name) | - | - |
| School District 5 (Enter Name) | - | - |
| School District 6 (Enter Name) | - | - |
| School District 7 (Enter Name) | - | - |
| School District 8 (Enter Name) | - | - |
| School District 9 (Enter Name) | - | - |
| School District 10 (Enter Name) | - | - |
| School District 11 (Enter Name) | - | - |
| School District 12 (Enter Name) | - | - |
| School District 13 (Enter Name) | - | - |
| School District 14 (Enter Name) | - | - |
| School District 15 (Enter Name) | - | - |
| School District - ALL OTHER | - | - |
| TOTAL Per Pupil Revenue (Average Districts Per Pupil Funding) | 13,527 | - |
| Special Education Revenue | | - |
| Grants | | - |
| Stimulus | | - |
| DYCD (Department of Youth and Community Developmt.) | | - |
| Other | | - |
| Other | | - |
| TOTAL REVENUE FROM STATE SOURCES | | - |

REVENUE FROM FEDERAL FUNDING

| | | |
|--|---------|---|
| IDEA Special Needs | | - |
| Title I | | - |
| Title Funding - Other | | - |
| School Food Service (Free Lunch) | | - |
| Grants | | - |
| Charter School Program (CSP) Planning & Implementation | 200,000 | - |
| Other | 60,000 | - |
| Other | | - |
| TOTAL REVENUE FROM FEDERAL SOURCES | 260,000 | - |

We assume a partial \$200,000 CSP Grant for the pre-opening period.
Charter School Center Loan - Confirmed with Ellena Day.

LOCAL and OTHER REVENUE

| | | |
|--|--|---|
| Contributions and Donations | | - |
| Fundraising | | - |
| Erate Reimbursement | | - |
| Earnings on Investments | | - |
| Interest Income | | - |
| Food Service (Income from meals) | | - |
| Text Book | | - |
| OTHER | | - |
| TOTAL REVENUE FROM LOCAL and OTHER SOURCES | | - |

TOTAL REVENUE **260,000**

EXPENSES**ADMINISTRATIVE STAFF PERSONNEL COSTS**

| | No. of Positions | | |
|-----------------------------------|------------------|---------------|-----------|
| Executive Management | 1.00 | 30,000 | Part-time |
| Instructional Management | - | - | |
| Deans, Directors & Coordinators | - | - | |
| CFO / Director of Finance | - | - | |
| Operation / Business Manager | 1.00 | 20,000 | Part-time |
| Administrative Staff | 1.00 | 7,500 | Part-time |
| TOTAL ADMINISTRATIVE STAFF | 3.00 | 57,500 | |

INSTRUCTIONAL PERSONNEL COSTS

| | | |
|----------------------------|----------|----------|
| Teachers - Regular | - | - |
| Teachers - SPED | - | - |
| Substitute Teachers | - | - |
| Teaching Assistants | - | - |
| Specialty Teachers | - | - |
| Aides | - | - |
| Therapists & Counselors | - | - |
| Other | - | - |
| TOTAL INSTRUCTIONAL | - | - |

NON-INSTRUCTIONAL PERSONNEL COSTS

| | | |
|--------------------------------|----------|----------|
| Nurse | - | - |
| Librarian | - | - |
| Custodian | - | - |
| Security | - | - |
| Other | - | - |
| TOTAL NON-INSTRUCTIONAL | - | - |

SUBTOTAL PERSONNEL SERVICE COSTS

| | | |
|--|------|--------|
| | 3.00 | 57,500 |
|--|------|--------|

PAYROLL TAXES AND BENEFITS

| | | | |
|---|---------|---------------|------------------|
| Payroll Taxes | 7.650% | 5,444 | \$8,500/employee |
| Fringe / Employee Benefits | 15.000% | 8,625 | Health Benefits |
| Retirement / Pension | 6.200% | 3,565 | |
| TOTAL PAYROLL TAXES AND BENEFITS | | 17,634 | |

TOTAL PERSONNEL SERVICE COSTS

| | | |
|--|------|--------|
| | 3.00 | 75,134 |
|--|------|--------|

CONTRACTED SERVICES

| | |
|---|---------------|
| Accounting / Audit | 5,000 |
| Legal | 5,000 |
| Management Company Fee | - |
| Nurse Services | - |
| Food Service / School Lunch | - |
| Payroll Services | - |
| Special Ed Services | - |
| Titlement Services (i.e. Title I) | - |
| Other Purchased / Professional / Consulting | - |
| TOTAL CONTRACTED SERVICES | 10,000 |

SCHOOL OPERATIONS

| | |
|---|---------------|
| Board Expenses | - |
| Classroom / Teaching Supplies & Materials | - |
| Special Ed Supplies & Materials | - |
| Textbooks / Workbooks | - |
| Supplies & Materials other | - |
| Equipment / Furniture | 25,000 |
| Telephone | 1,000 |
| Technology | 15,000 |
| Student Testing & Assessment | - |
| Field Trips | - |
| Transportation (student) | - |
| Student Services - other | - |
| Office Expense | - |
| Staff Development | - |
| Staff Recruitment | 10,000 |
| Student Recruitment / Marketing | 25,000 |
| School Meals / Lunch | - |
| Travel (Staff) | - |
| Fundraising | - |
| Other | - |
| TOTAL SCHOOL OPERATIONS | 76,000 |

FACILITY OPERATION & MAINTENANCE

| | |
|---|---------------|
| Insurance | - |
| Janitorial | - |
| Building and Land Rent / Lease | 20,000 |
| Repairs & Maintenance | 5,000 |
| Equipment / Furniture | 15,000 |
| Security | - |
| Utilities | - |
| TOTAL FACILITY OPERATION & MAINTENANCE | 40,000 |

DEPRECIATION & AMORTIZATION**DISSOLUTION ESCROW & RESERVES / CONTINGENCY**

| |
|---|
| - |
| - |

TOTAL EXPENSES

| |
|----------------|
| 201,134 |
|----------------|

NET INCOME

| |
|---------------|
| 58,866 |
|---------------|

ENROLLMENT - *School Districts Are Linked To Above Entries*

| | |
|---------------------------------|----------|
| NEW YORK CITY | - |
| School District 2 (Enter Name) | - |
| School District 3 (Enter Name) | - |
| School District 4 (Enter Name) | - |
| School District 5 (Enter Name) | - |
| School District 6 (Enter Name) | - |
| School District 7 (Enter Name) | - |
| School District 8 (Enter Name) | - |
| School District 9 (Enter Name) | - |
| School District 10 (Enter Name) | - |
| School District 11 (Enter Name) | - |
| School District 12 (Enter Name) | - |
| School District 13 (Enter Name) | - |
| School District 14 (Enter Name) | - |
| School District 15 (Enter Name) | - |
| School District - ALL OTHER | - |
| TOTAL ENROLLMENT | - |
| REVENUE PER PUPIL | - |
| EXPENSES PER PUPIL | - |

