New York City Community School Districts 8 and 11

Magnet Schools Assistance Program Grant Application (2017–22)

Program Narrative

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Magnet Schools Assistance Program (2017-2022)

New York City Community School Districts 8 and 11—Bronx, New York

COMPETITIVE PREFERENCE PRIORITIES

COMPETITIVE PRIORITY #1: NEED FOR ASSISTANCE

(A) The Secretary evaluates the applicant's need for assistance under this part, by considering the costs of fully implementing the magnet schools project as proposed.

New York City (NYC) is home to more than 1.1 million public school students served by the 1,800 schools of the New York City Department of Education (NYCDOE). Though the city itself is extremely diverse, recent research points out that it also has one of the most segregated public school systems in the country. This research conducted by the Civil Rights Project at UCLA revealed pervasive minority group isolation among schools in many NYC communities (Kucsera & Orfield, 2014). Kucsera and Orfield further state that, despite the highly segregated system, magnet schools had the highest proportion of multiracial schools and lowest proportion of segregated schools across the city.

The NYCDOE comprises 32 community school districts located across the city's boroughs, spanning from areas of high poverty and unemployment to the wealthiest parts of Manhattan and Brooklyn. Despite the extreme wealth among New Yorkers, the poverty rate of public school children is 76.5%. The student population is ethnically diverse; 40.9% of students are Hispanic/Latino, 23.3% are African American, 17.6% are Asian, 15.9% are White, and 2.4% represent other ethnicities. Additionally, 14.5% of students are English language learners (ELLs) and 17.6% qualify as students with disabilities.

In preparation for the 2017–22 funding cycle, the NYCDOE conducted an initial feasibility study to determine those communities within the city that presented the most compelling need for reducing minority group isolation (MGI) and at the same time provided fertile terrain for seeding an MSAP initiative. Community School Districts 8 and 11, which are submitting as a consortium,

met these two primary criteria. The D8-11 consortium is requesting a total five-year grant in the amount of $14,900,000 from the Magnet Schools Assistance Program (MSAP) to convert three elementary schools and one middle school into whole-school magnet programs. As shown in Table 1, all four schools are experiencing high degrees of MGI of Hispanic students (two schools) or African American students (two schools). The rates of MGI range from a low of 10.1 percentage points above the combined district-wide average to a high of 30.9 percentage points above the combined district-wide average at the same educational level. Collectively, the four schools serve a total of 1,665 students in grades pre-K–8. All four schools demonstrate concentrated poverty, consistent with the district-wide enrollment, and at two of the schools 100% of the students are eligible for Free or Reduced Price Lunch (FRL).

Table 1. Enrollment Demographics (2016-2017) and Free and Reduced Lunch (2015-2016) by Proposed Magnet School and Combined District Average

Proposed Magnet School	American Indian	Asian	African American	Hispanic	Native Hawaiian	White	Multi Racial	FRL
PS 160 (N=438)	1.1%	2.3%	**61.4%**	32.0%	0.0%	1.4%	1.8%	76%
PS 178 (N=508)	0.6%	1.2%	**60.6%**	31.1%	1.2%	4.7%	0.6%	76.5%
PS 567 (N=364)	1.1%	14.3%	17%	**62.6%**	0.8%	3.3%	0.8%	100%
IS 123 (N=355)	0.6%	2.8%	23.4%	**72.4%**	0.3%	0.6%	0%	100%
District 8/11 PK-8 (55,929)	1.1%	6.8%	30.5%	52.5%	0.4%	8.0%	0.8%	86%

As described in various narrative responses to the MSAP selection criteria, the planning process for the development of theme-based magnet programs is well under way, but an infusion of resources from MSAP is required to bring these unique educational programs to fruition and support efforts to provide more diverse learning environments for the students attending these schools. Funding from the MSAP will support the following mission-critical initiatives.

- **Designing and implementing exciting and rigorous educational opportunities at the elementary and middle school levels that will attract the population of families we are trying to recapture**

Curriculum development around the magnet themes will revitalize the curriculum, making it more attractive to a diverse population of students and families, and will enable magnet school students to meet challenging academic standards. D8-11 has requested funds to provide sufficient time for magnet school teachers to engage in curriculum development activities both during and after school, which will be guided and supported by the full-time, MSAP-funded Curriculum Specialist and full-time Outreach and Technology Coordinator, as well as an array of external partners. The site-based, MSAP-funded Magnet Resource Specialists, in collaboration with classroom teachers and other school-based staff, will develop, enhance, and strengthen the magnet themes at their schools, including developing or modifying theme-related enrichment and curricular materials to be aligned with NYS P-12 CCLS, the Next Generation Science Standards (NGSS), the NYC STEM Framework and Scope and Sequence in Science and Social Studies, and the NYC Blueprints For Teaching and Learning in the Arts.

- **Carrying out aggressive, targeted, and multimodal outreach campaigns to inform parents of the schools' innovative and rigorous academic offerings**

Aggressive and targeted outreach and recruitment, designed using best-in-class communication and dissemination strategies, will be used to promote awareness of the magnet program offerings in order to attract a more diverse population of families than is currently attending the proposed D8-11 magnet schools. Serving as the linchpin of the voluntary desegregation strategy, both district- and school-based staff, with support and guidance from the MSAP Project Director and Community Outreach and Technology Coordinator, will engage in numerous activities (e.g. development of promotional materials, establishment of relationships with the local press, creation of a strong social media presence, formation of linkages with community based organizations [CBOs]) throughout the project period to inform families about D8-11's magnet schools. In our experience, this initial investment in public relations and communications strategies pays off once the excitement builds about the schools and word of mouth can substitute for fee-based advertising.

- **Designing and carrying out rigorous and sustained PD for magnet school staff on theme- and evidence-based teaching and learning practices to support systemic reform efforts**

A strong and targeted PD program must be implemented to improve teaching and learning practices among D8-11 educators and equip them with the skills and knowledge to incorporate innovative and effective educational methods and practices into classroom instruction. Specifically, MSAP funds will be used to support partnerships with educational organizations that bring specific expertise in the instructional practices that will be fostered across the four proposed magnets (e.g. project-based learning, STEAM integration, culturally responsive teaching), including the Center for Technology and School Change (CTSC) at Columbia University Teachers College, the Mid-Atlantic Equity Consortium, (MAEC), the Buck Institute (BIE), Education

Closet and Uncharted Play. In addition, each school has a PD plan to support the implementation of its individual program design and build a solid foundation for program sustainability beyond the grant period. **As described in the narrative to Competitive Preference Priority 2, the D8-11 program design includes the implementation in all four proposed sites of an evidence-based approach to professional development (PD).**

- **Developing and sustaining collaborations to support student enrichment activities**

Collaborations with community partners serve to supplement, deepen, and expand the opportunities students have to engage in authentic, hands-on activities in real-world settings. In addition, these partnerships can allow the schools to tap a resource network of volunteers and corporate supporters that are vital for sustaining the magnet programs after the initial infusion of federal funding. As evidenced by the letters of support in the attachments and the site-based budgets, as well as descriptions provided in the Quality of Project Design (QPD) section, each magnet school will establish or expand collaborations with a variety of outside organizations to enhance curricular offerings for students both during and beyond the school day. Exposure to the kinds of enrichment experiences these partnerships can offer (including field trips, distance learning activities and elective courses) gives students attending high-poverty, MGI schools opportunities they would not ordinarily have access to either at home or in school.

- **Providing the necessary district-level coordination to ensure effective and efficient coordination of MSAP resources in the service of the project's objectives and performance measures**

The core team that has spearheaded the development of the D8-11 MSAP initiative is a seasoned group of NYCDOE staff members who have mounted several successful MSAP projects across the city. They will bring this expertise to the D8-11 project, if it is awarded. The district-

based core team, headed by the full-time Project Director, will ensure that all of the proposed magnet school activities are proceeding on schedule and in accordance with program guidelines and will be responsible for meeting with magnet school staff on a regular basis (the roles and responsibilities of the team are described in detail in the Quality of Management Plan section). The MSAP project design is complex and multifaceted; coordination of this program would be impossible in the absence of this core team.

In addition, MSAP funds will permit a comprehensive rigorous formative and summative evaluation of the project over its lifespan. D8-11 will engage the services of an external evaluation firm that has a 25-year history of evaluating MSAP initiatives in NYC as well as in districts across the country, and so brings to this effort a deep understanding of and commitment to the core principles of magnet school programming. This evaluation will provide timely, objective, and strategic feedback to the MSAP planning team and the school planning teams so that they are able to make midcourse corrections to improve the delivery of program services, which in turn will enhance the impact of the program on staff and student outcomes.

(B) The Secretary evaluates the applicant's need for assistance under this part, by considering the resources available to the applicant to carry out the project if funds under the program were not provided.

In 2006, the advocacy group Campaign for Fiscal Equity (CFE) successfully argued that the state's school finance system underfunded NYC public schools, prompting the NYS legislature to pass the State Education Budget and Reform Act of 2007, which committed the state to more than $7 billion in increased school funding, to be phased in over the course of four years. About $3 billion of this was to be directed to schools in NYC, with the rest going to schools elsewhere in the state. While there have been increases in state funding to the NYC public schools over the last

nine years, by all accounts the state has failed to meet its constitutional obligation to "ensure a sound basic education to all children of the State." The most recent budget proposal by Governor Cuomo provides an increase of $428 million; less than 10% of the current $4.3 billion gap between the budget appropriated for the current year and the amount called for by the State Education Budget and Reform Act of 2007 (Rebell, 2017). In fact, the sums dictated by the CFE lawsuit would have required an infusion of nearly $4.5 billion. Among the big winners were charter schools, which were slated to receive $430 more per student; in addition, the rule requiring NYC to help some charter schools pay rent will become permanent. This support will also increase the number of privately run charters schools by 100. In addition to a significant expansion in the number of Community Schools (currently at 150 schools, including the transformation of all 86 Renewal Schools into Community Schools), among the most significant initiatives to receive an infusion of dollars are the full-day pre-K for all four-year-olds. While important, these particular budget initiatives do not support the goals of MSAP.

(C) The Secretary evaluates the applicant's need for assistance under this part, by considering the extent to which the costs of the project exceed the applicant's resources.

The commitment of the Community Superintendents to—and the Chancellor's endorsement of—the modifications to the Voluntary Desegregation Plan and to the implementation of the magnet program is evident. This support notwithstanding, the costs of fully implementing the D8-11 magnet program as designed exceed the available resources. Given the fiscal climate within New York State and NYC and the budgeting priorities described above, D8-11 would be hard-pressed to implement the magnet program as designed in the absence of a grant from MSAP. Importantly, the combined district average annual per-pupil expenditure associated with the

implementation of the magnet program is $1790 and in excess of the standard per capita allocation per D8-11 student of $17,560. This latter average per capita allocation includes classroom instruction ($9,542), instructional support services ($3,074), leadership/supervision/support ($1,956), ancillary support services ($1,608), building services ($1,328), and field support ($52).

(D) The Secretary evaluates applicant's need for assistance under this part, by considering the difficulty of effectively carrying out the approved plan and the project for which assistance is sought, including consideration of how the design of the magnet school project—e.g., the type of program proposed, the location of the magnet school within the LEA—impacts on the applicant's ability to successfully carry out the approved plan.

As was described in the first section of this proposal, the communities in which the four proposed magnet schools are located are experiencing high levels of MGI. However, it was determined through a rigorous feasibility study carried out by the NYCDOE that there is potential within this district to move the needle on student diversity with an infusion of human and fiscal resources, such as those afforded by a federal magnet grant. The most recent research carried out by desegregation experts cites the effectiveness of magnet programs in NYC and is clear that in the absence of a magnet program intervention, NYC public schools will likely continue to become more and more segregated (Kucsera & Orfield, 2014).

As described throughout this application and highlighted in Section A of this CPP narrative, MSAP funding is directly aimed at creating compelling, appealing, and innovative learning environments with state-of-the-art technology, proven instructional methods, and a culture of entrepreneurialism within the NYC public school system that will cause parents who are not currently sending their children to these schools to stand up and take notice. The four school

communities included in this application are ready, willing, and able to accept this challenge, but they cannot bring the vision of the magnet programs to fruition without a significant infusion of resources. MSAP is the only funding source at the local, state, or federal level that promotes the twin principles of equity and excellence in education.

COMPETITIVE PRIORITY #2: NEW OR REVISED MAGNET SCHOOLS

The Secretary determines the extent to which the applicant proposes to carry out a new evidence-based magnet school program or significantly revise an existing magnet school program using evidence-based methods and practices, as available, or replicate an existing magnet school program that has a demonstrated record of success in increasing student academic achievement and reducing isolation of minority groups.

D8-11 proposes to carry out four new evidence-based magnet school programs at IS 123, PS 160, PS 178, and PS 567. The nature and significance of each of the whole-school magnet programs are described in Table 6 in the attachments. None of the proposed magnet schools have ever received MSAP funding and they do not operate theme-based instructional programs.

Professional development is an essential component of the D8-11 magnet initiative and will be fundamental to achieving the project objectives, and specifically the goal to build capacity within the magnet schools to provide rigorous, theme-based instructional programs. D8-11 has selected to focus on two PD practices that have been proven to demonstrate positive effects on student academic achievement: Looking at Student Work and The Center for Technology and School Change (CTSC) at Teachers College, Columbia University's *Innovating Instruction: Design, Situate, Lead*© model.

Looking at Student Work involves engaging teachers in structured and collaborative analysis of their own students' work to discuss evidence of student understanding of the unit. There is

strong evidence, as described in citation 1, supporting the impact of the practice on student academic achievement. It is a key component in the PD that will be provided by the Buck Institute For Education at each of the four magnet schools over the five-year grant period.