Attachment 7

Budget + Cash Flow

| Harlem Preparatory Charter School for Science, Technology, Engineering & Mathematics PROJECTED BUDGET / OPERATING PLAN FOR PRE-OPENING PERIOD September 1, 2011 to June 30, 2012 | | |
|--|--------------------------|---|
| Total Revenue | 260,000 | DESCRIPTION OF ASSUMPTIONS No student enrollment during the pre-opening period. |
| Total Expenses | 201,134 | |
| Net Income | 58,866 | |
| Actual Student Enrollment | - | |
| Total Paid Student Enrollment | - | |
| | | START-UP PERIOD |
| REVENUE | | |
| REVENUES FROM STATE SOURCES | | |
| Per Pupil Revenue: | CY Per Pupil Rate | |
| NEW YORK CITY | 13,527 | |
| School District 2 (Enter Name) | | |
| School District 3 (Enter Name) | | |
| School District 4 (Enter Name) | | |
| School District 5 (Enter Name) | | |
| School District 6 (Enter Name) | | |
| School District 7 (Enter Name) | | |
| School District 8 (Enter Name) | | |
| School District 9 (Enter Name) | | |
| School District 10 (Enter Name) | | |
| School District 11 (Enter Name) | | |
| School District 12 (Enter Name) | | |
| School District 13 (Enter Name) | | |
| School District 14 (Enter Name) | | |
| School District 15 (Enter Name) | | |
| School District - ALL OTHER | | |
| TOTAL Per Pupil Revenue (Average Districts Per Pupil Funding) | 13,527 | |
| Special Education Revenue | | |
| Grants | | |
| Stimulus | | |
| DYCD (Department of Youth and Community Development) | | |
| Other | | |
| TOTAL REVENUE FROM STATE SOURCES | | |
| REVENUE FROM FEDERAL FUNDING | | |
| IDEA Special Needs | | |
| Title I | | |
| Title Funding - Other | | |
| School Food Service (Free Lunch) | | |
| Grants | | |
| Charter School Program (CSP) Planning & Implementation | 200,000 | We assume a partial \$200,000 CSP Grant for the pre-opening period. |
| Other | 60,000 | Charter School Center Loan - Confirmed with Ellera Day. |
| TOTAL REVENUE FROM FEDERAL SOURCES | 260,000 | |
| LOCAL and OTHER REVENUE | | |
| Contributions and Donations | | |
| Fundraising | | |
| Erate Reimbursement | | |
| Earnings on Investments | | |
| Interest Income | | |
| Food Service (Income from meals) | | |
| Text Book | | |
| OTHER | | |
| TOTAL REVENUE FROM LOCAL and OTHER SOURCES | | |
| TOTAL REVENUE | 260,000 | |

EXPENSES

| | No. of Positions | | |
|--|------------------|----------------|---------------------|
| ADMINISTRATIVE STAFF PERSONNEL COSTS | | | |
| Executive Management | 1.00 | 30,000 | Part-time |
| Instructional Management | - | - | |
| Deans, Directors & Coordinators | - | - | |
| CFO / Director of Finance | - | - | |
| Operation / Business Manager | 1.00 | 20,000 | Part-time |
| Administrative Staff | 1.00 | 7,500 | Part-time |
| TOTAL ADMINISTRATIVE STAFF | 3.00 | 57,500 | |
| INSTRUCTIONAL PERSONNEL COSTS | | | |
| Teachers - Regular | - | - | |
| Teachers - SPED | - | - | |
| Substitute Teachers | - | - | |
| Teaching Assistants | - | - | |
| Specialty Teachers | - | - | |
| Aides | - | - | |
| Therapists & Counselors | - | - | |
| Other | - | - | |
| TOTAL INSTRUCTIONAL | | | |
| NON-INSTRUCTIONAL PERSONNEL COSTS | | | |
| Nurse | - | - | |
| Librarian | - | - | |
| Custodian | - | - | |
| Security | - | - | |
| Other | - | - | |
| TOTAL NON-INSTRUCTIONAL | | | |
| SUBTOTAL PERSONNEL SERVICE COSTS | 3.00 | 57,500 | |
| PAYROLL TAXES AND BENEFITS | | | |
| Payroll Taxes | 7.650% | 5,444 | \$8,500/employee |
| Fringe / Employee Benefits | 15.000% | 8,625 | Health Benefits |
| Retirement / Pension | 6.200% | 3,965 | |
| TOTAL PAYROLL TAXES AND BENEFITS | | 17,634 | |
| TOTAL PERSONNEL SERVICE COSTS | 3.00 | 75,134 | |
| CONTRACTED SERVICES | | | |
| Accounting / Audit | - | 5,000 | |
| Legal | - | 5,000 | |
| Management Company Fee | - | - | |
| Nurse Services | - | - | |
| Food Service / School Lunch | - | - | |
| Payroll Services | - | - | |
| Special Ed Services | - | - | |
| Titement Services (i.e. Title I) | - | - | |
| Other Purchased / Professional / Consulting | - | - | |
| TOTAL CONTRACTED SERVICES | | 10,000 | |
| SCHOOL OPERATIONS | | | |
| Board Expenses | - | - | |
| Classroom / Teaching Supplies & Materials | - | - | |
| Special Ed Supplies & Materials | - | - | |
| Textbooks / Workbooks | - | - | |
| Supplies & Materials other | - | - | |
| Equipment / Furniture | - | 25,000 | Not using CSP funds |
| Telephone | - | 1,000 | |
| Technology | - | 15,000 | Not using CSP funds |
| Student Testing & Assessment | - | - | |
| Field Trips | - | - | |
| Transportation (student) | - | - | |
| Student Services - other | - | - | |
| Office Expense | - | - | |
| Staff Development | - | - | |
| Staff Recruitment | - | 10,000 | |
| Student Recruitment / Marketing | - | 25,000 | |
| School Meals / Lunch | - | - | |
| Travel (Staff) | - | - | |
| Fundraising | - | - | |
| Other | - | - | |
| TOTAL SCHOOL OPERATIONS | | 76,000 | |
| FACILITY OPERATION & MAINTENANCE | | | |
| Insurance | - | - | |
| Janitorial | - | - | |
| Building and Land Rent / Lease | - | 20,000 | |
| Repairs & Maintenance | - | 5,000 | |
| Equipment / Furniture | - | 15,000 | |
| Security | - | - | |
| Utilities | - | - | |
| TOTAL FACILITY OPERATION & MAINTENANCE | | 40,000 | |
| DEPRECIATION & AMORTIZATION | | | |
| DISSOLUTION ESCROW & RESERVES / CONTINGENCY | | | |
| TOTAL EXPENSES | | 201,134 | |
| NET INCOME | | 58,866 | |

Harlem Preparatory Charter School for Science, Technology, Engineering & Mathematics
PROJECTED CASH FLOW FOR PRE-OPENING PERIOD
 September 1, 2011 to June 30, 2012

| | | | | | | | |
|-------------------------------|---------|----------|----------|----------|----------|----------|---------|
| Total Revenue | 160,000 | - | - | - | - | - | 260,000 |
| Total Expenses | 25,071 | 25,071 | 25,071 | 33,292 | 45,792 | 46,837 | 201,134 |
| Net Income | 134,929 | (25,071) | (25,071) | (33,292) | (45,792) | (46,837) | 58,866 |
| Cash Flow Adjustments | - | - | - | - | - | - | - |
| Beginning Cash Balance | - | 234,929 | 209,858 | 184,788 | 151,495 | 105,703 | - |
| Net Income | 134,929 | 209,858 | 184,788 | 151,495 | 105,703 | 58,866 | 58,866 |

| | January | February | March | April | May | June | TOTAL |
|---|---------|----------|-------|-------|-----|------|---------|
| REVENUE | | | | | | | |
| REVENUES FROM STATE SOURCES | | | | | | | |
| Per Pupil Revenue | | | | | | | |
| School District 1 (Enter Name) | - | - | - | - | - | - | - |
| School District 2 (Enter Name) | - | - | - | - | - | - | - |
| School District 3 (Enter Name) | - | - | - | - | - | - | - |
| School District 4 (Enter Name) | - | - | - | - | - | - | - |
| School District 5 (Enter Name) | - | - | - | - | - | - | - |
| School District 6 (Enter Name) | - | - | - | - | - | - | - |
| School District 7 (Enter Name) | - | - | - | - | - | - | - |
| School District 8 (Enter Name) | - | - | - | - | - | - | - |
| School District 9 (Enter Name) | - | - | - | - | - | - | - |
| School District 10 (Enter Name) | - | - | - | - | - | - | - |
| School District 11 (Enter Name) | - | - | - | - | - | - | - |
| School District 12 (Enter Name) | - | - | - | - | - | - | - |
| School District 13 (Enter Name) | - | - | - | - | - | - | - |
| School District 14 (Enter Name) | - | - | - | - | - | - | - |
| School District 15 (Enter Name) | - | - | - | - | - | - | - |
| School District - ALL OTHER | - | - | - | - | - | - | - |
| TOTAL Per Pupil Revenue (Average Districts Per Pupil Funding) | - | - | - | - | - | - | - |
| Grants | | | | | | | |
| Stimulus | - | - | - | - | - | - | - |
| DYCD (Department of Youth and Community Developmt.) | - | - | - | - | - | - | - |
| Other | - | - | - | - | - | - | - |
| Other | - | - | - | - | - | - | - |
| TOTAL REVENUE FROM STATE SOURCES | - | - | - | - | - | - | - |
| REVENUE FROM FEDERAL FUNDING | | | | | | | |
| IDEA Special Needs | - | - | - | - | - | - | - |
| Title I | - | - | - | - | - | - | - |
| Title Funding - Other | - | - | - | - | - | - | - |
| School Food Service (Free Lunch) | - | - | - | - | - | - | - |
| Grants | | | | | | | |
| Charter School Program (CSP) Planning & Implementation | 200,000 | - | - | - | - | - | 200,000 |
| Other | - | - | - | - | - | - | - |
| Other | 60,000 | - | - | - | - | - | 60,000 |
| TOTAL REVENUE FROM FEDERAL SOURCES | 260,000 | - | - | - | - | - | 260,000 |
| LOCAL and OTHER REVENUE | | | | | | | |
| Contributions and Donations | - | - | - | - | - | - | - |
| Fundraising | - | - | - | - | - | - | - |
| Erate Reimbursement | - | - | - | - | - | - | - |
| Earnings on Investments | - | - | - | - | - | - | - |
| Interest Income | - | - | - | - | - | - | - |
| Food Service (Income from meals) | - | - | - | - | - | - | - |
| Text Book | - | - | - | - | - | - | - |
| OTHER | - | - | - | - | - | - | - |
| TOTAL REVENUE FROM LOCAL and OTHER SOURCES | - | - | - | - | - | - | - |
| TOTAL REVENUE | 260,000 | - | - | - | - | - | 260,000 |

EXPENSES

| | No. of Positions | | | | | | | |
|--|------------------|----------------|-----------------|-----------------|-----------------|-----------------|-----------------|----------------|
| ADMINISTRATIVE STAFF PERSONNEL COSTS | | | | | | | | |
| Executive Management | 1.00 | 5,000 | 5,000 | 5,000 | 5,000 | 5,000 | 5,000 | 30,000 |
| Instructional Management | - | - | - | - | - | - | - | - |
| Deans, Directors & Coordinators | - | - | - | - | - | - | - | - |
| CFO / Director of Finance | - | - | - | - | - | - | - | - |
| Operation / Business Manager | 1.00 | 3,333 | 3,333 | 3,333 | 3,333 | 3,333 | 3,333 | 20,000 |
| Administrative Staff | 1.00 | - | - | - | 2,500 | 2,500 | 2,500 | 7,500 |
| TOTAL ADMINISTRATIVE STAFF | 3.00 | 8,333 | 8,333 | 8,333 | 10,833 | 10,833 | 10,833 | 57,500 |
| INSTRUCTIONAL PERSONNEL COSTS | | | | | | | | |
| Teachers - Regular | - | - | - | - | - | - | - | - |
| Teachers - SPED | - | - | - | - | - | - | - | - |
| Substitute Teachers | - | - | - | - | - | - | - | - |
| Teaching Assistants | - | - | - | - | - | - | - | - |
| Specialty Teachers | - | - | - | - | - | - | - | - |
| Aides | - | - | - | - | - | - | - | - |
| Therapists & Counselors | - | - | - | - | - | - | - | - |
| Other | - | - | - | - | - | - | - | - |
| TOTAL INSTRUCTIONAL | - | - | - | - | - | - | - | - |
| NON-INSTRUCTIONAL PERSONNEL COSTS | | | | | | | | |
| Nurse | - | - | - | - | - | - | - | - |
| Librarian | - | - | - | - | - | - | - | - |
| Custodian | - | - | - | - | - | - | - | - |
| Security | - | - | - | - | - | - | - | - |
| Other | - | - | - | - | - | - | - | - |
| TOTAL NON-INSTRUCTIONAL | - | - | - | - | - | - | - | - |
| SUBTOTAL PERSONNEL SERVICE COSTS | 3.00 | 8,333 | 8,333 | 8,333 | 10,833 | 10,833 | 10,833 | 57,500 |
| PAYROLL TAXES AND BENEFITS | | | | | | | | |
| Payroll Taxes | 7.650% | 638 | 638 | 638 | 829 | 829 | 1,874 | 5,444 |
| Fringe / Employee Benefits | 15.000% | 1,250 | 1,250 | 1,250 | 1,625 | 1,625 | 1,625 | 8,625 |
| Retirement / Pension | 6.200% | 517 | 517 | 517 | 672 | 672 | 672 | 3,565 |
| TOTAL PAYROLL TAXES AND BENEFITS | | 2,404 | 2,404 | 2,404 | 3,125 | 3,125 | 4,171 | 17,634 |
| TOTAL PERSONNEL SERVICE COSTS | 3.00 | 10,738 | 10,738 | 10,738 | 13,959 | 13,959 | 15,004 | 75,134 |
| CONTRACTED SERVICES | | | | | | | | |
| Accounting / Audit | 5,000 | 833 | 833 | 833 | 833 | 833 | 833 | 5,000 |
| Legal | 5,000 | 833 | 833 | 833 | 833 | 833 | 833 | 5,000 |
| Management Company Fee | - | - | - | - | - | - | - | - |
| Nurse Services | - | - | - | - | - | - | - | - |
| Food Service / School Lunch | - | - | - | - | - | - | - | - |
| Payroll Services | - | - | - | - | - | - | - | - |
| Special Ed Services | - | - | - | - | - | - | - | - |
| Titlement Services (i.e. Title I) | - | - | - | - | - | - | - | - |
| Other Purchased / Professional / Consulting | - | - | - | - | - | - | - | - |
| TOTAL CONTRACTED SERVICES | | 1,667 | 1,667 | 1,667 | 1,667 | 1,667 | 1,667 | 10,000 |
| SCHOOL OPERATIONS | | | | | | | | |
| Board Expenses | - | - | - | - | - | - | - | - |
| Classroom / Teaching Supplies & Materials | - | - | - | - | - | - | - | - |
| Special Ed Supplies & Materials | - | - | - | - | - | - | - | - |
| Textbooks / Workbooks | - | - | - | - | - | - | - | - |
| Supplies & Materials other | - | - | - | - | - | - | - | - |
| Equipment / Furniture | 25,000 | - | - | - | 5,000 | 10,000 | 10,000 | 25,000 |
| Telephone | 1,000 | 167 | 167 | 167 | 167 | 167 | 167 | 1,000 |
| Technology | 15,000 | - | - | - | - | 7,500 | 7,500 | 15,000 |
| Student Testing & Assessment | - | - | - | - | - | - | - | - |
| Field Trips | - | - | - | - | - | - | - | - |
| Transportation (student) | - | - | - | - | - | - | - | - |
| Student Services - other | - | - | - | - | - | - | - | - |
| Office Expense | - | - | - | - | - | - | - | - |
| Staff Development | - | - | - | - | - | - | - | - |
| Staff Recruitment | 10,000 | 1,667 | 1,667 | 1,667 | 1,667 | 1,667 | 1,667 | 10,000 |
| Student Recruitment / Marketing | 25,000 | 4,167 | 4,167 | 4,167 | 4,167 | 4,167 | 4,167 | 25,000 |
| School Meals / Lunch | - | - | - | - | - | - | - | - |
| Travel (Staff) | - | - | - | - | - | - | - | - |
| Fundraising | - | - | - | - | - | - | - | - |
| Other | - | - | - | - | - | - | - | - |
| TOTAL SCHOOL OPERATIONS | | 6,000 | 6,000 | 6,000 | 11,000 | 23,500 | 23,500 | 76,000 |
| FACILITY OPERATION & MAINTENANCE | | | | | | | | |
| Insurance | - | - | - | - | - | - | - | - |
| Janitorial | - | - | - | - | - | - | - | - |
| Building and Land Rent / Lease | 20,000 | 3,333 | 3,333 | 3,333 | 3,333 | 3,333 | 3,333 | 20,000 |
| Repairs & Maintenance | 5,000 | 833 | 833 | 833 | 833 | 833 | 833 | 5,000 |
| Equipment / Furniture | 15,000 | 2,500 | 2,500 | 2,500 | 2,500 | 2,500 | 2,500 | 15,000 |
| Security | - | - | - | - | - | - | - | - |
| Utilities | - | - | - | - | - | - | - | - |
| TOTAL FACILITY OPERATION & MAINTENANCE | | 6,667 | 6,667 | 6,667 | 6,667 | 6,667 | 6,667 | 40,000 |
| DEPRECIATION & AMORTIZATION | | | | | | | | |
| DISSOLUTION ESCROW & RESERVES / CONTINGENCY | | | | | | | | |
| TOTAL EXPENSES | | 25,071 | 25,071 | 25,071 | 33,292 | 45,792 | 46,837 | 201,134 |
| NET INCOME | | 234,929 | (25,071) | (25,071) | (33,292) | (45,792) | (46,837) | 58,866 |