CTSC's *Innovating Instruction: Design, Situate, Lead* model includes training in Systemic Transformation of Inquiry Learning Environments (STILE) for STEM which will also be implemented across the four schools and throughout the five-year grant period. As described in citation 2, there are high-quality research findings that STILE is likely to improve student outcomes, based on results of a National Science Foundation (NSF) planning grant awarded to CTSC in 2012; and ongoing efforts to examine the effects of the model, as evidenced in the subsequent NSF design and development grant awarded to CTSC in 2016. Both of these models of PD are key components in the D8-11 magnet program that will lead to improved student achievement outcomes, as shown in the logic model in the QPD.

Citation 1: (Included in attachments)

Heller, J., Daehler, K., Wong, N., Shinohara, M., & Miratrix, L. (2011). Differential Effects of Three Professional Development Models on Teacher Knowledge and Student Achievement in Elementary Science. *Journal of Research in Science Teaching 49(3)* 333-362.

Citation Outcomes: This study includes a randomized experiment in six states with over 270 elementary teachers and 7,000 students to compare the outcomes of three strategies for teacher staff development and a no-treatment control group. The three interventions included a total of 24 hours of PD offered in eight three-hour sessions. The three intervention strategies—Teaching Cases, Looking at Student Work, and Metacognitive Analysis—were designed to include key features identified in literature on effective PD including: in-depth focus on science content

activities that build on teacher knowledge, opportunities to engage in active learning, alignment to standards-based curricula, substantial duration, and collaboration and collective participation.

To analyze the impact of PD, researchers established baseline equivalence for teachers and students in science content knowledge and demographic characteristics to ensure that the groups were statistically similar. They then administered two tests of science content assessment developed and validated in previous studies. Data for two cohorts of teachers and students were analyzed using hierarchical linear modeling to determine impact of intervention on treatments. Results of the analyses showed statistically significant gains in teacher AND student scores on tests of science content knowledge during the study year and the follow-up year for all three interventions, as well as statistically significant gains in written justification items for teachers and students. Using these findings, researchers concluded that "investing in professional development that integrates content learning with analysis of student learning and teaching rather than advanced content or teacher metacognition alone."

Relevance to Proposed Project: The D8-11 magnet initiative is designed to engage teachers in ongoing PD and active reflection on teacher strategies and processes to positively affect student learning and achievement. The magnet initiative is implementing a multi-pronged approach to PD which will engage all instructional staff across the four schools in at least 50 hours of training in each year of the grant.

Looking at Student Work is a key element in several components of the proposed magnet PD. First, BIE, as described in the project narrative, will provide extensive and ongoing training for teachers across the four schools to support the design, implementation, management, and assessment of rigorous and standards-aligned project-based units of study. Part of the PBL Coaching Cycle included in the PD is the use of discussion protocols that implement the practice

of looking at student work to examine and assess specific units. Using the discussion protocol, the BIE coach guides teachers through discussion of student work to ensure standards are being met and student learning is being achieved as planned.

Looking at Student Work is also built into the ATLAS protocol which will be used with BIE and during grade-level planning to evaluate elements of student learning. The ATLAS – Learning for Student Work protocol is a tool developed by Eric Buchovecky, and is based in part on the work of the Leadership for Urban Mathematics Project and of the Assessment Communities of Teachers Project. The tool also draws on the work of Steve Seidel and Evangeline Harris-Stefanakis of Project Zero at Harvard University. The protocol includes guiding questions to help teachers discuss evidence of student thinking, listen to colleagues' feedback, and reflect on their own thinking.

Lastly, teachers will use PLCs to discuss their own instructional units and materials using the Critical Friends protocol published by the National School Reform Faculty to reflect on effective strategies and practices. The Critical Friends process provides an opportunity both to solicit and provide feedback on teaching and instruction (or other pertinent topics) in a manner that promotes reflective learning. Taken together, the phases of training will engage all teachers in ongoing continuous improvement that will produce positive outcomes for students.

Citation 2: (Included in attachments)

Meyer, E.B. (2016). Project Outcomes Report (NSF-1238643): Systemic Transformation of Inquiry Learning Environments (STILE) in STEM. Submitted to National Science Foundation, December 22, 2016).

Citation Outcomes: The report presents results of an NSF planning grant through which CTSC and its partners studied, developed, and tested a "transformative approach for developing STEM

teachers" using CTSC's *Innovating Instruction* PD model (p. 1). In testing this approach, Systemic Transformation of Inquiry Learning Environments (STILE) in STEM, in two NYC public schools, CTSC researchers produced the following results. First, the schools that utilized the STILE approach achieved higher levels of sophistication and rigor of STEM teaching and learning than before using the model. Secondly, the STILE model enhanced teachers' capacities as leaders and supported greater depth of STEM teaching; and, lastly, the school principals and STILE facilitators played essential roles in developing capacity within the schools and supporting a framework for systemic change in STEM teaching and learning. These findings are directly related to the D8-11magnet program which is proposing to work with CTSC to build capacity among teachers to engage in rigorous, research-based STEM instruction that will lead to improved student academic achievement. This work will also serve as a springboard for further research on the impact of STILE.

Relevance to Proposed Project: The STILE approach proposes that educators view STEM as a "meta-discipline" that is best integrated into teaching and learning through a transdisciplinary perspective. Using the STILE approach, educators support student inquiry within the context of real-world problem-solving which allows for more sophisticated and meaningful study of STEM as a meta-discipline, rather than the sum of individual components. The NSF planning grant was used to test the implementation of the STILE approach on teaching and learning in NYC schools. Based on the positive research emanating from CTSC's initial work on the planning grant, NSF awarded CTSC a design and development grant to continue to test the STILE model and further examine impact on student, teacher, and school outcomes. In 2016, CTSC began work on the four-year grant which includes a mixed-method design approach to explore implementation of STILE in 12 high-need urban schools and examine effects on students and teachers. This research is

significant to the proposed D8-11 magnet program because CTSC will serve as a key partner who will provide ongoing and intensive PD across all four schools to transform STEM teaching and learning for all grade levels.

COMPETITIVE PRIORITY #3: SELECTION OF STUDENTS

The Secretary determines the extent to which the applicant proposes to select students to attend magnet schools by methods such as lottery, rather than through academic examination.

In NYC, all families have the opportunity to enroll in a public elementary or middle school using the NYC standard admission policies for elementary and middle schools. The admissions process for the four D8-11 magnet schools (IS 123, PS 160, PS 178, and PS 567) will be fully aligned with these processes. Furthermore, as described in the Table 5 attachments, the admissions process uses a **race-neutral lottery that does not include academic achievement as a selection criterion**.

At the elementary school level, all families who are seeking to enroll their child in one of the three elementary magnet schools will submit an application and participate in a random lottery for admission. The random lottery will include priorities for admission which are listed below in order of preference:

1. Resides within the school's attendance zone;
2. Sibling of a student currently enrolled in the magnet program;
3. Resides in District 8-11 (but not in school attendance zone); and
4. (For admissions to Kindergarten only), is currently enrolled in the school's Pre-K program.

Pre-Kindergarten students must apply for admission into Kindergarten at the same school if they wish to stay in that school; after Kindergarten, all students attending the magnet school may remain in the school until the terminal grade without applying again.

At the middle school level, the process is similar. It includes a random lottery, but with fewer priorities. The priorities are (in the stated order):

1. Resides within the school's attendance zone; and
2. Resides in District 8-11 (but not in school attendance zone).

After admission, students may remain in the magnet school until the terminal grade without applying again.

COMPETITIVE PRIORITY #4: INCREASING RACIAL INTEGRATION AND SOCIOECONOMIC DIVERSITY

(A) The Secretary determines the extent to which the applicant proposes to increase racial integration by taking into account socioeconomic diversity in designing and implementing magnet school programs.

Numerous studies show a close relationship between socioeconomic status (SES) and racial/ethnic background, suggesting that efforts to use SES as a factor to help integrate schools can have implications for racial diversity, and by extension, the resulting academic outcomes as well (Mickelson, 2016). Research points to the substantial impact of economic desegregation—separate from and in addition to racial/ethnic integration—on student achievement. Recent large-scale studies show a strong correlation between a school's concentration of poverty and lower levels of student achievement (Poverty & Race Research Action Council, undated). More specifically, low-income students who attend schools with middle-class peers achieve significantly higher academic outcomes than low-income students who are enrolled in schools with concentrated poverty. In fact, at least one study suggests that the overall SES composition of a school has a greater impact on student achievement than an individual's familial economic background (Kalhenberg, 2013).

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In one of his last initiatives as New York State Commissioner, former Education Secretary John King launched the first school integration pilot that expressly focused on using socioeconomic status (SES) as a tool for increasing racial and ethnic diversity. The purpose of the Socioeconomic Integration Pilot Program is to increase student achievement in Priority and Focus Schools by encouraging greater socioeconomic integration in these schools. Following a planning period, the funded schools are expected to develop and implement programs that improve the achievement of low-SES students and attract higher-SES students, including students from other school districts based on inter-district choice agreement, to voluntarily enroll in the Focus or Priority School. While these pilots represent a promising step in the direction of promoting greater diversity in NYC and across the state, the initiative's impact is decidedly limited, given the very small number of grants and the limited funding that accompanies them.

In May of 2015, The NYC Council passed the "School Diversity Accountability Act (Local Law 511A)," a local law designed to amend the administrative code of the city of New York which requires the NYCDOE to provide detailed demographic data and steps it is taking to advance diversity in NYC schools. The bill requires the DOE to report this demographic data for students in each district, each school within a district, and each program within a school by: grade level, race or ethnicity, gender, and for students who are ELLs, primary home language. The bill also requires the DOE to report on any efforts during the preceding school year to encourage a diverse student body in its schools and special programs, (e.g. school zoning, admissions policies, strategic site selection, targeted outreach and recruitment efforts, special programs, etc.). Local Law 511A will provide a better framework and data to advance the goals of more diverse NYC schools documenting and driving District- and School-Based Strategies for Confronting Segregation and Advancing Diversity.

In spring of 2015 the NYCDOE introduced a Diversity Admissions pilot program aimed at creating diversity at seven elementary schools. The seven schools give priority to students entering Pre K and Kindergarten who qualify for free or reduced price lunch, ELLs and students in the child welfare system. These schools will set aside a certain percentage of seats within the context of existing admissions priorities. The city saw positive results from the original pilot group of seven schools; all but one of the schools met their diversity goals for this year. This spring, the DOE expanded the Diversity Admissions initiative with an additional 12 schools - a mix of elementary, middle and high schools, to the program. The participating schools seek to strengthen diversity among their students through targeted efforts to change their admissions process. Adding 12 new schools to DOE's Diversity in Admissions pilot—more than doubling the current number—is a meaningful step forward in combating segregation, but is not enough to prevent, reduce and eliminate racial and socioeconomic imbalance.

The NYCDOE continues to pursue further efforts to ensure schools are as diverse as the city itself. Demonstrating this commitment to diversity is a recently created online application for schools to request a change in their admission policies. The application asks schools to specify how they might consider factors like family income, English-language skills and homelessness to increase student diversity as well as how they would accommodate incoming students who are admitted based on the new criteria, including a plan for monitoring student success.

SES is also a priority in Districts 8 and 11. The D8-11 magnet initiative is designed to capitalize on the SES diversity that is present within the districts by targeting a sub-set of feeder schools that have lower levels of free and reduced-price lunch eligibility for its outreach and recruitment efforts. In D8, 88.6% of students are FRL-eligible; in D11, this percentage is 84.7%. The percentages at the four proposed magnet schools range from a low of 76% at PS 160 to a high

of 100% at PS 567 and IS 123. In contrast, the five feeder schools identified in Table 4 in the attachments have FRL percentages that range from a low of 43% at PS/IS 83 in D11 to 69% at PS 71 in D8. **Leveraging the comprehensive set of outreach and recruitment activities described in the Desegregation section that follows will help to ensure that D8-11 succeeds in reducing MGI and increasing SES diversity in the proposed magnets by focusing its efforts on a more diverse set of school communities.**

SELECTION CRITERIA

(A) Desegregation

The Secretary reviews each application to determine the quality of desegregation-related activities.

The proposed magnet schools are located in two distinct and very different neighborhoods in Districts 8 and 11, which will allow for students from diverse backgrounds to integrate across the magnet schools and districts. In D11, two target schools (PS 160 and PS 178) are located in Co-op City, a residential community located across one square mile in the Baychester section of the Bronx. Co-op City is the largest cooperative housing complex in the nation. Built in the late 1960s, it is now home to more than 50,000 residents, of whom approximately 60% are African American. The larger Baychester neighborhood in which Co-op City is situated is more diverse, with a population that is 22% African American, 33% White, and 38% Hispanic. Both of the proposed magnet schools are racially isolated for African American students—61.4% at PS 160 and 60.6% at PS 178.

The other two proposed magnet schools, PS 567 in D11 and IS 123 in D8, are located in the Parkchester/Soundview section of the southeast Bronx, which straddles the school district boundary line. Parkchester is also a planned community that was built in the early 1940s by

Metropolitan Life Insurance Company. Spanning less than 1.5 square miles, the Parkchester/Soundview neighborhood is home to a large Hispanic population (59%). Its other residents are 31% African American residents, 3% White, and a small but growing Southeast Asian community (6%). Both of the target magnet schools have MGI among Hispanic students—62.6% at PS 567 and 72.4% at IS 123.

According to data from the 2013–14 Private Schools Universe Survey, the eleven elementary, middle, and PK-12 non-public schools located in the same zip codes as Districts 8 and 11 magnet schools serve about 2,695 students. Demographics for these students enrolled in non-public schools in Districts 8 and 11 are presented in Table 2. Students enrolled in the non-public schools are more likely to be white and less likely to be Hispanic or African American than the students enrolled in the public schools as well as the students enrolled in the proposed magnets.

Table 2. Non-Public School Enrollments in D8-11 Community

Non-Public School	Black or African American	White	Hispanic or Latino	Asian	Two or more races
Holy Cross Elementary School (N=303)	29%	0%	63%	1%	7%
St Benedict School (N=284)	1%	46%	52%	1%	0%
St Frances De Chantal School (N=250)	6%	50%	40%	4%	0%
Villa Maria Academy (N=355)	11%	61%	24%	3%	1%
R T Hudson Elementary School (N=47)	96%	0%	4%	0%	0%
St Ignatius School (N=130)	5%	0%	95%	0%	0%

Non-Public School	Black or African American	White	Hispanic or Latino	Asian	Two or more races
Greek American Institute Of New York (N=169)	3%	78%	15%	3%	0%
Our Lady Of The Assumption School (N=255)	0%	34%	36%	1%	29%
Our Saviour Lutheran School (N=217	71%	2%	21%	2%	4%
St Clares School (N=377)	6%	63%	21%	10%	1%
St Theresa School (N=308)	5%	54%	32%	1%	8%
Total NPS (N=2695)	14%	41%	37%	3%	5%

Additionally, in the 2016-2017 school year, 8,853 D8 and 8,387 D11 students in grades K-8 who were zoned to attend school in D8-11 chose to attend a school out of district. By developing new and attractive magnet programs, the schools will be able to attract a more diverse population of students who are attending nonpublic, charter, or out-of-district schools in close proximity to the proposed magnet schools.

Once the district and target communities were identified, in keeping with NYC Chancellor Carmen Fariňa's goal for schools to become more integrated, the NYCDOE's planning team reached out to the Community Superintendents to secure their interest in pursuing the grant and their commitment to the goals of the MSAP, including its desegregation mandate. The Superintendents' in-depth knowledge of the community and the schools was critical in identifying candidate schools for the grant. The candidate schools in D8-11 were then invited to an awareness session at which the goals, requirements, and expectations of the MSAP grant were spelled out. Principals who were interested in participating in the D8-11 grant were then asked to submit a

letter of intent to the NYCDOE. All four Principals in the D8-11 grant application embraced the opportunity to use MSAP as a critical lever in helping to further their educational missions and to support the effort to promote greater diversity within the school communities. As a final step, the Superintendents codified their support for the MSAP initiative by signing both the Program Assurances and the memorandum of agreement with the NYCDOE regarding the amended Voluntary Desegregation Plan (see Desegregation Plan and supplementary documentation in attachments).

The D8-11 magnet initiative will convert four schools into whole-school, theme-based magnets. As described in the Quality of Design section, the process for identifying the magnet themes was a collaborative effort within the school communities, with support and guidance provided by the NYCDOE magnet team, a group of seasoned educators and MSAP leaders that has collectively worked with over 100 elementary, middle, and high school magnets throughout the five boroughs of NYC. Emanating from this collaborative and comprehensive planning process, the plans outlined in Table 3 have been launched and will be brought to fruition should an MSAP grant be forthcoming.

Table 3. D8-11 Magnet School Programs

District	School	Theme	Grades Served	SY 2016-17 Enrollment
8	IS 123	Urban Community School/STEAM	6–8	355
11	PS 160	STEAM	Pre-K–5	438
11	PS 178	Multimedia Arts and Design	Pre-K–5	508
11	PS 567	Global Leaders of Innovation and Discovery	Pre-K–3	364

(1) The Secretary determines the extent to which the applicant demonstrates the effectiveness of its plan to recruit students from different social, economic, ethnic, and racial backgrounds into the magnet schools.

One of the best ways to attract a more diverse population of students to the magnet schools is by developing effective and targeted outreach and recruitment strategies. Research suggests that districts should use a comprehensive approach to outreach that includes information centers, direct mailing of literature in multiple languages, and advertisements in a variety of media outlets (Frankenberg & Siegel-Hawley, 2008). Furthermore, when outreach is effective, magnet school choice programs have been successful in achieving greater levels of integration by race/ethnicity as well as level of parental education (Betts, Rice, Zau, Tang, & Koedel, 2006). Districts 8-11 has developed a multifaceted approach to outreach and recruitment that will include the strategic use of district- and school-level resources to share information about the magnet programs with a diverse group of families and community members through print materials, web-based and virtual promotion, in-person events, and effective word-of-mouth marketing.

Outreach and recruitment will be a joint responsibility of the MSAP Project Director, the Community Outreach and Technology Specialist, and the individual magnet schools. The Project Director will work closely with each school to develop and implement targeted and aggressive outreach and recruitment strategies that reflect the unique characteristics of the school community. The Community Outreach and Technology Specialist will develop and disseminate district-based promotional materials (e.g., brochures, videos, fact sheets); establish contacts within the local community and the Community Education Council (CEC); oversee the development of a D8-11 magnet program website; and submit information to local media for the promotion of magnet

schools' activities. The Community Outreach and Technology Specialist will also work hand in hand with the school-based magnet staff to develop a robust set of marketing materials and activities to promote their individual magnet programs. Without such targeted outreach, the chances of successfully meeting the desegregation goals that are outlined in the project performance measures would be negligible.

D8-11's plan to recruit students from different social, economic, ethnic, and racial backgrounds includes the attraction of parents and students from targeted feeder schools, nonpublic schools or schools outside the community back into the D8-11 public school system. D8-11 ensures that its recruitment and outreach for the magnet project will be sensitive and responsive to its diverse constituents and will be fully aligned with MSAP statute and the guidance of the Office for Civil Rights on the voluntary use of race. A marketing timeline is presented in Table 4.

Table 4. D8-11 Annual Marketing Timeline

Month(s)	Activity	Responsibility Center
October–December	Conduct magnet information sessions, events and open houses; conduct outreach to feeder schools, preschools, libraries, and relevant community/cultural organizations; attend District Choice Fairs; disseminate marketing materials; conduct outreach to local media (traditional and online); maintain active presence on social media (Facebook, Twitter, Instagram)	Project Director, Magnet Site Coordinators, Outreach and Tech Coordinator
Early December	Application period begins; parents submit applications	Magnet Site Coordinators, Principals, and school-based staff

Month(s)	Activity	Responsibility Center
Mid-December – February	Parents continue to submit applications; continue to conduct outreach efforts, dissemination of marketing materials, school tours, social media posts, and marketing to local media (traditional and online)	Magnet Site Coordinators, Outreach and Tech Coordinator, Principals
March	Placement offers distributed	District, NYCDOE
March–April	Continued outreach as necessary, pending available seats	Project Director, Outreach and Tech Coordinator
April	Preregistration process begins as parents accept offers	Magnet Schools
May–August	Late applications accepted; late offers made; continued outreach as necessary, pending available seats	Magnet Schools

School-based recruitment for the magnet schools will be especially important because the students, teachers, administrators, and parents are the individuals who best know the schools and can best advertise them. The Magnet Site Coordinator at each school will develop a school-based marketing and outreach plan to build on the activities and strategies that are conducted by the district. Targeted marketing will focus on D8-11 families choosing private school options, community service agencies, faith-based organizations, and private daycares and preschools. Open Houses and showcases of student learning will be conducted for the families and community members; paper and electronic informational flyers and brochures will be shared with families in neighboring feeder schools (including daycares and preschools for the three elementary schools);

and presentations will be made by magnet staff and students at feeder schools and community events such as block parties and fairs. Furthermore, each school will develop a magnet page on the school's website to highlight student and teacher achievements in the magnet program and to share information about the magnet theme and related family resources. The schools will also develop a presence on social media, including Facebook pages and Twitter accounts, to share information with families in real time. In addition, schools will advertise on free online community calendars and build relationships with local newspapers to promote events at each school.

Key strategies in reaching a diverse population of families will be the development of strong community partnerships and dissemination of information to prospective families at community-based locations, such as libraries, faith-based organizations, youth centers, play gyms, and recreational facilities, as well as through local governmental offices. In their efforts to disseminate information to "hard-to-reach" parents and families, the MSAP funded Magnet Site Coordinators will receive support from the Borough and District Family Advocates across the district. These staff members work closely with the school communities, including families, School Leadership Teams (SLTs), and Parent Associations (PAs)/Parent-Teacher Associations (PTAs). Additionally, each school will work with district staff and the NYCDOE Translation Unit to ensure that they have access to resources to provide verbal and written information about the programs with native speakers of languages other than English. Each school will also work to recruit native speakers of languages other than English from their staff, parent, and local communities to interact directly with parents so that they feel welcome in the school buildings and understand the information that is shared. The school-specific outreach and recruitment efforts that will be carried out by the magnet schools are outlined in Table 5.

Table 5. School-Based Outreach and Recruitment Strategies

School	Strategies
IS 123	• Distribution of letters to parents in English and Spanish and advertising in newspapers *The Bronx Times Reporter* and The *Bronx Press Review* and on local TV station Channel 12 • Outreach at Bronx-wide Middle School Fairs • Outreach at local churches and community centers • Parent meetings facilitated by Parent Outreach Coordinator • Social media outreach on Instagram and Facebook • Events such as STEAM celebrations at local NYC Public Library
PS 160	• Distribution of informational flyers and newsletters to parents in the local community • Advertising on the school website, through the school telephone notification system, Remind App, and in local newspapers, *The Co-Op City Times*, *The City News*, *The Bronx Times*, and The *Parent Newsletter* • Outreach to the school PTA and families in the Pelham Bay and Throgs Neck sections of the Bronx
PS 178	• Advertising in local publications, including The Bronx Times Reporter, The Co-Op City Times, and the Penny Pincher, and on local TV station Channel 12 • Outreach to targeted neighborhoods, including City Island, Morris Park, Pelham Parkway, and Pelham Gardens • Outreach to local schools and preschools, including the Bronx House School for Performing Arts, Shining Stars Preschool, and Steppingstone Preschool, and to local libraries, such as the Morris Park Library, the Pelham Parkway Library, and the City Island Library

School	Strategies
PS 567	• Distribution of informational flyers to local residents and businesses and at all school events • Advertising on the school's two websites and in local newspapers, including The Bronx Times, El Diario, and the Bronx/Riverdale Family • Outreach to local schools, including St. Raymond's, Bronx Charter School of Excellence, Success Academy, St. Helena's, Cahn Charter School, Santa Maria, and Sunshine Learning Center, in the targeted neighborhoods of Parkchester, Pelham Parkway, and Castle Hill

(2) The Secretary determines the extent to which the applicant demonstrates how it will foster interaction among students of different social, economic, ethnic, and racial backgrounds in classroom activities, extracurricular activities, or other activities in the schools in which the magnet programs operate.

The District's aggressive outreach and recruitment plan, in concert with an equitable, efficient, and race-neutral student selection process (described in the Selection of Students CPP 3, Table 5 in attachments), will ensure that the D8-11 magnet schools attract and enroll an increasingly diverse population of students and families over the five-year project. However, there is ample evidence to suggest that attracting a diverse student body does not in and of itself guarantee that students of different backgrounds, once enrolled in magnet schools, will develop positive interactions in the absence of educational and structural strategies known to foster positive intergroup relationships and to support all learners to succeed in the magnet program (Bifulco, Buerger, & Cobb, 2012). Some important strategies identified in the literature for promoting positive interactions between students and teachers and among students include implementing a

culturally responsive pedagogy and providing opportunities for student-centered, project-based collaborative learning experiences.

Cultural competence refers to the ability to effectively understand, communicate with, and interact with people of different cultures and involves awareness of one's own cultural worldview, attitude toward cultural differences, knowledge of different cultural practices and worldviews, and cross-cultural skills (Ben-Ari & Strier, 2010). Culturally responsive teaching requires awareness of the cultural differences of students and an adjustment in teacher attitude (Colbert, 2010). Suggested strategies for developing cultural competencies in the classroom include building relationships with students and parents, listening empathetically, looking for cultural interpreters in the school or community, and using available resources such as books, articles, files, and audio files (Pratt-Johnson, 2006).

To support the proposed magnet schools in providing culturally responsive instruction, D8-11 intends to partner with the Mid-Atlantic Equity Consortium (MAEC). Founded in 1991, the MAEC is dedicated to providing access to high quality education for culturally, linguistically, and economically diverse learners. As part of this work, the MAEC focuses on issues such as the identification and placement of English Language Learners in supportive and appropriate instructional environments; creating positive and safe schools; increasing participation of girls and students of color in STEM, and addressing disproportionality in discipline. D8-11 will partner with the MAEC to provide PD in the areas of equity related to culturally responsive teaching and parent/family engagement in the classroom. Additional information about this training is provided in the QPD section.

A focus on **project-based learning** (PBL)—in which students learn through research and applied learning—is important in encouraging the development of higher-order thinking skills.

Furthermore, cooperative work and team learning have been shown to have a strong and consistent positive effect on relationships between culturally diverse students (Colbert, 2010). As described in the QPD section, the Buck Institute of Education (BIE) will support the four schools in their efforts to integrate PBL opportunities into instruction by providing immersive learning experiences, staff training, resources, and expertise. BIE will provide the four D8-11 schools with rigorous PD, in the form of training and coaching, on how to design and implement PBL activities that engage and motivate students. BIE will help bring coherence to PBL practices and support the creation of schoolwide processes and structures to support PBL and STEM education.

(3) The Secretary determines the extent to which the applicant demonstrates how it will ensure equal access and treatment from eligible project participants who have been traditionally underrepresented in courses or activities offered as part of the magnet school, e.g., women and girls in mathematics, science, or technology courses, and disabled students.

New York City Department of Education's Policy on Equal Access

It is the policy of the NYCDOE to provide educational opportunities without regard to race, color, religion, creed, ethnicity/national origin, alienage and citizenship status, age, marital status, disability, sexual orientation, and gender (sex), and to maintain an environment free of unlawful harassment, including sexual harassment, and retaliation. This policy is in accordance with Title VI and Title VII of the Civil Rights Act of 1964, as amended; Title IX of the Education Amendments of 1972; Section 503 and Section 504 of the Rehabilitation Act of 1973, as amended; the Americans with Disabilities Act of 1990, as amended; the Civil Rights Act of 1991; and the New York State and NYC Human Rights Laws.

Districts 8-11's Policies to Ensure Equal Access and Treatment

D8-11 adheres unconditionally to the nondiscrimination practices of the New York State (NYS) and NYC Department of Education and ensures equal access and treatment for all of its students in all curricular and extracurricular programs. The polices to ensure equal access and treatment are also fully aligned with guidance provided by the USDOE Office for Civil Rights on the voluntary use of race to achieve diversity and avoid racial isolation in elementary and secondary schools (U.S. Department of Education Office for Civil Rights and U.S. Department of Justice, 2011).