**Harlem Preparatory Charter School for Science, Technology, Engineering & Mathematics
PROJECTED BUDGET / OPERATING PLAN FOR YEAR ONE
July 1, 2012 to June 30, 2013**

DESCRIPTION OF ASSUMPTIONS

| | | | | | | |
|--------------------------------------|-----------|--------|---|---|---|-----------|
| Total Revenue | 2,141,018 | 62,140 | - | - | - | 2,203,158 |
| Total Expenses | 2,145,437 | 28,000 | - | - | - | 2,173,437 |
| Net Income | (4,420) | 34,140 | - | - | - | 19,720 |
| Actual Student Enrollment | - | - | - | - | - | - |
| Total Paid Student Enrollment | 125 | 8.00 | - | - | - | 131 |

7% of students are special ed

| | PROGRAM SERVICES | | | SUPPORT SERVICES | | |
|--|-------------------|-------------------|-------|------------------|------------|-------|
| | REGULAR EDUCATION | SPECIAL EDUCATION | OTHER | FUNDRAISING | MANAGEMENT | TOTAL |

REVENUE

REVENUES FROM STATE SOURCES

| Per Pupil Revenue | NY Per Pupil Rate | REGULAR EDUCATION | SPECIAL EDUCATION | OTHER | FUNDRAISING | MANAGEMENT | TOTAL |
|---|-------------------|-------------------|-------------------|-------|-------------|------------|-----------|
| NEW YORK CITY | 13,027 | 1,690,675 | - | - | - | - | 1,690,675 |
| School District 2 (Enter Name) | - | - | - | - | - | - | - |
| School District 3 (Enter Name) | - | - | - | - | - | - | - |
| School District 4 (Enter Name) | - | - | - | - | - | - | - |
| School District 5 (Enter Name) | - | - | - | - | - | - | - |
| School District 6 (Enter Name) | - | - | - | - | - | - | - |
| School District 7 (Enter Name) | - | - | - | - | - | - | - |
| School District 8 (Enter Name) | - | - | - | - | - | - | - |
| School District 9 (Enter Name) | - | - | - | - | - | - | - |
| School District 10 (Enter Name) | - | - | - | - | - | - | - |
| School District 11 (Enter Name) | - | - | - | - | - | - | - |
| School District 12 (Enter Name) | - | - | - | - | - | - | - |
| School District 13 (Enter Name) | - | - | - | - | - | - | - |
| School District 14 (Enter Name) | - | - | - | - | - | - | - |
| School District 15 (Enter Name) | - | - | - | - | - | - | - |
| School District - ALL OTHER | - | - | - | - | - | - | - |
| TOTAL Per Pupil Revenue (Average Districts Per Pupil Funding) | 13,527 | 1,690,675 | - | - | - | - | 1,690,675 |
| Special Education Revenue | 10,390 | - | 62,340 | - | - | - | 62,340 |
| Grants | - | - | - | - | - | - | - |
| Stimulus | - | - | - | - | - | - | - |
| DYCD (Department of Youth and Community Development) | - | - | - | - | - | - | - |
| Other | 5443 | 106,375 | - | - | - | - | 106,375 |
| Other | - | - | - | - | - | - | - |
| TOTAL REVENUE FROM STATE SOURCES | | 1,797,050 | 62,340 | - | - | - | 1,859,390 |

are there any special ed students and what is the rate?

NYDOE Startup Funds: \$51,000 + \$443/individual school student

REVENUE FROM FEDERAL FUNDING

| | | | | | | | |
|--|-----|---------|---|---|---|---|---------|
| IDEA Special Needs | - | - | - | - | - | - | - |
| Title I | 500 | 56,500 | - | - | - | - | 56,500 |
| Title Funding - Other | 40 | 5,000 | - | - | - | - | 5,000 |
| School Food Service (Free Lunch) | - | - | - | - | - | - | - |
| Grants | - | - | - | - | - | - | - |
| Charter School Program (CSP) Planning & Implementation | - | 200,000 | - | - | - | - | 200,000 |
| Other | - | - | - | - | - | - | - |
| Other | - | - | - | - | - | - | - |
| TOTAL REVENUE FROM FEDERAL SOURCES | | 261,500 | - | - | - | - | 261,500 |

90% of student eligible for Title I

LOCAL and OTHER REVENUE

| | | | | | | | |
|---|-----|--------|---|---|---|---|--------|
| Contributions and Donations | - | - | - | - | - | - | - |
| Fundraising | 100 | 12,500 | - | - | - | - | 12,500 |
| State Reimbursement | - | - | - | - | - | - | - |
| Savings on Investments | - | - | - | - | - | - | - |
| Interest Income | - | - | - | - | - | - | - |
| Food Service (Divisor from meals) | - | 4,158 | - | - | - | - | 4,158 |
| Text Book | - | 6,300 | - | - | - | - | 6,300 |
| OTHER | - | 36,200 | - | - | - | - | 36,200 |
| TOTAL REVENUE FROM LOCAL and OTHER SOURCES | | 62,258 | - | - | - | - | 62,258 |

Includes State Aid for Textbooks, Software and Library
Extended Learning Time Tuition (After-school, Saturday, and Summer)

| | | | | | | | |
|----------------------|-----------|--------|---|---|---|---|-----------|
| TOTAL REVENUE | 2,141,018 | 62,140 | - | - | - | - | 2,203,158 |
|----------------------|-----------|--------|---|---|---|---|-----------|