The D8-11 magnet schools will be whole-school programs that provide all students with opportunities to participate in rigorous, theme-based instruction and enrichment activities. As described in CPP 3 (and Table 5 in the attachments), the NYCDOE will use a race-neutral student selection process to enroll new students at the magnet schools. D8-11 ensures that all communications with parents and community members about the magnet program and activities will be provided in multiple languages to reach a diverse population. Furthermore, participation in magnet activities will *not* require financial contributions from students or their families.

D8-11 also believes that the District and schools must take a proactive role in providing adequate supports and resources to ensure that all students can attain high levels of achievement, including those who have traditionally been underrepresented in courses or activities that will be offered as part of the magnet school programs. An essential component to ensuring equal access and treatment is setting high standards that all students are expected to meet, regardless of their gender, racial, or ethnic background; educational needs; or income level. It is recognized, however, that some students have greater difficulty in meeting these standards when they are confronted by certain academic, social, or emotional challenges.

This section describes some of the major efforts the proposed magnet schools are making to ensure equal access and treatment. **These efforts demonstrate that D8-11 is in full compliance with Section 427 of the U.S. Department of Education's General Education Provisions Act (GEPA).** This proactive approach to ensuring equitable access to and participation in the magnet schools initiative provides additional support for students with special learning needs, including ELLs, students with disabilities, and struggling learners, and offers guidance support for all students. The whole-school magnet programs at the four D8-11 schools are designed to serve all students and ensure equal access and treatment for all groups.

Support for Students With Special Learning Needs

D8-11 is committed to meeting the varied educational needs of its student population, including ELLs and students with disabilities.

Services for ELLs. The NYCDOE Department of English Language Learners and Student Support (DELLSS), through its Field Support Liaisons, provides extensive PD opportunities, resources, and technical assistance for school staff in these models and other evidence-based services for ELL students. For example, the NYCDOE DELLSS has a partnership with Understanding Language at Stanford University that focuses on six key principles for ELL instruction. Understanding Language aims to heighten educator awareness of the critical role that language plays in the new Common Core State Standards (CCLS) and NGSS. The long-term goal of the initiative is to increase recognition that learning the language of each academic discipline is essential to learning content.

NYC provides bilingual programs (Transitional Bilingual Education and Dual Language) that strengthen students' native language development and content knowledge while they build their social and academic English skills. NYCDOE also provides English as a New Language (ENL)

programs that use strategies for English language development with native language support so that students develop language and content knowledge in English. DELLSS ensures educational equity by adhering to all applicable Federal, State, and City policies as well as informing future policies. DELLSS does this to realize the NYCDOE vision of all ELLs graduating with a high-quality education that is equitable, rigorous, and supportive, and that values their cultural and linguistic assets, so that they are prepared for college, careers, and leadership in a global society.

All NYC schools are required to hold orientations for parents or guardians of newly enrolled ELLs to inform them of the different ELL programs that are available. In orientations, parents have the opportunity to receive materials about ELL programs in their home language and to ask questions about ELL services (with assistance from a translator, if necessary). At the end of each orientation, school staff collect the Parent Survey and Program Selection Form, which indicates the program that parents are requesting for their child.

The proposed D8-11 magnet schools currently serve ELL populations ranging from 3.5% at PS 178 to 26.7% at IS 123. The schools are dedicated to meeting the unique needs of their ELL students. Through their school-based inquiry teams, ELL students are targeted for in-class and extended-day interventions and supports. Additional ELL programs and services provided at the schools are listed in Table 6.

Table 6. Percentage of ELL Students and Programs/Services Available to Serve These Students' Needs in the Proposed Magnet Schools

Schools	% ELLs	Programs and Services to Meet Needs of ELLs
IS 123	26.7%	• English as a New Language (ENL) teacher collaborates with content area teachers to plan and implement small-group instruction to ELLs designed to address individual student needs.

Schools	% ELLs	Programs and Services to Meet Needs of ELLs
		• Teachers use various strategies and modalities (e.g., interactive role play, games, photo dictionaries) to promote the language and vocabulary development of ELLs. • ELL instruction is based the Reading and Writing Workshop model.
PS 160	6.3%	• ENL teacher provides ELLs with standalone instruction using various strategies, including the research-based Sheltered Instruction Observation Protocol (SIOP) Model and Balanced Literacy focused on Reading Workshop (mini-lesson, shared reading, guided reading, and independent reading), Writing Workshop (modeled writing, guiding writing, interactive writing and independent writing), and Word Work (phonemic awareness, phonics, vocabulary, and comprehension).
PS 178	3.5%	• Instruction is delivered to ELLs by the ENL teacher via the pull-out/push in model. • ENL teacher uses various methods and strategies, including: Total Physical Response (TPR) techniques, SIOP, Backward Design, vocabulary front loading, adapted texts, schema building graphic organizers, visuals, realia, hands-on activities,
PS 567	26.1%	• ELLs receive standalone ENL instruction. Entering and emergent level ELLs are grouped homogenously as a block while transitioning and expanding ELLs are grouped heterogeneously and receive push in services. • ELLs use Imagine Learning, a research-based computerized reading program, daily. • ENL Coordinator works with teachers to provide language structures to ensure ELLs receive the additional supports they need. • Before- and after-school tutoring is provided to students performing below grade level, including ELLs.

Services for Students With Disabilities. Under the leadership of the Deputy Chancellor for Specialized Instruction, the NYCDOE is making significant improvements in the way it delivers services to students with disabilities. Through the citywide, multiphase initiative *A Shared Path to Success* launched in 2012, students with disabilities entering kindergarten, 6th grade, or 9th grade are able to attend the same schools they would attend if they did not have an Individualized Education Program (IEP), whether that is their local community school or a school of their choice. As a result, all students with IEPs are provided with the greatest possible access to the least restrictive environment appropriate to their needs. The goal of A *Shared Path to Success* is to prepare all students to graduate from high school fully prepared for college, careers, and independent living. In order to further bolster support for these efforts to increase opportunities for students with IEPs to learn alongside their peers, NYCDOE provides extensive PD for general education and special education teachers and school staff to promote an inclusive school culture.

Response to Intervention (RTI) is an ongoing process of using student performance and data on student progress to guide decisions about instruction and intervention. The major premise of RTI is that intervening early can prevent academic failure. Typical RTI procedures use a tiered approach of increasing interventions as follows:

- **Tier I:** Teachers provide research-based curriculum and effective differentiated instruction in the general education class. Schools screen all students to identify those at risk of non-response to the core curriculum. The response of these students to the general education instruction (primary prevention) is monitored for 5-6 weeks to determine which student's needs are not met and therefore require more intensive intervention at Tier II.
- **Tier II:** Tier II provides more intensive targeted intervention services which may include but is not limited to: smaller group instruction, more homogeneous grouping, greater frequency/duration of services, etc. Those students that do not respond to Tier

II interventions are referred for a special education evaluation and possibly classified as disabled and recommended to receive special education services.

- **Tier III:** Special Education evaluation and provision of special education services. Progress monitoring is a component of Tier III with responders moving back to Tier I and/or Tier II.

In D8-11, students with disabilities are eligible for the full continuum of special education services, including instruction in self-contained (12:1:1) classes; Special Education Teacher Support Services (SETSS) push-in services; Integrated Co-Teaching (ICT) classes and other models of inclusion; and other related services, including speech and language services, counseling, and adaptive physical education. The proportion of students with disabilities at the magnet schools ranges from 17.4% at PS 567 to 30.7% at IS 123. As shown in Table 7, the proposed magnet schools are dedicated to meeting the needs of students with disabilities through various targeted programs.

Table 7. Percentage of Students With Disabilities and Programs/Services Available to Serve These Students' Needs in the Proposed Magnet Schools

Schools	% Students With Disabilities	Programs and Services to Meet Special Education Students' Needs
IS 123	30.7%	• Director of Special Education ensures that SWDs are placed in the appropriate educational setting and receive the push-in services they need from a dually-certified special education teacher, per their IEP.

Schools	% Students With Disabilities	Programs and Services to Meet Special Education Students' Needs
PS 160	27.0%	• PS 160 is a Barrier-Free School servicing students with special needs. • Special Education Inquiry Team and Special Education Teacher Support Services (SETSS) Inquiry Team use the collaborative inquiry cycle to develop and refine instructional strategies for SWDs. • Support services, including small-group and individual counseling and Positive Behavioral Interventions and Supports (PBIS), are available to all students including SWDs.
PS 178	24.0%	• Special Education Liaison provides support to special education teachers in curriculum, assessment, management, and goal setting.
PS 567	17.4%	• IEP coordinator and AIS teachers coordinate regularly with classroom teachers to ensure differentiated instruction for SWDs. • Before- and after-school tutoring is provided to students performing below grade level, including SWDs.

Academic Supports for Struggling Learners. In its commitment to raising achievement for all of its students, D8-11 devotes extensive resources to support the achievement of students performing below state learning standards and students who are at risk. Some of the proposed magnet schools offer before-school or after-school instructional programs to enable students who are struggling academically to get additional support in smaller and more focused learning groups. As shown in Table 8, the proposed magnet schools are dedicated to meeting the needs of struggling

students through various targeted programs.

Table 8. Programs/Services Available to Serve Struggling Learners in the Proposed Magnet Schools

Schools	Programs and Services to Meet Needs of Struggling Learners
IS 123	• Students struggling in reading receive small-group or individual instruction in repeated readings and interactive writing. A daily double period of ELA provides the opportunity for small-group instruction and one-to-one conferring during the Literacy Block. • Students struggling in math receive small-group instruction and one-to-one conferring. • Students struggling in science receive small-group instruction and one to one conferring; struggling eighth-grade students receive preparation for the NYS science exam. • Students struggling in social studies receive small group instruction and one-to-one conferring.
PS 160	• Students struggling in reading and math receive small-group and individual instruction using skill sophistication and guided practice. • Students struggling in science receive small-group and individual instruction using Kaplan Advantage, Simple Solutions, and Foss Webb. • Students struggling in social studies receive small-group and individual instruction using guided practice and scaffolded support using DBQ questioning and Tier 3 content-level vocabulary.
PS 178	• The RTI Team meets at least monthly to examine individual cases using multiple data sources (anecdotal reports, frequency charts, exam histories, samples of student work) and develop intervention strategies and toolkits at each level. • Students struggling in reading, math, science, and social studies receive small-group instruction from the Special Education Teacher Support

Schools	Programs and Services to Meet Needs of Struggling Learners
	Services (SETTS) teacher and/or the Academic Intervention Services (AIS) teacher.
PS 567	• Students struggling in reading receive small-group instruction using research-based programs (e.g., Fundations, Max Scholar, One More Story, Raz-Kids, Explode the Code, Sounds in Motion, Handwriting without Tears, Leveled Literacy Intervention), guided/shared reading, interactive writing, independent reading/writing, and tutoring. • Students struggling in math receive small-group instruction. • Students struggling in science receive whole-class or small-group instruction during which they complete STEM projects and research-based hands-on activities aligned with the NGSS. • Students struggling in social studies receive whole-class or small-group instruction using centers and hands-on activities based on multiple learning styles.

Guidance Services. In the event that "high-risk" students are identified, D8-11 implements several potential intervention approaches to meet their needs, including individual, group, and peer counseling. The goal of these services is to develop students' social and decision-making abilities and establish positive relationships by providing opportunities for them to bond with peers, counselors, parents, school personnel, and the community. Special counseling services are given to Title I–eligible students to support their success in the regular classroom environment. Title I also provides outreach services to families and planning and intervention through the use of pupil personnel committees to support eligible students. The School Response Team (SRT) Program offers assessments, consultations, classroom observations, crisis interventions, PD for teachers, parent trainings, and referrals for treatment in the community. Finally, several schools are

implementing the Positive Behavior Interventions and Supports (PBIS) RTI program described above with general education as well as special education students. School-based behavior specialists provide students with assistance and behavior management, crisis intervention, and other related resources.

All the aforementioned supports for students with special learning needs will ensure that all students at the proposed magnet schools will have equal access to the same rigorous instructional programs and enrichment and extracurricular activities.

Support for All Students in Science, Technology, Engineering, and Math Courses

Underrepresentation of girls and racial and ethnic minority groups—particularly of African American and Hispanic students—in STEM fields and courses of study is well documented by research (Chen & Thomas, 2009; National Science Foundation, 2013). At the same time, literature highlights the advantages to pursuing these fields, both in terms of employability and future earnings, as well as the cognitive benefits that STEM brings to all aspects of education (Malcolm & Webster, 2014; Reed & Berry, 2006).

For these reasons, strategies that support participation among all groups of students, including both those who are traditionally underrepresented in STEM and groups who participate more frequently, is of utmost importance to providing equitable access and opportunities. Research and literature have highlighted effective strategies for promoting participation in STEM among all groups. For example, one of the best ways to build interest in STEM among children and adolescents—and especially students from racial and ethnic minority groups—is to provide hands-on applications of STEM learning (Hayden et al., 2011; Ilumoka, 2012). Opportunities for students and teachers to engage in explicit teaching and learning of STEM content and concepts within the context of real-world examples have been shown to build interest among students in STEM,

including girls and racial and ethnic minority groups (Hayden et al., 2011). Furthermore, supplementing engaging, hands-on classroom experiences with out-of-school STEM activities, which may include extracurricular clubs, competitions, or activities during the school year as well as summer bridge and research opportunities, have proven to increase student engagement and motivation to pursue STEM fields (Maton et al., 2009).

All of the proposed magnet sites will be implementing a range of STEM- and/or STEAM-related activities for their students. Highlights of these curricular offerings are summarized below:

- **IS 123** will offer a variety of different STEM-related activities that will support hands-on student work with research-based learning activities. The school will implement a set of rigorous, interdisciplinary, and STEM-integrated curriculum units in which students examine the ways in which technology and the arts impact their local communities and the world and then share their learnings with local politicians, community members, and others via social media and other technology-based venues. As part of this work, partners will facilitate hands-on student work in digital architecture as well as math and science experiments and other units of study. In addition, the school will offer a variety of hands-on STEM-based electives in areas such as digital architecture, garage band, and film making, as well as after-school LEGO robotics and science clubs.
- **PS 160** will prepare students with 21st century learning skills including communication, collaboration, and critical thinking via a real-world, project-based learning approach. The curriculum will allow students to explore the past and present of their communities and the world through hands-on learning activities with partners in the local community. Example activities may include inventing, designing, and engineering a product to benefit the global community or creating digital timelines showing important events over time in local

communities. Programming will utilize the school's planned purchases of Promethean (interactive touch) tables and electronic whiteboards for collaborative work. School- and partner-supported electives and clubs will include those focused on the arts, coding, and science.

- **PS 178** will provide students with a wide array of STEM activities with a focus on multimedia arts and design. The school plans to implement a rigorous, staff-developed, transdisciplinary curriculum that will integrate literacy and the arts with a hands-on project-based learning approach. Hand-on interdisciplinary lessons will be enriched with the use of Makerspaces in classrooms through a partnership with LEGO education. The school will leverage the local community to facilitate hands- on multimedia arts and design learning where students use iPads to take pictures and create videos showcasing their community's architecture, natural world, and community workers (e.g., police, postal workers). Within STEAM labs or Makerspaces, students will work to develop and design a product they determine will benefit their local community with 3-D modeling and other technologies. A set of electives and after-school clubs in robotics, coding, newspaper, and theater will be offered to reinforce, deepen, and extend the interdisciplinary learning in the classroom.

☐ **PS 567** will offer a wide variety of experiences for students focused specifically on interdisciplinary approaches in STEM fields that ensure students become innovative problem solvers and well-rounded global citizens. Curricula will include real-world, technology-infused units designed to spur student inquiry and exploration while encouraging use of essential 21st Century skills such as critical thinking, collaboration, creativity, and communication. In addition, elective and after-school programming in areas

such as robotics, arts, and broadcasting will support STEM content-area student learning.

(4) The Secretary determines the extent to which the applicant demonstrates the effectiveness of all other desegregation strategies proposed by the applicant for the elimination, reduction, or prevention of minority group isolation in elementary schools and secondary schools with substantial proportions of minority students.

As described in CPP 4, in spring of 2015 the NYCDOE introduced a Diversity Admissions pilot program aimed at creating diversity at seven elementary schools. Based on the positive results from the original pilot group, this spring, the DOE expanded the Diversity Admissions initiative welcoming an additional 12 schools in order to strengthen diversity among their student enrollment. Lessons learned from this initiative will inform continued efforts on the part of the NYCDOE to refine and scale approaches to promoting increased racial/ethnic and SES diversity in its portfolio of schools.

Dual-language programs have been used as a desegregation strategy in school districts across the country, and it is for this as well as other educational reasons that the NYC Schools Chancellor is promoting this initiative in NYC. Dual-language immersion (DLI) is an instructional model that integrates native English speakers and native speakers of another language to provide instruction in core subjects to both groups of students in both languages (Howard, Sugarman, & Christian, 2003). The DLI model has gained popularity over the past 15 years, largely due to the growth in non-native English-speaking students in the U.S. public education system, as well as findings from academic studies about the positive impacts of DLI on increasing student academic achievement and promoting linguistic and cultural equity (Alvear, 2015; Sugarman, 2012). For example, extensive research conducted by George Mason University Professors Thomas and Collier (2002) has highlighted the academic and social benefits of DLI, including implementation of high-quality

language arts instruction, support for positive interdependence among students of different cultures, and active school-family partnerships.

(B) Quality of Project Design

The Secretary reviews each application to determine the quality of the project design.

(1) The Secretary considers the manner and extent to which each magnet school will improve student academic achievement for all students attending the magnet school programs, including the manner and extent to which each magnet school will increase student academic achievement in the instructional area or areas offered by the school, including any evidence, or if such evidence is not available, a rationale based on current research findings to support such description.

In January 2014, the newly appointed Chancellor of the NYC public schools, Carmen Fariña, unveiled her vision for the NYCDOE, which highlighted three themes: collaboration, communication, and celebration. Fariña deemed these themes essential to providing quality instruction, promoting professional growth, and, most important, enabling students to achieve academic success. Furthermore, Chancellor Fariña set forth four pillars that would serve as the road map for the DOE during her tenure: (1) Return dignity and respect to the teaching profession; ***(2)*** Improve student achievement by aligning all instruction to the Common Core standards; (3) Engage parents in every aspect of school life; and (4) Create new collaborative and innovative models within our city and schools. These themes and pillars were then codified in *The Framework for Great Schools*, with the following six elements:

- Rigorous Instruction: Instruction is customized, inclusive, motivating, and aligned to the Common Core. High standards are set in every classroom. Students are actively engaged in ambitious intellectual activity and developing critical thinking skills.

- Supportive Environment: The school establishes a classroom and school culture where students feel safe, supported, and challenged by their teachers and peers.
- Collaborative Teachers: Teachers are committed to the success and improvement of their classrooms and schools. They have the opportunity to participate in PD within a culture of respect and continuous improvement.
- Effective School Leadership: Principals lead by example and nurture the professional growth of teachers and staff, developing and delivering the instructional and social-emotional support that drives student achievement.
- Strong Family-Community Ties: School leadership brings resources from the community into the school building by welcoming, encouraging, and developing partnerships with families, businesses, and community-based organizations (CBOs).
- Trust: Everyone works toward the shared goal of improving student outcomes, preparing students for success in school and beyond. Across the school community, there is respect. School staff, parents, students, and administrators value each other.

Pillars of D8-11 Magnet Program Design

The D8-11 magnet initiative has been designed so that it is fully aligned with and support of the six elements of NYCDOE's Framework for Great Schools. Implementation of these methodologies will serve to bring the curricula to life in and beyond the walls of the classrooms, helping students to see and make connections across subject areas and apply what they are learning to solve real-world problems in their schools, communities and the world at large. The goal is for these approaches to be implemented schoolwide, and with all populations of students, by the end of the five-year project period. The D8-11 magnet schools will adhere to these pillars, as described in the following section.

Rigorous Instruction

As stated in its core values, "NYCDOE is committed to doing whatever it takes to ensure that every student learns and succeeds, regardless of race, ethnicity, gender, and socioeconomic status." Yet, many students struggle to meet grade-level standards as measured by state assessments. Furthermore, with the transition to CCLS, students are expected to meet increasingly challenging benchmarks in order to prepare them for college and careers. As a result, we are finding that a low proportion of students are meeting the standards in ELA and math on the NYS assessments. Furthermore, our data show that there are significant achievement gaps for students by racial and ethnic background, eligibility for free- or reduced price lunch, and students with special needs, namely students with disabilities and ELLs.

Results of the 2015–16 NYS assessments are presented in Tables 9 and 10. As shown, as of spring 2016, ELA and math proficiency rates at the proposed D8-11 magnet schools were lower than the district averages in most cases. For example, at IS 123, approximately 16% of students met learning standards in ELA and 7% met learning standards in math, compared to approximately 26% of district students meeting standards in ELA and 23% of district students in math. Data are not presented when the number of students in a subgroup is less than 10.

Table 9. Percentage of Students who Met/Exceeded Standard on NYS Assessment in ELA and Math (District 8)

Student Group	IS 123 Grades 6–8		D8 Grades 3-8	
	ELA N=312	Math N=328	ELA N=12,112	Math N=12,088
All students	15.7%	6.7%	26.3%	22.7%

New York City Community School Districts 8 and 11—Bronx, New York

Student Group	IS 123 Grades 6–8		D8 Grades 3-8	
	ELA N=312	Math N=328	ELA N=12,112	Math N=12,088
Asian	-	-	54.1%	58.9%
American Indian/Alaska Native	-	-	33.3%	34.6%
Black/African American	16.7%	5.8%	20.5%	16.4%
Hispanic/Latino	15.4%	6.8%	24.0%	19.7%
White	-	-	42.2%	38.6%
Two or more races	-	-	37.5%	43.8%
English language learners	1.6%	0.0%	2.5%	5.8%
Students with disabilities	2.1%	0.0%	5.5%	6.1%
Eligible for free or reduced-price meals	15.9%	5.3%	24.0%	20.7%

Table 10. Percentage of Students Who Met/Exceeded Standard on NYS Assessment in ELA and Math (District 11)

Student Group	PS 160 Grades 3-5		PS 178 Grades 3-5		PS 567 Grade 3		D11 Grades 3-8	
	ELA N=175	Math N=176	ELA N=273	Math N=276	ELA N=61	Math N=65	ELA N=17,832	Math N=17,813
All students	27.4%	10.2%	27.8%	29.0%	24.6%	18.5%	29.5%	26.5%
Asian	-	-	-	-	-	-	47.3%	38.9%
American Indian/Alaska Native	-	-	-	-	-	-	29.3%	-
Black/African	30.6%	10.2%	28.7%	27.5%	30.0%	10.0%	27.3%	20.7%

Student Group	PS 160 Grades 3-5		PS 178 Grades 3-5		PS 567 Grade 3		D11 Grades 3-8	
	ELA N=175	Math N=176	ELA N=273	Math N=276	ELA N=61	Math N=65	ELA N=17, 832	Math N=17, 813
American								
Hispanic/Latino	24.1%	11.1%	23.9%	27.5%	16.7%	15.9%	25.6%	19.2%
White	-	-	36.4%	36.4%	-	-	39.3	31.6%
Two or more races	-	-	-	-	-	-	40.9%	-
English language learners	-	-	-	-	-	16.7%	3.6%	7.1%
Students with disabilities	6.5%	1.6%	6.8%	9.5%	13.3%	6.7%	5.4%	6.0%
Eligible for free or reduced-price meals	24.6%	8.4%	24.2%	24.4%	21.7%	14.3%	27.0%	17.8%

There is a great push to get students reading independently by the third grade. The NYC reading initiative, **NYC Reads 365**, is a multi-year citywide literacy effort to promote a City that reads every day, in and outside of schools. All pre-K-12 schools promote daily reading, using resources such as age-appropriate reading lists, engaging posters and bookmarks, and support for school staff and parents around strengthening students' reading skills and encouraging a love for reading. **NYC Reads 365** builds on the City's universal 2nd-grade literacy plan, announced in the Mayor's plan for equity and excellence in education. **NYC Reads 365** will build momentum and

enthusiasm for daily reading and support the work of reading coaches that will be assigned to all elementary schools by fall 2018. In spring 2017, the DOE will begin identifying and training reading coaches in advance of placement at high-needs schools starting next fall.

The NYCDOE is committed to working with schools to build their capacity in and develop a shared understanding of high-quality STEM education. To support these efforts, the city created the STEM Framework, a tool that provides a structured approach for schools seeking to organize and develop the implementation of a quality STEM initiative. It includes a readiness checklist of structures, criteria, and systems and is not intended to be judgmental or evaluative. The architecture of the Framework is presented as a structure of domains, indicators, and criteria to support the evolution of a school's initiative over time. The Framework is designed to work alongside other data and qualitative tools to help schools develop a STEM culture that integrates well with a school's existing instructional mission and vision, while shifting the disciplinary paradigm from multidisciplinary and interdisciplinary toward instruction and learning that is ultimately transdisciplinary.

The *Algebra for All* Initiative, one of eight Equity and Excellence initiatives launched in 2015-16, spans grades 5-10 and is designed to improve student readiness for Algebra 1 and high school math instruction. All students will complete algebra no later than 9th grade, enabling them to reach more advanced math courses in high school and better preparing them for college and careers. By 2022, all students will have access to an algebra course in 8th grade, and to academic supports in elementary and middle school to ensure greater algebra readiness. The logic behind increasing access to algebra, according to the city, is that research shows students who pass the subject by the end of ninth grade are more likely to graduate high school and college (Gamoran & Hannigan, 2000; Klepfer & Hull, 2012; Lee, 2012). In addition, 75 schools are participating in another branch

of *Algebra for All* to "departmentalize" math in fifth grade. Principals at these schools will designate selected fifth-grade teachers to take on the central math role for their grade. This approach is supported by researchers who have found that the quality of math instruction improves when taught by a teacher with demonstrated expertise in this content area, especially since many elementary-level teachers are not excited about math or do not feel prepared to teach it (Condie, Lefgren, & Sims, 2014).

Today, preparing students for college and careers means equipping them with skills that will help them adapt and excel in any learning or workplace environment they encounter. These skills include those that are often referred to as "21st-century skills" or "learning and innovation skills," such as creativity, critical thinking, communication and collaboration, information media, and technology skills (Partnership for 21st Century Skills, 2009). Recognizing that this is a pressing need, NYC plans to dramatically increase the number of students that will engage with computer science instruction over the next decade. In the nation's largest effort to increase computer science in classrooms, the city began expanding computer science instruction in fall 2016, with the goal of offering it in all schools by 2025. This *Computer Science for All* initiative is expanding on a series of smaller efforts to boost computer science in schools that the city has introduced over the past few years, including the launch of a teacher training plan, opening software engineering–focused high schools, and adding AP computer science courses to high schools. This year, 246 elementary, middle, and high schools are participating in the *Computer Science for All* initiative, including 98 that offer full-year or multi-year sequences. This includes AP Computer Science Principles, the Software Engineering Program (SEP), and SEP Jr., which are full-year or multi-year sequences, and the STEM Institute, an intensive training for teachers to implement Computer Science lessons and units in their schools.

Bolstering students' ability to access more rigorous coursework across all subject areas are programs that teach students technology skills; these are especially important in low-income and minority neighborhoods where young people have less access to computers or the Internet at home (DeBell & Chapman, 2006). Students from homes with limited access and use of technology are at a disadvantage for completing technology-based tasks and often miss out on educational opportunities that require the use of technological resources (Kim & Bagaka, 2005). In addition to the technology applications that will be developed through the partnerships described above, a key resource to the D8-11 magnet schools will be the full-time Outreach and Technology Specialist, who will work with each school community to support the integration of state-of-the-art instructional technology supplies, equipment, and applications into their magnet programs.