| EXPENSES | | Positions | | | | | |
|--|-------------|------------------|------------------|---------------|---|---|------------------|
| ADMINISTRATIVE STAFF PERSONNEL COSTS | | | | | | | |
| Executive Management | 1.00 | 150,000 | - | - | - | - | 150,000 |
| Instructional Management | 1.00 | 90,000 | - | - | - | - | 90,000 |
| Deans, Directors & Coordinators | | | | | | | |
| CPD / Director of Finance | 1.00 | 90,000 | - | - | - | - | 90,000 |
| Operation / Business Manager | 1.00 | 15,000 | - | - | - | - | 15,000 |
| Administrative Staff | 1.00 | 30,000 | - | - | - | - | 30,000 |
| TOTAL ADMINISTRATIVE STAFF | 5.00 | 435,000 | - | - | - | - | 435,000 |
| INSTRUCTIONAL PERSONNEL COSTS | | | | | | | |
| Teachers - Regular | 0.00 | 375,000 | - | - | - | - | 375,000 |
| Teachers - SPED | 1.00 | - | 80,000 | - | - | - | 80,000 |
| Substitute Teachers | | | | | | | |
| Teaching Assistants | | | | | | | |
| Specialty Teachers | 5.50 | 180,000 | - | - | - | - | 180,000 |
| Aides | | | | | | | |
| Therapists & Counselors | | | | | | | |
| Other | | 40,730 | - | - | - | - | 40,730 |
| TOTAL INSTRUCTIONAL | 0.50 | 595,730 | 80,000 | - | - | - | 675,730 |
| NON-INSTRUCTIONAL PERSONNEL COSTS | | | | | | | |
| Nurse | | | | | | | |
| Librarian | | | | | | | |
| Custodian | | | | | | | |
| Security | 1.00 | 80,000 | - | - | - | - | 80,000 |
| Other | 1.00 | 40,000 | - | - | - | - | 40,000 |
| TOTAL NON-INSTRUCTIONAL | 2.00 | 120,000 | - | - | - | - | 120,000 |
| SUBTOTAL PERSONNEL SERVICE COSTS | | 16.50 | 1,150,730 | 80,000 | - | - | 1,230,730 |
| PAYROLL TAXES AND BENEFITS | | | | | | | |
| Payroll Taxes | | 124,830 | - | - | - | - | 124,830 |
| Fringe / Employee Benefits | | 133,675 | - | - | - | - | 133,675 |
| Retirement / Pension | | | | | | | |
| TOTAL PAYROLL TAXES AND BENEFITS | | 278,505 | - | - | - | - | 278,505 |
| TOTAL PERSONNEL SERVICE COSTS | | 16.50 | 1,429,235 | 80,000 | - | - | 1,509,235 |
| CONTRACTED SERVICES | | | | | | | |
| Accounting / Audit | | 25,000 | - | - | - | - | 25,000 |
| Legal | | 10,000 | - | - | - | - | 10,000 |
| Management Company Fee | | | | | | | |
| Nurse Services | | | | | | | |
| Food Service / School Lunch | | 88,375 | - | - | - | - | 88,375 |
| Payroll Services | | 2,063 | - | - | - | - | 2,063 |
| Special Ed Services | | | | | | | |
| Therapist Services (i.e. Title I) | | | | | | | |
| Other Purchased / Professional / Consulting | | 20,000 | - | - | - | - | 20,000 |
| TOTAL CONTRACTED SERVICES | | 116,438 | - | - | - | - | 116,438 |
| SCHOOL OPERATIONS | | | | | | | |
| Board Expenses | | 1,500 | - | - | - | - | 1,500 |
| Classroom / Teaching Supplies & Materials | | 20,000 | - | - | - | - | 20,000 |
| Special Ed Supplies & Materials | | | 3,000 | - | - | - | 3,000 |
| Textbooks / Workbooks | | 61,750 | 5,000 | - | - | - | 66,750 |
| Supplies & Materials other | | | | | | | |
| Equipment / Furniture | | | | | | | |
| Telephone | | 15,000 | - | - | - | - | 15,000 |
| Technology | | 84,600 | - | - | - | - | 84,600 |
| Student Testing & Assessment | | 6,125 | - | - | - | - | 6,125 |
| Field Trips | | 3,125 | - | - | - | - | 3,125 |
| Transportation (student) | | | | | | | |
| Student Services - other | | 6,250 | - | - | - | - | 6,250 |
| Office Expense | | 53,023 | - | - | - | - | 53,023 |
| Staff Development | | | | | | | |
| Staff Recruitment | | 10,000 | - | - | - | - | 10,000 |
| Student Recruitment / Marketing | | 10,000 | - | - | - | - | 10,000 |
| School Meals / Lunch | | | | | | | |
| Travel (Staff) | | 4,125 | - | - | - | - | 4,125 |
| Fundraising | | 5,000 | - | - | - | - | 5,000 |
| Other | | 17,250 | - | - | - | - | 17,250 |
| TOTAL SCHOOL OPERATIONS | | 278,948 | 8,000 | - | - | - | 286,948 |
| FACILITY OPERATION & MAINTENANCE | | | | | | | |
| Insurance | | 25,000 | - | - | - | - | 25,000 |
| Janitorial | | 10,000 | - | - | - | - | 10,000 |
| Building and Land Rent / Lease | | 165,000 | - | - | - | - | 165,000 |
| Repairs & Maintenance | | 20,000 | - | - | - | - | 20,000 |
| Equipment / Furniture | | | | | | | |
| Security | | | | | | | |
| Utilities | | 28,750 | - | - | - | - | 28,750 |
| TOTAL FACILITY OPERATION & MAINTENANCE | | 233,750 | - | - | - | - | 233,750 |
| DEPRECIATION & AMORTIZATION | | | | | | | |
| DISSOLUTION ESCROW & RESERVES / CONTINGENCY | | 69,067 | - | - | - | - | 69,067 |
| TOTAL EXPENSES | | 2,145,437 | 88,000 | - | - | - | 2,233,437 |
| NET INCOME | | (4,420) | 34,340 | - | - | - | 29,920 |

The role also includes Technology/Data Analyst Middle School Administrative Assistant

Includes Summer Instructor Costs

Food Service Staff

Includes Worker's Comp
Includes Pension Expense

Includes Bank Charges

Includes Software

Includes Internet

Includes School Uniform

Includes Extra-curricular Activities, Library books, and Nursing Supplies

Factor \$25,000 + Contingency of 2.0% of Revenue

EXPENSES

ADMINISTRATIVE STAFF PERSONNEL COSTS

| | No. of Positions | 12,500 | 12,500 | 12,500 | 12,500 | 12,500 | 12,500 | 12,500 | 12,500 | 12,500 | 12,500 | 12,500 | 12,500 | 12,500 | |
|-----------------------------------|------------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|----------------|
| Executive Management | 150,000 | | | | | | | | | | | | | | |
| Instructional Management | 30,000 | 7,500 | 7,500 | 7,500 | 7,500 | 7,500 | 7,500 | 7,500 | 7,500 | 7,500 | 7,500 | 7,500 | 7,500 | 7,500 | 150,000 |
| Deans, Directors & Coordinators | | | | | | | | | | | | | | | 90,000 |
| CFO / Director of Finance | 50,000 | | | | | | | | | | | | | | |
| Operation / Business Manager | 55,000 | 7,500 | 7,500 | 7,500 | 7,500 | 7,500 | 7,500 | 7,500 | 7,500 | 7,500 | 7,500 | 7,500 | 7,500 | 7,500 | 90,000 |
| Administrative Staff | 50,000 | 4,583 | 4,583 | 4,583 | 4,583 | 4,583 | 4,583 | 4,583 | 4,583 | 4,583 | 4,583 | 4,583 | 4,583 | 4,583 | 55,000 |
| TOTAL ADMINISTRATIVE STAFF | 439,000 | 36,250 | 439,000 |

INSTRUCTIONAL PERSONNEL COSTS

| | | | | | | | | | | | | | | | |
|----------------------------|---------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|----------------|
| Teachers - Regular | 376,000 | 31,250 | 31,250 | 31,250 | 31,250 | 31,250 | 31,250 | 31,250 | 31,250 | 31,250 | 31,250 | 31,250 | 31,250 | 31,250 | 375,000 |
| Teachers - SPED | 30,000 | 2,500 | 2,500 | 2,500 | 2,500 | 2,500 | 2,500 | 2,500 | 2,500 | 2,500 | 2,500 | 2,500 | 2,500 | 2,500 | 30,000 |
| Substitute Teachers | | | | | | | | | | | | | | | |
| Teaching Assistants | | | | | | | | | | | | | | | |
| Specialty Teachers | | 15,000 | 15,000 | 15,000 | 15,000 | 15,000 | 15,000 | 15,000 | 15,000 | 15,000 | 15,000 | 15,000 | 15,000 | 15,000 | 180,000 |
| Aides | | | | | | | | | | | | | | | |
| Therapists & Counselors | | | | | | | | | | | | | | | |
| Other | | 3,394 | 3,394 | 3,394 | 3,394 | 3,394 | 3,394 | 3,394 | 3,394 | 3,394 | 3,394 | 3,394 | 3,394 | 3,394 | 40,730 |
| TOTAL INSTRUCTIONAL | | 52,144 | 628,730 |