Each proposed magnet school will develop an innovative, theme-based program that provides rigorous instruction and enrichment activities to all students that are not available in other schools in the district. The magnet themes will be infused into core subject curricula through the development of interdisciplinary curriculum units and lesson plans to provide enhanced, rigorous, and engaging learning opportunities for all students. While the content areas of focus may vary across the four schools (e.g., communication arts and multi-media, leadership development, the arts), a common thread that connects all of the magnet school designs is their emphasis on science, technology, engineering, mathematics, and in some cases, the arts (STEM or STEAM). Furthermore, all of the thematic units will be mapped to and supportive of the Common Core standards as well as the Next Generation Science Standards (NGSS).

Effective School Leadership

The NYCDOE believes in its talent—the teachers, school leaders, and other personnel who work with our city's students and communities. NYCDOE believes that an investment in

leadership development today will benefit children's futures tomorrow. From teacher leadership programs to opportunities for seasoned principals, NYCDOE offers a range of professional experiences for leadership development and career advancement.

The NYCDOE Office of Leadership (OOL) within the Division of Teaching and Learning facilitates leadership pipelines of instructional leaders for all levels of the system by identifying and recruiting talent, building leadership capacity, supporting placement of leadership vacancies, and providing early-career supports for new leaders. OOL manages multiple leadership programs, each of which serves a unique purpose in preparing educators at particular stages in their career to transition successfully to the next level. Providing PD, skills training, and on the job experiences to help educators become better leaders in their current role and to enable them to transition to new leadership roles. Summarized below are key NYCDOE leadership development initiatives that will be leveraged to support the leadership of the four proposed magnet schools:

- **Wallace Leadership Fellows Program:** This grant has informed efforts to reassess existing leadership pipelines and to strengthen them with an emphasis on teacher leadership and school leadership roles. NYCDOE has partnerships with the following universities: Fordham, Lehman College, Queens College, Hunter, Bank Street, and Brooklyn College. Wallace Leadership Fellows are granted to selected participants in each of these university's education leadership programs.
- **Leaders in Education Apprenticeship Program:** This one-year program for current teachers and assistant principals includes a five-week summer intensive; weekly evening sessions; and a rigorous apprenticeship with the participant's own principal.

- **Executive Leadership Institute (ELI):** The intent of the various ELI programs is to provide standards-based, results-driven leadership training to help school leaders successfully fulfill their responsibilities as instructional leaders.
- **Assistant Principal Leadership Institute/Advanced Leadership Program for Assistant Principals:** This program prepares strong, experienced APs to transition into principal roles within one to three years. It includes monthly class sessions, quarterly school visits, and individualized developmental work; participants also gain admission to the Principal Candidate Pool through participation in the program. PD program focused on the advanced leadership skills needed to serve as an effective principal.
- **Principal Candidate Pool:** This initiative develops and supports individuals with leadership experience to successfully lead low-performing schools through teamwork, simulated school projects, and a six-month principal internship.
- **School Based Intermediate Supervisors Institute (SBISI) New Principal Support:** This two-year leadership seminar series for new principals is designed to build, expand, and enhance fundamental school leadership skills and knowledge through a wide variety of "nuts and bolts" strategies, engagement in critical thinking scenarios, and exploration of educational leadership-related literature.
- **Chancellor's Fellowship:** This is a leadership development opportunity for top talent at the NYCDOE. The program is designed for exemplary principals and central leaders who are committed to public education and have a proven record of success.

Supportive Environment/Trust

As described earlier in this section, the NYCDOE's research-based Framework for Great Schools identifies a supportive environment and trust as two of the key elements of high-quality,

effective schools. According to the Framework, supportive schools are environments where students feel safe both in and around the school building and while they travel to and from home; the culture of the school is such that students push one another in positive ways; teachers work closely with students who may need extra help; and teachers differentiate instruction to promote real learning in every way. In order to increase the supportiveness of NYC schools, NYCDOE has improved school-based behavioral supports and mental health services by enhancing PD for guidance counselors; emphasizing and expanding training in progressive discipline, restorative justice, and social-emotional learning; and expanding the school-based free lunch program to include all eligible middle school students, thereby reducing free-lunch stigma.

According to the Framework for Great Schools, a trusting school environment is one where teachers listen to student ideas and incorporate them into their instruction and are able to comfortably share their feelings, worries, and frustrations with other teachers and Principals in order to maintain mutually trusting and respectful relationships with other teachers and families. Recognizing the importance of fostering trusting school environments, the NYCDOE continually seeks input and feedback from families, teachers, and Principals to understand their needs and strive toward the shared goal of improved student achievement.

Strong Family-Community Ties

Consistent with the citywide philosophy on parent involvement, D8-11 recognizes that schools, families, and community members share responsibility for the education of all students. To support the goals of the District and schools to effectively educate all students, schools and parents must work as knowledgeable partners. Parents, teachers, and administrators in the District work together through the SLTs, PA/PTAs, Presidents Councils, Title I Parent Advisory Councils,

and other formal and informal groups and organizations to ensure that all students meet high standards in safe, nurturing environments. Furthermore, each school in D8-11 has an on-site Parent Coordinator who is responsible for promoting parent engagement by creating a welcoming environment in the school, supporting parent leadership activities, expanding parent involvement activities, and helping resolve parent issues and concerns.

In addition to establishing strong ties with the parent community, the D8-11 magnet initiative has brought together a robust set of community partners that have expressed their commitment to support the various facets of the magnet program design. In some instances, schools will continue or expand existing linkages with community partners as their work aligns well to the scope of the magnet program. Most schools have begun the process of reaching out to new local, regional, and national organizations that would bring specific expertise to the magnet project design. In all cases, the MSAP project team will work with the schools to ensure that the services proposed will add value to the school community and to the magnet program, that costs are in alignment with NYCDOE and USDOE fiscal and contracting policies and practices, and that the efforts of all outside partners are coordinated to avoid duplication or fragmentation of services.

Individual Magnet School Program Designs

Each school selected to participate in the magnet initiative engaged in a broad-based, collaborative planning process in developing its magnet program. To structure the process, each school established a magnet planning team composed of teachers, administrators, staff developers, and parents and carried out several school-based planning activities to solicit the input of all key stakeholders in the design. Schools were provided with copies of several tools that were developed by the NYCDOE to guide the teams through the planning process. These tools include a school-based program design worksheet, a budgeting worksheet, a template for program partnership

descriptions, a template for letters of support, and signature pages for gathering support from school staff and parents. The school-based teams met individually with the district planning team several times during the planning process to provide updates and get feedback and support in designing their programs. A detailed description of each proposed magnet school program is provided in the section that follows.

IS 123—James M. Kieran

The Bronx Urban STEAM Magnet School

The Bronx Urban Community School (IS 123) will become The Bronx Urban STEAM Magnet School. Located in the South Bronx, IS 123 strives to empower 335 sixth- through eighth-grade students with critical thinking skills and a sense of self-determination in their pursuit of academic excellence to prepare them for college and career. Sharing similar themes as three elementary schools in this proposal (PS 160, PS 178, and PS 567), the program will provide new opportunities for students who attend elementary magnet schools in D8-11 to continue along a pipeline where they can deepen their knowledge and skills of STEM concepts at the middle school level. Through its rigorous liberal arts curriculum, IS 123 students graduate with an extensive knowledge of art history, musical literacy, as well as the ability to read, write, think critically, and utilize innovative problem-solving skills to address the issues plaguing our ever-changing society. Current partnerships with the New York Historical Society, Lincoln Center, Marquis Studios, and the Metropolitan Museum of Art support the school's mission.

In keeping with its mission, IS 123 will adopt STEAM as its magnet theme, allowing the school to leverage its existing arts focus to support a rigorous, interdisciplinary instructional program in which students examine the ways in which technology and the arts impact our changing world.

Through the overarching essential question, "*How does technology impact society over time*?", students will develop skills to be able to: (1) articulate ways in which society is transformed by science, art, and technology; (2) describe how scientific, artistic, and technological developments affect society and the environment; (3) identify the historical, economic, cultural, and/or societal impacts of such issues as sustainability, energy challenges, water/air quality issues, and information science; (4) demonstrate a knowledge of scientific and technological advancements and their impact on historical/modern societies and their Bronx community; (5) analyze the scientific/technological debates and ethical concerns of such issues as global warming, urban development, GMO foods, healthcare, innovation, sustainability, and economic competitiveness; and (6) integrate, synthesize, and apply knowledge of the relationship between art, science and technology and societal issues in both focused and broad interdisciplinary contexts.

Interdisciplinary units of study will incorporate research, writing, and debate projects into science, math, social studies, and ELA curricula to empower students with the 21st century skills they need to become ethical global citizens in the community. The units of study will utilize and expand upon "It's About Time's" Project-Based Inquiry Science (PBIS) curriculum, enabling students to engage in long-term projects focused on using 21st century skills via practical applications for authentic audiences, such as engaging students with local politicians, in public competitions, or with local community forums, as well as activities designed to raise awareness, and calling the community to action through social media and other public avenues. These thematic activities will be facilitated via the use of school technology, including Smart Boards and other technologies that will be purchased with MSAP support.

In addition to the overarching essential question, there will also be grade-specific essential questions centered on a "final challenge activity" that will require students to work collaboratively

to design a solution to a problem through the use of STEAM-based problem-solving skills. These units of study will be developed and introduced over the course of the five-year program with one unit per grade the first year, growing to four units per grade in the fifth and final year of the grant. For example, an eighth-grade interdisciplinary thematic unit of study might address the essential question, "*What is the role of science, technology and the arts in the development of the United States as a world power, specifically with regard to conflict, change, and health*?" For such a project, students could study how the use of energy resources affects the environment for living things as well as research and engage in debates on the value of technological progress versus the carbon footprint. As a culminating project for the sample eighth-grade unit, students may research and write an argumentative essay examining if future urban developers should consider the environmental impact housing developments will have on the current residents of the Bronx community.

With support from our ongoing partners, a wide array of opportunities will be offered to students under the umbrella of PBIS while attempting to address our essential question. For example, through our partnership with the **Salvadori Center**, a New York City nonprofit that uses buildings, bridges, and parks within our communities to bring math and science to life in public schools, Salvadori architecture consultants will provide classroom teachers with curriculum planning, professional development, and in-class support to help students research the impact of rapid housing development and construction in NYC on the city's water quality and carbon emissions. Through a digital architecture course taught by our arts partner **Marquis Studios**, students will apply math and science concepts to designing environmental architectural spaces (e.g., green roofs and community green spaces) that can creatively maximize limited space to promote increased oxygen and minimize the impact of carbon emissions. In addition, with the help

of Marquis Studios, visual arts will be woven into the units of study which will provide opportunities for students to study the housing architecture of Frank Lloyd Wright and his masterpiece, the Guggenheim Museum. This activity will support the overarching essential question by connecting the history of architecture and design to the urban development of the students' communities, both in the present and in the future. Finally, the staff from the **NYC Department of Health** will work with students to create/launch a public health campaign on air quality issues and the asthma health crisis in Bronx County to be shared with others during our annual community health fair and with partner high schools.

As technology is a ubiquitous part of student's lives, we believe it must also be an integral part of our daily instruction. To that end, the school will hire a full-time technology teacher/media specialist through a new partnership with **Microsoft** in order to support the integration of necessary technologies to enable our students to be college- and career-ready. The media specialist will work with teachers to identify authentic and meaningful ways to integrate technology into learning experiences to enhance students' access to information and people, as well as provide varied avenues for students to express their opinions and learning to a wide array of authentic audiences, both locally and globally.

Students will be provided with theme-based enrichment activities during the school day and out-of-school time. For example, through the partnership with Marquis Studio, all 6th graders will have the opportunity to take courses in digital architecture, garage band, visual arts, and film making, as well as (after school) robotics, chess, and student government. In addition, all students will have opportunities to participate in multiple field trips each year with a special focus on local Bronx areas of interest (e.g., Van Cortlandt Park, Bronx Zoo, New York Botanical Garden, Bronx River), including walking tours of the community. These experiences will provide valuable

support to students' PBIS projects by exposing them to the geography, urban housing/green space developments, clean energy solutions, and challenges in the Bronx.

IS 123 will provide an after-school program that will extend and support thematic units via activities such as LEGO Robotics and science clubs. In addition, the school plans to develop a new partnership with **Take Two Film Academy** to support students in the creation of documentaries focused on the ever-changing role of technology in society. In addition, teaching artists from **School Murals by Thrive Collective** will provide visual arts enrichment by facilitating collaborative, student-driven mural projects at the school.

IS 123 is committed to engaging parents in their children's education. The school's parent coordinator will provide periodic updates to parents about the progress of the implementation of our new STEAM initiative through informational meetings and open houses. The coordinator will also support parent involvement by inviting families to student showcases of theme-related artwork and STEAM fairs where IS 123 will work with partners to provide hands-on, theme-based family activities. For example, the New York Historical Society will facilitate a workshop for parents and students on using art to study history.

PS 160—Walt Disney School

The STEAM Magnet School

PS 160, which will become the STEAM Magnet School, currently serves 417 students in grades PK-5 and is located in Co-op City (short for Cooperative City), within Baychester, in the northeastern section of the Bronx. Situated at the intersection of Interstate 95 and the Hutchinson River Parkway, Co-op City would be the 10th largest "city" in New York State if it were a distinct municipality and is also the largest cooperative housing development in the world. Nearby

resources include Pelham Bay Park, Orchard Beach, and City Island. STEAM is a natural fit as a magnet theme for PS 160 because the school has made significant investments in a wide range of facilities, equipment, and supplies that will support a hands-on, student-driven approach to inquiry and exploration.