NON-INSTRUCTIONAL PERSONNEL COSTS

| | | | | | | | | | | | | | | | |
|--------------------------------|----------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|----------------|
| None | | | | | | | | | | | | | | | |
| Librarian | | | | | | | | | | | | | | | |
| Custodian | | | | | | | | | | | | | | | |
| Security | | 6,667 | 6,667 | 6,667 | 6,667 | 6,667 | 6,667 | 6,667 | 6,667 | 6,667 | 6,667 | 6,667 | 6,667 | 6,667 | 80,000 |
| Other | 40,000 | 3,333 | 3,333 | 3,333 | 3,333 | 3,333 | 3,333 | 3,333 | 3,333 | 3,333 | 3,333 | 3,333 | 3,333 | 3,333 | 40,000 |
| TOTAL NON-INSTRUCTIONAL | 120,000 | 10,000 | 120,000 |

SUBTOTAL PERSONNEL SERVICE COSTS

| | | | | | | | | | | | | | | | |
|--|------------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|------------------|
| | 1,180,730 | 98,394 | 1,180,730 |
|--|------------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|------------------|

PAYROLL TAXES AND BENEFITS

| | | | | | | | | | | | | | | | |
|---|---------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|----------------|
| Payroll Taxes | 124,830 | 10,403 | 10,403 | 10,403 | 10,403 | 10,403 | 10,403 | 10,403 | 10,403 | 10,403 | 10,403 | 10,403 | 10,403 | 10,403 | 124,830 |
| Fringe / Employee Benefits | 183,875 | 12,806 | 12,806 | 12,806 | 12,806 | 12,806 | 12,806 | 12,806 | 12,806 | 12,806 | 12,806 | 12,806 | 12,806 | 12,806 | 183,875 |
| Retirement / Pension | | | | | | | | | | | | | | | |
| TOTAL PAYROLL TAXES AND BENEFITS | | 23,209 | 228,505 |

TOTAL PERSONNEL SERVICE COSTS

| | | | | | | | | | | | | | | | |
|--|------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|------------------|
| | 1,499,235 | 121,603 | 1,499,235 |
|--|------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|------------------|

CONTRACTED SERVICES

| | | | | | | | | | | | | | | | |
|---|----------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|----------------|
| Accounting / Audit | 25,000 | 2,083 | 2,083 | 2,083 | 2,083 | 2,083 | 2,083 | 2,083 | 2,083 | 2,083 | 2,083 | 2,083 | 2,083 | 2,083 | 25,000 |
| Legal | 10,000 | 833 | 833 | 833 | 833 | 833 | 833 | 833 | 833 | 833 | 833 | 833 | 833 | 833 | 10,000 |
| Management Company Fee | | | | | | | | | | | | | | | |
| Nurse Services | | | | | | | | | | | | | | | |
| Food Service / School Lunch | 59,375 | 4,948 | 4,948 | 4,948 | 4,948 | 4,948 | 4,948 | 4,948 | 4,948 | 4,948 | 4,948 | 4,948 | 4,948 | 4,948 | 59,375 |
| Payroll Services | 2,083 | 172 | 172 | 172 | 172 | 172 | 172 | 172 | 172 | 172 | 172 | 172 | 172 | 172 | 2,083 |
| Special Ed Services | | | | | | | | | | | | | | | |
| Tribement Services (i.e. Title I) | | | | | | | | | | | | | | | |
| Other Purchased / Professional / Consulting | 20,000 | 1,667 | 1,667 | 1,667 | 1,667 | 1,667 | 1,667 | 1,667 | 1,667 | 1,667 | 1,667 | 1,667 | 1,667 | 1,667 | 20,000 |
| TOTAL CONTRACTED SERVICES | 116,438 | 9,703 | 116,438 |

SCHOOL OPERATIONS

| | | | | | | | | | | | | | | | |
|---|----------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|----------------|
| Board Expenses | 1,500 | 125 | 125 | 125 | 125 | 125 | 125 | 125 | 125 | 125 | 125 | 125 | 125 | 125 | 1,500 |
| Classroom / Teaching Supplies & Materials | 20,000 | 1,667 | 1,667 | 1,667 | 1,667 | 1,667 | 1,667 | 1,667 | 1,667 | 1,667 | 1,667 | 1,667 | 1,667 | 1,667 | 20,000 |
| Special Ed Supplies & Materials | 3,000 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 3,000 |
| Textbooks / Workbooks | 68,750 | 5,729 | 5,729 | 5,729 | 5,729 | 5,729 | 5,729 | 5,729 | 5,729 | 5,729 | 5,729 | 5,729 | 5,729 | 5,729 | 68,750 |
| Supplies & Materials other | | | | | | | | | | | | | | | |
| Equipment / Furniture | | | | | | | | | | | | | | | |
| Telephone | 15,000 | 1,250 | 1,250 | 1,250 | 1,250 | 1,250 | 1,250 | 1,250 | 1,250 | 1,250 | 1,250 | 1,250 | 1,250 | 1,250 | 15,000 |
| Technology | 64,800 | 5,400 | 5,400 | 5,400 | 5,400 | 5,400 | 5,400 | 5,400 | 5,400 | 5,400 | 5,400 | 5,400 | 5,400 | 5,400 | 64,800 |
| Student Testing & Assessment | 8,125 | 677 | 677 | 677 | 677 | 677 | 677 | 677 | 677 | 677 | 677 | 677 | 677 | 677 | 8,125 |
| Field Trips | 3,125 | 260 | 260 | 260 | 260 | 260 | 260 | 260 | 260 | 260 | 260 | 260 | 260 | 260 | 3,125 |
| Transportation (student) | | | | | | | | | | | | | | | |
| Student Services - other | 6,280 | 521 | 521 | 521 | 521 | 521 | 521 | 521 | 521 | 521 | 521 | 521 | 521 | 521 | 6,280 |
| Office Expense | 53,023 | 4,419 | 4,419 | 4,419 | 4,419 | 4,419 | 4,419 | 4,419 | 4,419 | 4,419 | 4,419 | 4,419 | 4,419 | 4,419 | 53,023 |
| Staff Development | | | | | | | | | | | | | | | |
| Staff Recruitment | 10,000 | 833 | 833 | 833 | 833 | 833 | 833 | 833 | 833 | 833 | 833 | 833 | 833 | 833 | 10,000 |
| Student Recruitment / Marketing | 10,000 | 833 | 833 | 833 | 833 | 833 | 833 | 833 | 833 | 833 | 833 | 833 | 833 | 833 | 10,000 |
| School Meals / Lunch | | | | | | | | | | | | | | | |
| Travel (Staff) | 4,125 | 344 | 344 | 344 | 344 | 344 | 344 | 344 | 344 | 344 | 344 | 344 | 344 | 344 | 4,125 |
| Fundraising | 6,000 | 417 | 417 | 417 | 417 | 417 | 417 | 417 | 417 | 417 | 417 | 417 | 417 | 417 | 6,000 |
| Other | 12,250 | 1,021 | 1,021 | 1,021 | 1,021 | 1,021 | 1,021 | 1,021 | 1,021 | 1,021 | 1,021 | 1,021 | 1,021 | 1,021 | 12,250 |
| TOTAL SCHOOL OPERATIONS | 284,948 | 23,746 | 284,948 |

FACILITY OPERATION & MAINTENANCE

| | | | | | | | | | | | | | | | |
|---|---------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
| Insurance | 25,000 | 2,083 | 2,083 | 2,083 | 2,083 | 2,083 | 2,083 | 2,083 | 2,083 | 2,083 | 2,083 | 2,083 | 2,083 | 2,083 | 25,000 |
| Janitorial | 10,000 | 833 | 833 | 833 | 833 | 833 | 833 | 833 | 833 | 833 | 833 | 833 | 833 | 833 | 10,000 |
| Building and Land Rent / Lease | 165,000 | 13,750 | 13,750 | 13,750 | 13,750 | 13,750 | 13,750 | 13,750 | 13,750 | 13,750 | 13,750 | 13,750 | 13,750 | 13,750 | 165,000 |
| Repairs & Maintenance | 25,000 | 2,083 | 2,083 | 2,083 | 2,083 | 2,083 | 2,083 | 2,083 | 2,083 | 2,083 | 2,083 | 2,083 | 2,083 | 2,083 | 25,000 |
| Equipment / Furniture | | | | | | | | | | | | | | | |
| Security | 28,750 | 2,306 | 2,306 | 2,306 | 2,306 | 2,306 | 2,306 | 2,306 | 2,306 | 2,306 | 2,306 | 2,306 | 2,306 | 2,306 | 28,750 |
| Utilities | 253,750 | 21,146 | 21,146 | 21,146 | 21,146 | 21,146 | 21,146 | 21,146 | 21,146 | 21,146 | 21,146 | 21,146 | 21,146 | 21,146 | 253,750 |
| TOTAL FACILITY OPERATION & MAINTENANCE | | 69,067 |