At PS 160, students will participate in STEAM-based learning activities that require 21st century learning skills such as communication, collaboration, and critical thinking, all within a project-based learning (PBL) environment. As part of the work of the grant, staff at the school will develop and implement a compendium of interdisciplinary thematic units for students in grades K–5 that will be framed by four to five subthemes or topics per grade. Table 11 presents two examples of interdisciplinary thematic units that will be developed and implemented within the school, which will be derived from, and fully aligned with, the NYC Science and Social Studies Scope and Sequence, the Next Generation Science Standards, and the NYC STEM Framework.

Table 11. Transdisciplinary Thematic Units

Thematic Unit and Project, by Grade	Transdisciplinary Activities
NYC Over Time: Grade 2 Museum of Then and Now	**Science:** connects to NYC Scope and Sequence unit *Force and Motion*; study transportation over time, visit NYC Transportation Museum **Engineering:** design invention that will benefit NYC in the future **Art:** visit museums, create artworks that depict NYC through the years **Math:** study the concepts of scale (using maps of NYC) and time

	ELA: read about NYC, create digital "Now and Then" scrapbooks **Social studies:** create digital timelines depicting important events over time **Technology:** use Glogster, Book Creator, Scratch
We Are the World: Grade 3 International Arts and Design Expo	**Science:** connects to NYC Scope and Sequence unit *Plant and Animal Adaptations*; study animals and plants from around the world **Engineering:** study important inventions from around the world, invent and design a product to benefit the global community **Art:** study and create art, dance, and music from around the world **Math:** graph and analyze data on countries of study, learn about currency from around the world **ELA:** read and write about different world cultures, create presentations **Social studies:** connects to NYC Scope and Sequence unit *Communities Around the World* **Technology:** use Google Earth, PowerPoint, Prezi, GoogleSlides

Implementation of the STEAM-based thematic curriculum will be supported by existing art and music cluster teaching positions as well as through partnerships the school will develop with local arts organizations and institutions of higher education. Each cluster teacher will work with students on a weekly basis and, during that time, will provide instruction that builds upon the thematic units and supports students' hands-on projects. Cluster teachers will also support

classroom teachers during common planning sessions. In addition, work at the school will be facilitated through the purchase of Promethean (interactive touch) tables and electronic whiteboards for collaborative work.

The STEAM curriculum will be enriched through a number of residencies with partnering organizations, including the **Bronx Opera** (through Lehman College), **Arts Connection**, **Dancing Classrooms**, **Little Friends of Orchard Beach**, and **Science Pathfinders** (sponsored by Mentoring in Medicine). Each residency will include school-day enrichment, field trips to extend thematic learning, and a culminating event in June featuring student performances and displays of student projects and artwork. As part of a residency from **Cultural After-School Adventures (CASA)**, teaching artists will help teachers to integrate theater and drama into classroom instruction. Field trips to the **Bronx Children's Museum, Museum of Modern Art** and the **Metropolitan Museum of Art** will provide guided tours of exhibits and hands-on art workshops and activities facilitated by museum educators to view STEAM-related exhibits (e.g., Egyptian pyramids).

Enrichment programming will be offered to students at PS 160 featuring arts- and technology-based enrichment activities. For example, **Dancing Classrooms** and **American Ballet Theater** will provide programming that allows students to have an opportunity to learn various styles of ballroom dancing as well as participate in a ballroom dancing competition held outside of school. In addition, PS 160 staff members will provide theme-based, after-school programming in visual arts, cooking, and science.

The school will inform and engage parents of magnet school students through a variety of different strategies such as telephone blasts, flyers, the Remind App, a parent newsletter, and a parent feedback survey. All communications will be translated into the languages spoken by PS

160 parents (e.g., Arabic, Bengali, Chinese, French, Haitian, Creole, Korean, Russian, Spanish, and Urdu) and will be provided in a variety of formats (e.g., hard copy or electronic). The school will also conduct several informational sessions for parents throughout the year as well as parent workshops featuring STEAM-related interactive, hands-on activities. In addition, the school will host Saturday Fun Day trips for families (e.g., to museums and local schools implementing STEAM programming and the Bronx Opera Company) and parent "STEAM" Saturday Academies, which will leverage the talents of parents and community members to engage families in theme-based learning activities in areas identified by parents through the parent survey.

PS 178—Dr. Selman Waksman

Magnet School of Multimedia Arts and Design

Through the magnet program, PS 178 will be transformed into the Magnet School of Multimedia Arts and Design. Like PS 160, PS 178 is located in Co-op City in the Bronx and serves a population of 481 students in grades K–5. Multimedia arts and design is a natural fit for PS 178, as it will leverage the school's unique location and existing and planned partnerships.

Using a staff-developed, transdisciplinary curriculum, the school will seamlessly integrate literacy, arts education, technology, STEM, and PBL and align these disciplines and methodologies to CCLS and the NYC-mandated Scope and Sequence for Science and Social Studies. The school's magnet themed units of study will be aligned with their reading curriculum at each grade level as follows: grades K–1 will focus on communities; grade 2 will focus on making decisions; grade 3 will focus on connecting character, culture, and community; grade 4 will focus on the interactions in nature and culture; and grade 5 will focus on finding courage.

PS 178 will partner with a variety of organizations to help facilitate magnet themed units of

study and fully integrate the arts and design into teaching and learning. For example, **Story Pirates**, an education and media organization dually based in New York and Los Angeles that turns children's original stories into sketch comedy musicals featuring professional actors, will provide scriptwriting activities that will augment classroom writing instruction. **Lincoln Center Institute (LCI)** will facilitate curriculum-aligned museum visits, gallery tours, and performances to extend learning beyond the classroom. After such trips, LCI teaching artists will come back to the school and work with teachers and students as they create their own exhibits. A partnership with the **New York Hall of Science** will allow students to use artistic design in the museum's on-site Makerspaces and help teachers develop pop-up maker projects in their classrooms. Finally, **LEGO Education** will provide math curriculum units that will be infused into the school's GoMath curriculum. The school's partnership with **TheatreWorks** will provide low-cost access to shows for schools, teachers, and parents during the school day as well as guest artists in storytelling, puppetry, magic and dance. Additional multimedia resources will be provided by PBS Learning Media, Time for Kids, and National Geographic News to support the delivery of literacy, core content knowledge, and skills instruction in multimedia formats. For example, PBS Learning Media will offer direct access to curriculum-aligned resources while allowing students the freedom to investigate and explore through scientific, mathematical, and artistic activities.

The school will leverage all that the community has to offer by ensuring that local resources and NYC-at-large serve as the foundation for the school's multimedia arts and design theme. For example, as first-grade students learn about the theme "My Family and Other Families, Now and Long Ago" as part of their year-long Social Studies Scope and Sequence, they will venture into the community to learn about the history and families of their neighborhood. They will take walks throughout the community where they will use iPads to photograph the local architecture, parks,

and historic landmarks. As students learn about what it means to be a good community member and local citizen, they will interview people they meet and videotape their responses on their iPads. Learners will take pictures of people helping each other, community workers (such as police officers and postal workers), and road signs demonstrating rules and laws. Teaching artists from **Magic Box Productions** will meet with students prior to these community walks to teach them basic photography skills. In order to integrate science concepts into these walks, students will take photographs of local plant and animal life, as well as pictures that show weather conditions that occur seasonally. As a math connection, students will take photos of geometric shapes they find in the architecture, street patterns, and numbers they see in the real-word setting of Co-op City. Using data gathered on the community walks, students will make charts and graphs to visually depict the information they discover.

When they return to the classroom, students will work in small groups to sort, organize, and assess their photographs and determine which will be used in a Family and Community Photo Gallery that will be curated by the students and presented to the public. With assistance from the technology teacher and professional photographers from Magic Box Productions, students will digitally edit photographs. As an added literacy component, teachers will work with students to caption photographs, research and read about specific landmarks they photographed, and create text panels for the gallery that provide information about the community. In STEAM labs or Makerspaces, which the school will establish through the magnet grant, students will work in groups to design an invention that will benefit the community of Co-op City.

As students move into the upper elementary grades (3–5), they will use the multimedia arts and design skills they have attained in early grades, to expand their focus from *what it means to be a good citizen in the community* to *what it means to be a good national and global citizen.* For

example, as third graders conduct case studies of world communities, they will build on earlier work by creating interactive museum exhibits that feature a wide range of multimedia arts and design products that not only include photography and text panels, but 3-D and digital designs based on the world cultures of Africa, China, and South America. A partnership with **Town Hall**, a performance space located in midtown Manhattan, will offer visual arts and technical theater instruction for all students that will assist in the sophistication of this culminating unit product.

Theme-based after-school magnet clubs in robotics, coding, newspaper, and theater will be offered. The clubs, which will be designed to reinforce, deepen, and extend the interdisciplinary curriculum, will meet twice a week from November to June and will be facilitated by school staff and supported through training and/or open source materials from LEGO Education, Code.org and Code Academy.

PS 178 will provide various opportunities to engage parents in thematic learning and decision making about the program. These activities will include a magnet curriculum night, SLT and PA meetings; Tuesday parent engagement; parent workshops facilitated by partner organizations; and monthly magnet newsletters. As many parents speak Spanish, the school's parent coordinator is fluent in Spanish, as are some teachers and paraprofessionals, and communications will be translated as needed. In addition, parents will be engaged via electronic methods such as the Remind App as well as email.

PS 567—Linden Tree Elementary School

Global Leaders of Innovation and Discovery Magnet School

Located in the Parkchester section of the eastern Bronx, PS 567 currently serves 347 students in grades pre-K–4. The school, which was opened in 2012, is in the process of phasing in one grade

per year so that in 2017–18 it will be at full scale, serving grades pre-K–5. Through the magnet grant, PS 567 will become the Global Leaders of Innovation and Discovery Magnet School. This theme is a natural fit for PS 567, as its mission is to nurture the whole child, ensuring students become innovative problem solvers and well-rounded global citizens.

Students at PS 567 will be immersed in a transdisciplinary curriculum comprising technology-infused thematic units that drive student inquiry and exploration through social studies and science content. These thematic units will immerse students in PBL activities that demand essential 21st century skills such as critical thinking, collaboration, creativity, and communication. The units will be organized around four overarching themes including—change over time, engineering, growth, and citizenry—and each theme will be framed by essential questions and associated learning objectives. Instruction will be supported with the purchase of laptop carts, 3d printers (and carts), and iPads to facilitate technology-integrated and innovative learning.

Through PBL, magnet instruction at PS 567 will include real-life applications of learning to help develop students into global citizens and leaders. For example under the theme of citizenry, in a fifth-grade study of food and nutrition (Unit 3 of NYC's Science Scope and Sequence), students will engage in a hands-on project in which they examine health issues such as obesity, diabetes, and heart disease in their own neighborhoods as well as the community's access to healthy, locally grown fruits and vegetables. On a global level, students will explore hunger issues and the access of families in developing countries to food. Students will interview school dietitians and cafeteria workers as well as videoconference with professionals in health fields. They will go on community walks to visit local grocery stores to determine whether families in their community have easy access to fresh and healthy foods, organic products, and locally-grown fruits and vegetables at reasonable prices. In math, they will examine food labels and determine whether

foods common to the community have healthy percentages of necessary daily vitamins and what is the percentage of fat in recommended servings. In social studies, students will watch videos dealing with issues of world hunger provided by UNICEF and the World Health Organization (WHO) and will engage in discussions with their peers about how to help solve global hunger issues.

Partner organization **GrowNYC** will help support learning through their Grow to Learn program by engaging students in hands-on activities on gardening and healthy eating. Established in partnership with The Mayor's Fund to Advance NYC in 2010, and working alongside partners from the NYC Parks Department's Green Thumb division and the NYCDOE's Office of School Food and Nutrition, Grow to Learn inspires, facilitates, and promotes the creation of sustainable school gardens in public schools across New York City. A partnership with **Discovery Education** will support technology integration into the thematic curriculum by providing PS 567 with high-quality, dynamic digital content, including interactive lessons, real-time assessment, and virtual experiences with technology experts. Finally, **Education Through Music** will provide arts-based classroom learning to support and reinforce thematic instruction. Thematic enrichment will also be provided through field trips that all students will participate in as a way to deepen their understanding of the content. Field trip destinations might include the New York Hall of Science, Central Park Theatre, SUNY Maritime Nautical Museum, and the Cooper Hewitt Museum of Design.

In addition to the core curriculum, students will engage in bimonthly enrichment clusters that will connect to the school's thematic curriculum by bringing together students from different grades who share the same interest. These clusters will celebrate students' unique learning styles and interests, provide opportunities for real-world learning through PBL and integration of

technology, and promote development of students' natural skills and talents. Examples of possible enrichment clusters include music (students learn to play and read music and explore instruments from around the world in connection with social studies instruction); robotics (students design robots that can help solve problems in the community or world); broadcasting (students learn about the behind-the-scenes components of broadcasting and create video and audio news segments on school- and community-based news); and healthy living (students learn about healthy eating habits and grow food in the school garden). At the end of the year, the school will host a Cluster Expo, which will serve as a culminating activity where students will display the work products they created in their specific enrichment cluster.

The school science, art, and music rooms will serve as key resources in the magnet program. PS 567 plans to use the magnet grant to develop its mini-lab into a STEM lab that will be equipped with a SMART Board, working equipment sinks, and a workshop/hands-on area. The school will also create a media center, which will include multimedia technologies and software for student use in the areas of design and creation.

PS 567 is committed to engaging parents in theme-based learning throughout the school year. The school will host monthly magnet fairs that focus on science, technology, social studies, and the arts and explore international contributions to these fields of study. In addition, family cooking nights will be facilitated by an educational chef who will tie in math and science concepts from the curriculum and celebrate international foods from cultures that are represented in the school community. And, during Family Science Nights, parents will work in the STEM lab and experience what their children are learning throughout the day. The school will use various methods to ensure parents are informed about the program, including biweekly phone and e-mail blasts translated in all languages represented in the school community (e.g. Arabic, Bengali,

Chinese, French, Haitian, Creole, Korean, Russian, Spanish, and Urdu) as well as monthly parent information sessions that will introduce parents to the next thematic unit. Parents will be encouraged to engage in decision making about the program through participation in the SLT, which meets monthly to share upcoming events and discuss shared leadership responsibilities among the members and the school's Magnet Advisory Council.