DEPRECIATION & AMORTIZATION

| | | | | | | | | | | | | | | | |
|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| | | | | | | | | | | | | | | | |
|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|

DISSOLUTION ESCROW & RESERVES / CONTINGENCY

| | | | | | | | | | | | | | | | |
|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| | | | | | | | | | | | | | | | |
|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|

TOTAL EXPENSES

| | |
|--|------------------|
| | 2,185,427 |
|--|------------------|

**Harlem Preparatory Charter School for Science, Technology, Engineering & Mathematics
PROJECTED BUDGET / OPERATING PLAN FOR INITIAL CHARTER PERIOD**

*NOTE: If a Planning Year is Taken in the Beginning of the Charter, the Charter Will Be Extended to Encompass Five Years of Operation. Projected Five Year Budget on this Tab Should Be For the First Five Years of Actual Operations.

| | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 |
|--|--|------------------|------------------|------------------|------------------|-------------------|-------------------|
| Total Revenue | 2,201,356 | 3,856,746 | 5,282,338 | 7,349,637 | 9,223,023 | 10,932,435 | 12,504,439 |
| Total Expenses | 2,181,437 | 3,493,681 | 4,828,760 | 6,779,392 | 7,968,734 | 8,392,285 | 9,514,709 |
| Net Income (Before Cash Flow Adjustments) | 19,920 | 165,065 | 453,577 | 570,245 | 1,254,289 | 2,539,150 | 2,989,730 |
| Actual Student Enrollment | 115 | 237 | 337 | 462 | 574 | 674 | 764 |
| Total Paid Student Enrollment | | | | | | | |
| | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Year 6 | Year 7 |
| | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 |
| | *Year 1 should tie to Totals for Year 1 on Tabs 4 and 5 | | | | | | |
| | Per Pupil Revenue Percentage Increase | | | | | | |
| | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% |
| REVENUE | | | | | | | |
| REVENUES FROM STATE SOURCES | | | | | | | |
| Per Pupil Revenue | | | | | | | |
| School District 1 (Enter Name) | | | | | | | |
| School District 2 (Enter Name) | | | | | | | |
| School District 3 (Enter Name) | | | | | | | |
| School District 4 (Enter Name) | | | | | | | |
| School District 5 (Enter Name) | | | | | | | |
| School District 6 (Enter Name) | | | | | | | |
| School District 7 (Enter Name) | | | | | | | |
| School District 8 (Enter Name) | | | | | | | |
| School District 9 (Enter Name) | | | | | | | |
| School District 10 (Enter Name) | | | | | | | |
| School District 11 (Enter Name) | | | | | | | |
| School District 12 (Enter Name) | | | | | | | |
| School District 13 (Enter Name) | | | | | | | |
| School District 14 (Enter Name) | | | | | | | |
| School District 15 (Enter Name) | | | | | | | |
| School District - ALL OTHER | | | | | | | |
| TOTAL Per Pupil Revenue (Average Districts Per Pupil Funding) | 13,527 | | | | | | |
| Special Education Revenue | | | | | | | |
| Grants | | | | | | | |
| Stimulus | | | | | | | |
| DYCD (Department of Youth and Community Developmt.) | | | | | | | |
| Other | | | | | | | |
| TOTAL REVENUE FROM STATE SOURCES | 1,733,215 | 3,363,885 | 4,830,407 | 6,685,050 | 8,391,312 | 9,951,547 | 11,389,525 |
| REVENUE FROM FEDERAL FUNDING | | | | | | | |
| IDEA Special Needs | | | | | | | |
| Title I | | | | | | | |
| Title Funding - Other | | | | | | | |
| School Food Service (Free Lunch) | | | | | | | |
| Grants | | | | | | | |
| Charter School Program (CSP) Planning & Implementation | | | | | | | |
| Other | | | | | | | |
| TOTAL REVENUE FROM FEDERAL SOURCES | 261,500 | 317,140 | 158,296 | 233,343 | 292,869 | 347,317 | 297,623 |
| LOCAL and OTHER REVENUE | | | | | | | |
| Extended Learning Tuition | | | | | | | |
| Fundraising | | | | | | | |
| Erate Reimbursement | | | | | | | |
| Earnings on Investments | | | | | | | |
| Interest Income | | | | | | | |
| Food Service (Income from meals) | | | | | | | |
| Text Book | | | | | | | |
| OTHER | | | | | | | |
| TOTAL REVENUE FROM LOCAL and OTHER SOURCES | 168,641 | 177,721 | 283,634 | 431,244 | 536,822 | 631,572 | 717,311 |
| TOTAL REVENUE | 1,203,356 | 3,856,746 | 5,282,338 | 7,349,637 | 9,223,023 | 10,932,435 | 12,504,439 |

EXPENSES

ADMINISTRATIVE STAFF PERSONNEL COSTS

| | No. of Positions | | | | | | | |
|-----------------------------------|------------------|----------------|----------------|----------------|------------------|------------------|------------------|------------------|
| Executive Management | - | 150,000 | 154,500 | 155,135 | 163,909 | 166,826 | 173,891 | 179,128 |
| Instructional Management | - | 90,000 | 92,700 | 95,481 | 98,345 | 102,299 | 104,119 | 107,465 |
| Deans, Directors & Coordinators | - | - | 123,600 | 246,312 | 442,554 | 455,831 | 469,506 | 483,591 |
| CFO / Director of Finance | - | 90,000 | 92,700 | 95,481 | 98,345 | 102,299 | 104,119 | 107,465 |
| Operation / Business Manager | - | 55,000 | 113,300 | 116,699 | 185,764 | 191,136 | 197,079 | 202,989 |
| Administrative Staff | - | 90,000 | 51,250 | 53,246 | 109,223 | 112,551 | 115,927 | 119,325 |
| TOTAL ADMINISTRATIVE STAFF | | 435,000 | 628,300 | 785,153 | 1,098,191 | 1,131,130 | 1,165,670 | 1,200,023 |

INSTRUCTIONAL PERSONNEL COSTS

| | | | | | | | | |
|----------------------------|---|----------------|------------------|------------------|------------------|------------------|------------------|------------------|
| Teachers - Regular | - | 375,000 | 772,800 | 1,111,946 | 1,557,136 | 1,941,503 | 2,347,530 | 2,776,172 |
| Teachers - SPED | - | 30,000 | 58,586 | 63,654 | 111,127 | 120,061 | 209,669 | 214,920 |
| Substitute Teachers | - | - | - | - | - | - | - | - |
| Teaching Assistants | - | - | - | - | - | - | - | - |
| Specialty Teachers | - | - | - | - | - | - | - | - |
| Aides | - | 180,000 | 302,573 | 426,227 | 645,671 | 762,825 | 813,532 | 1,070,659 |
| Therapists & Counselors | - | - | - | - | - | - | - | - |
| Other | - | 40,730 | 84,677 | 71,075 | 84,472 | 110,152 | 124,152 | 135,212 |
| TOTAL INSTRUCTIONAL | | 625,730 | 1,168,336 | 1,674,901 | 2,420,406 | 2,940,541 | 3,493,884 | 4,206,512 |

NON-INSTRUCTIONAL PERSONNEL COSTS

| | | | | | | | | |
|--------------------------------|---|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| Nurse | - | - | - | - | - | - | - | - |
| Librarian | - | - | - | - | - | - | - | - |
| Custodian | - | - | - | - | - | - | - | - |
| Security | - | 80,000 | 82,400 | 84,872 | 67,418 | 90,941 | 92,742 | 95,524 |
| Other | - | 40,000 | 132,200 | 132,917 | 210,500 | 241,614 | 261,911 | 310,484 |
| TOTAL NON-INSTRUCTIONAL | | 120,000 | 214,600 | 222,789 | 327,918 | 337,653 | 354,153 | 406,008 |

SUBTOTAL PERSONNEL SERVICE COSTS

| | | | | | | | | |
|--|--|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
| | | 1,180,730 | 2,032,936 | 2,666,842 | 3,854,414 | 4,418,330 | 5,053,107 | 5,812,512 |
|--|--|------------------|------------------|------------------|------------------|------------------|------------------|------------------|

PAYROLL TAXES AND BENEFITS

| | | | | | | | | |
|---|---|----------------|----------------|----------------|----------------|------------------|------------------|------------------|
| Payroll Taxes | - | 124,830 | 216,419 | 284,237 | 411,714 | 489,616 | 579,721 | 621,496 |
| Fringe / Employee Benefits | - | 133,675 | 288,665 | 390,014 | 581,888 | 716,219 | 858,536 | 915,437 |
| Retirement / Pension | - | - | - | - | - | - | - | - |
| TOTAL PAYROLL TAXES AND BENEFITS | | 278,505 | 505,084 | 674,251 | 993,602 | 1,205,835 | 1,438,257 | 1,536,933 |

TOTAL PERSONNEL SERVICE COSTS

| | | | | | | | | |
|--|--|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
| | | 1,459,235 | 2,538,020 | 3,341,093 | 4,848,017 | 5,624,165 | 6,491,364 | 7,349,445 |
|--|--|------------------|------------------|------------------|------------------|------------------|------------------|------------------|

CONTRACTED SERVICES

| | | | | | | | | |
|---|---|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| Accounting / Audit | - | 25,000 | 25,790 | 26,523 | 27,318 | 28,138 | 28,982 | 29,851 |
| Legal | - | 10,000 | 10,300 | 10,609 | 10,927 | 11,255 | 11,593 | 11,941 |
| Management Company Fee | - | - | - | - | - | - | - | - |
| Nurse Services | - | - | - | - | - | - | - | - |
| Food Service / School Lunch | - | 59,375 | 112,575 | 160,075 | 219,450 | 277,600 | 330,150 | 362,900 |
| Payroll Services | - | 2,943 | 2,714 | 4,734 | 6,945 | 8,342 | 8,593 | 8,890 |
| Special Ed Services | - | - | - | - | - | - | - | - |
| Titelment Services (i.e. Title I) | - | - | - | - | - | - | - | - |
| Other Purchased / Professional / Consulting | - | 20,000 | 30,500 | 31,827 | 32,262 | 33,295 | 34,778 | 35,822 |
| TOTAL CONTRACTED SERVICES | | 116,418 | 183,239 | 233,767 | 297,423 | 359,130 | 404,995 | 449,364 |

SCHOOL OPERATIONS

| | | | | | | | | |
|---|---|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| Board Expenses | - | 1,500 | 1,545 | 1,591 | 1,639 | 1,688 | 1,739 | 1,791 |
| Classroom / Teaching Supplies & Materials | - | 22,000 | 41,118 | 58,126 | 82,900 | 105,618 | 150,796 | 112,030 |
| Special Ed Supplies & Materials | - | 1,000 | 1,030 | 1,061 | 1,093 | 1,126 | 1,161 | 1,194 |
| Textbooks / Workbooks | - | 66,750 | 89,198 | 108,636 | 148,775 | 173,324 | 175,528 | 183,884 |
| Supplies & Materials other | - | - | - | - | - | - | - | - |
| Equipment / Furniture | - | - | - | - | - | - | - | - |
| Telephone | - | 15,000 | 15,490 | 15,914 | 16,391 | 16,883 | 17,389 | 17,911 |
| Technology | - | 54,800 | 83,673 | 82,385 | 106,122 | 126,006 | 142,625 | 140,022 |
| Student Testing & Assessment | - | 8,125 | 15,867 | 21,239 | 32,815 | 41,991 | 41,253 | 44,550 |
| Field Trips | - | 3,125 | 4,103 | 8,938 | 12,621 | 16,151 | 18,636 | 17,125 |
| Transportation (student) | - | - | - | - | - | - | - | - |
| Student Services - other | - | 6,250 | 12,206 | 17,876 | 25,342 | 32,362 | 33,271 | 34,269 |
| Office Expense | - | 63,023 | 79,113 | 103,673 | 136,316 | 166,600 | 171,660 | 176,800 |
| Staff Development | - | - | - | - | - | - | - | - |
| Staff Recruitment | - | 10,000 | 16,300 | 10,609 | 10,927 | 11,255 | 11,593 | 11,941 |
| Student Recruitment / Marketing | - | 10,000 | 10,300 | 10,609 | 10,927 | 11,255 | 11,593 | 11,941 |
| School Meals / Lunch | - | - | - | - | - | - | - | - |
| Travel (Staff) | - | 4,125 | 7,427 | 9,467 | 13,891 | 16,601 | 17,185 | 17,701 |
| Fundraising | - | 5,000 | 5,150 | 5,305 | 5,464 | 5,628 | 5,796 | 5,970 |
| Other | - | 12,250 | 18,396 | 24,242 | 31,298 | 39,663 | 49,322 | 41,434 |
| TOTAL SCHOOL OPERATIONS | | 284,948 | 397,086 | 482,870 | 636,981 | 779,703 | 800,810 | 819,171 |

FACILITY OPERATION & MAINTENANCE

| | | | | | | | | |
|---|---|----------------|----------------|----------------|----------------|------------------|------------------|------------------|
| Insurance | - | 25,000 | 25,790 | 26,523 | 27,318 | 28,138 | 28,982 | 29,851 |
| Janitorial | - | 10,000 | 10,300 | 10,609 | 10,927 | 11,255 | 11,593 | 11,941 |
| Building and Land Rent / Lease | - | 169,000 | 330,000 | 462,000 | 627,000 | 799,000 | 891,000 | 1,023,000 |
| Repairs & Maintenance | - | 25,000 | 25,000 | 25,000 | 25,000 | 25,000 | 25,000 | 25,000 |
| Equipment / Furniture | - | - | 24,411 | 35,752 | 50,484 | 64,604 | 68,542 | 68,539 |
| Security | - | - | - | - | - | - | - | - |
| Utilities | - | 26,750 | 57,800 | 80,500 | 109,250 | 132,250 | 155,250 | 178,250 |
| TOTAL FACILITY OPERATION & MAINTENANCE | | 251,750 | 472,961 | 640,384 | 849,979 | 1,030,247 | 1,186,367 | 1,346,530 |

DEPRECIATION & AMORTIZATION

| | | | | | | | | |
|---|---|--------|---------|---------|---------|---------|---------|---------|
| DISSOLUTION ESCROW & RESERVES / CONTINGENCY | - | 69,067 | 102,175 | 130,647 | 146,993 | 184,460 | 218,649 | 250,099 |
|---|---|--------|---------|---------|---------|---------|---------|---------|

TOTAL EXPENSES

| | | | | | | | | |
|--|--|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
| | | 2,182,437 | 3,693,681 | 4,828,760 | 6,779,392 | 7,968,724 | 8,393,285 | 9,514,709 |
|--|--|------------------|------------------|------------------|------------------|------------------|------------------|------------------|

NET INCOME

| | | | | | | | | |
|--|--|---------------|----------------|----------------|----------------|------------------|------------------|------------------|
| | | 19,920 | 165,065 | 453,577 | 870,245 | 1,254,292 | 1,539,150 | 2,089,730 |
|--|--|---------------|----------------|----------------|----------------|------------------|------------------|------------------|