(2) The Secretary considers the extent to which the applicant demonstrates that it has the resources to operate the project beyond the length of the grant, including a multi-year financial and operating model and accompanying plan; the demonstrated commitment of any partners; evidence of broad support from stakeholders (e.g., State educational agencies, teachers' unions) critical to the project's long-terms success; or more than one of these types of evidence.

Commitment to Magnet Project

As evidenced in the first section of this proposal, there is widespread support for the D8-11 magnet initiative, stemming from the highest level of the NYCDOE down to each of the proposed magnet schools. Table 12 shows the number of parents (signatures attained during a PTA meeting) and staff in each school who expressed support for the magnet program (these support forms are provided in the attachments). Should D8-11 be awarded an MSAP grant, the momentum and excitement that was generated during the proposal development phase will be leveraged in support of program implementation.

Table 12. Number of Parents and Staff Who Signed

Support Forms for the Magnet Programs

School	Parents (N)	Staff (N)
IS 123	57	33
PS 160	49	55
PS 178	32	39
PS 567	39	39

Capacity-Building Strategies to Support the Sustainability of Magnet Programs

Built into the D8-11 magnet program design—and funded by the MSAP grant—are numerous activities that, starting from Day 1 of grant implementation, will help to establish a solid foundation for the sustainability of the four magnet programs. These activities include (1) developing and refining innovative, thematic curricula; (2) offering extensive PD and support to magnet teachers and school leaders; (3) building strong and lasting collaborations with outside partners; (4) working with parents to enhance their decision-making roles; (5) designing and implementing formative evaluation tools to measure the programs' progress as they mature; and (6) providing staff from the magnet schools an opportunity to disseminate and share lessons learned from magnet implementation. These capacity-building activities, which are described throughout this application and are summarized below, will provide a fertile environment in which the successful project components will continue to flourish after federal magnet funds expire.

Curriculum Development. Over the five-year grant period, with the support of MSAP-funded partnerships, school-based Magnet Resource Specialists, and the district-based Curriculum Specialist and Outreach and Technology Specialist, the D8-11 magnet schools will develop and disseminate theme-based curricular materials and course sequences for use by classroom teachers,

cluster and specialty teachers, and staff working in extended-day and extended-year programs, thereby increasing the schools' capacity to meet current and emerging student instructional needs. These curricular products, which will be developed by each school over the course of the project, will contain standards-based goals and objectives, activities, resources, and assessments that are tied to each school's magnet theme and will serve as an important vehicle for sustaining the magnet programs beyond the funding cycle.

Professional Development and Support for Teachers. The comprehensive PD initiatives will enable staff at each of the magnet schools to develop and implement evidence-based instructional strategies that will transform their classrooms into innovative and effective learning environments. The NYCDOE Office of Curriculum, Instruction and Professional Learning has a wide range of PD opportunities including a STEM department that offers STEM themed PD series' during summer and other school breaks. The MSAP Project Director and Site Coordinators will arrange opportunities for teachers to share the skills and knowledge learned through PD with their colleagues in workshops, inter-visitations, cross-school conferences and meetings, and study groups, as well as through digital media. Additionally, the Magnet Site Coordinators and Resource Specialists at each school will use established structures for planning and collaboration with key staff within the school—such as inquiry teams, professional learning communities (PLCs), and grade-level teams—to support effective implementation of the magnet program.

Enhanced Decision-Making Roles for Parents. D8-11 is strongly committed to developing collaborative and supportive relationships with parents, and that commitment extends to the magnet program. As part of the planning phase for this proposal, each of the D8-11 magnet schools conducted outreach to its parent communities to disseminate information and mobilize support for the program (evidence of parental support for the magnet programs is documented in the parent

sign-off sheets that each school has collected and is summarized in Table 12).

The proposed magnet schools will establish school-based magnet parent advisory committees to ensure that parents have an opportunity to play a meaningful role in magnet planning. Additionally, each school's Site Coordinator will facilitate monthly meetings with the school-based Parent Coordinator in an effort to strengthen the school's capacity to support and empower parents. Finally, as discussed in the individual magnet program descriptions, each magnet school will provide opportunities for parents to expand their role through participation in a wide variety of magnet-related parent involvement events.

Continuous Improvement Process. D8-11 will implement a process of continuous improvement that incorporates real-time data, feedback from various stakeholders, and rigorous research to test, refine, and scale the models and practices that define the magnet programs. Continuous improvement will be achieved through an iterative cycle that includes six steps: goal setting, testing models of innovation, timely and regular feedback, monitoring and measuring quality of inputs, information sharing, and opportunities for ongoing corrections. The cycle will be repeated continuously throughout and beyond the grant term to spur ongoing innovation.

The Project Director will work closely with the four Site Coordinators and other magnet staff and in conjunction with teachers and administrators to complete continuous improvement of activities. For example, the Magnet Resource Specialist will meet regularly with teachers to obtain formative feedback on their experiences with the magnet program. The school-based magnet team, in collaboration with school administrators, will use teacher feedback as well as feedback obtained from other key stakeholder groups (e.g., parents, students, and program partners) to identify ineffective practices and implementation challenges and inform midcourse corrections to program activities. Feedback on implementation best practices will be shared among and within the four

schools through cross-school magnet meetings, school-based PLCs, and other collaborative forums.

Program evaluation is a key mechanism supporting the continuous improvement process. As discussed in the Quality of Project Evaluation (QPE), the evaluation is to be carried out jointly by the project staff and the project evaluator and is designed to gather formative and summative findings on program implementation and outcomes in order to ensure that project activities are being carried out as planned and to address challenges or issues as they arise.

Dissemination Strategies. D8-11 will use a wide variety of strategies to disseminate lessons learned and best practices in magnet implementation. These activities will use well-established networks at the district level as well as national and virtual venues to support institutionalization and contribute to the knowledge base of effective magnet practices.

The monthly meetings of school-based magnet staff convened by the Project Director will provide an invaluable opportunity for the magnet schools to discuss implementation experiences, challenges, and effective practices with their peers and to share the curricular products that have been developed. In addition, the Project Director and other district- and school-based magnet staff will actively participate in USDOE and MSA-sponsored conferences throughout the five-year project period to learn about the experiences of magnet districts and schools across the nation and to share best magnet practices from D8-11 in these venues.

Finally, the District will capitalize on its information technology structure to support the project's dissemination goals. The D8-11 magnet schools will use the various virtual collaboration vehicles that have been established or endorsed by the NYCDOE, including Ning and Moodle, to support and enhance schoolwide PD about theme integration. A magnet website will be developed as the overarching umbrella to unite the four schools in their endeavors and will facilitate

communication and information sharing between the schools, parents, and the larger community. The website will include information about each school as well as student- and teacher-generated materials, such as a blogging site for sharing information and for teacher and student collaborations; lesson plans and student work products, including multimedia projects; PD opportunities and resources; links to specific subject-related resources; links to the websites of all partners involved in the grant; and student-created public service announcements, advertisements, and posters that show the types of activities and partnerships that each magnet school has cultivated.

Recognizing the potential for increasing the diversity of its public schools, the NYCDOE has successfully pursued a number of magnet grants that provided seed funding for schools to convert into whole-school magnets. These are some examples of schools that are sustaining their magnet programs:

- **PS 100—The Magnet School of Multimedia and Communication in D21** was funded in 2004 and has a functioning broadcast studio where students produce shows and broadcasts. It continues to implement the thematic curriculum, which includes courses in journalism and video making.
- **PS 119—The Magnet School for Global and Ethical Studies in D22** was funded in 2007 and has sustained its magnet program for almost 10 years. The program culminates each year in an annual schoolwide Magnet Expo showcasing students' theme-based project work. Over the years, the annual expo has been attended by the Chancellor of NYCDOE, the D22 Superintendent, District and field office support staff, parents, community members, and other D22 schools.
- **PS 257—The Magnet School for the Performing Arts in D14** was funded in 2010 and

continues to implement a schoolwide magnet program. The students at this school perform at various public venues, and the school band has been featured in several publications.

- **MS 421—West Prep Academy in D3** is a middle school with the theme Youth Voice, Youth Media. The school, which received MSAP funding in 2010, continues to implement its thematic curriculum. The school has received grants from iZone and the Center for Arts Education to support sustainability of their magnet program, and in 2016, it implemented a new PBL class titled Become a Recording Artist where students take on the role of a music producer.
- **PS 208—Alain L Locke Magnet School for Environmental Stewardship in D3** has sustained its environmental stewardship theme since 2010. It still has a working hydroponics lab and indoor gardening program. After the magnet funding ended, a delegation of 20 educators from Holon, Israel, visited the school in order to learn about the magnet program to help support development of a similar program in their own school district. The following year, the Principal of PS 208 was invited to Holon to serve as keynote speaker at an educational conference the delegation was hosting and was invited to serve as an advisor to the District as they worked to implement systemic and thematic changes in their schools.

Multiyear Financial and Operating Models to Sustain Magnet Programs

In June 2016, the NYCDOE's Division of Finance issued the *Fair Student Funding & School Budget Resource Guide*, which is designed to enable Principals and their SLTs to closely align their schools' fiscal initiatives to the principles set forth by the Schools Chancellor. The Guide presents the Fair Student Funding formula, which includes four categories: foundation (a fixed sum of $225,000 for all schools); grade weights (based on student grade levels); needs weights (based on student needs); and enhanced weights for students in "portfolio" high schools. These

weights reflect objective criteria that can be applied evenly across all NYC schools, support schools with students with the greatest needs, and provide transparency in the levels of funding available to all schools.

Currently, every school creates its own educational strategies within a context of accountability for the performance of its students. The school's budget reflects decisions of the SLT (composed of administrators, teachers, and parents) within the context of state and federal mandates, collective bargaining agreements, and the Chancellor's initiatives. Performance-driven budgeting (PDB) decentralizes the fiscal decision-making process by enabling Principals, teachers, other staff, parents, and community members to implement the goals outlined in their schools' Comprehensive Education Plans. Galaxy 2000, a software tool, was developed from the experiences and recommendations of school and district personnel to carry out the principles of PDB.

Once the MSAP grant has expired, schools have the flexibility under PDB to absorb positions and other expenditures that are critical to sustaining the magnet program, should this be the decision of the SLT. It is our goal that the MSAP grant will serve as a lever for the strategic realignment of fiscal, technological, and human resources within each school community such that magnet programming can be easily sustained at the conclusion of the funding cycle.

As detailed in the Management Plan, each school is planning to commit significant in-kind personnel and other-than-personnel resources to promote the development of whole-school magnet programs. Funding for these come from federal, state, and local funding sources that typically have been awarded on an annual basis and may be expected to continue. However, it should be noted that in some cases, federal, state, and local funds for education programs are not guaranteed from year to year and are subject to discontinuation or reductions. Provided in Table 13 is an overview of the multiple funding streams coming from city, state, and federal sources into the four proposed

magnet schools and how these resources are aligned to the MSAP objectives.

Table 13. Sources of Funding for D8-11 Magnet Schools

Funding Source	Purpose	Alignment to MSAP Objectives
Attendance Improvement Drop-out Prevention (NYSED)	To improve school attendance rates and reduce dropout rates	Student Achievement
IDEA (USDOE)	To ensure that students with disabilities receive the early intervention, special education, and related services that they are entitled to	Equity of Access
Title I (USDOE)	To ensure that all children have a fair, equal, and significant opportunity to obtain a high-quality education and to reach, at a minimum, proficiency on state academic achievement standards and assessments	Equity of Access, Student Achievement, Building Capacity
Title IIA, B (USDOE, NYSED)	To improve teacher quality through PD	Building Capacity
Title III (USDOE)	To expand the capacity of schools to serve low-income students by providing funds to improve and strengthen their academic quality, institutional management, and fiscal stability	Equity of Access, Building Capacity
State Legislative Grants	To expand school and classroom libraries and provide instructional materials	Student Achievement
Extended School Day School Violence Prevention and 21st Century Community Learnings Centers (NYSED)	To provide academic enrichment opportunities during non-school hours for children, particularly students who attend high-poverty and low-performing schools	Equity of Access, Student Achievement

(3) The Secretary considers the extent to which the training or professional development services to be provided by the proposed project are of sufficient quality, intensity, and duration to lead to improvements in practice among the recipients of those services.

Research on effective teacher PD suggests that training should be intensive, supportive, engaging, content-specific, and aligned with school improvement goals. Intensive PD is often defined as ongoing and for duration of at least 14 hours (Yoon, Garet, Birman, & Jacobson, 2007). A meta-analysis of nine experimental studies of teacher PD found that the duration of a program was positively associated with changes in teacher practice and student learning (Darling-Hammond, Wei, Andree, Richardson, & Orphanos, 2009).

PD strategies that provide job-embedded support through coaching are highly effective in providing opportunities for teachers to implement and master new skills (Knight & Cornet, 2007; Truesdale, 2003). Furthermore, expert demonstration of a new skill through modeling has proven to be an effective technique for teacher learning (Desimone, Porter, Garet, & Yoon, 2002; Snow-Renner & Lauer, 2005). It is equally important that teacher PD be highly engaging and applicable to instruction—for example, by employing varied approaches such as reading, role playing, classroom observations, and discussions—to help teachers see and make direct connections to their own teaching practices (Garet, Porter, Desimone, Birman, & Yoon, 2001; Yoon, Garet, Birman, & Jacobson, 2007).

Research also suggests that teachers benefit more from PD that is directly tied to discipline-specific concepts that they can easily apply in their own classrooms (Darling-Hammond, Wei, Andree, Richardson, & Orphanos, 2009), and that discipline-specific PD has been shown to have strong positive impacts on student learning (Blank, de las Alas, & Smith, 2007). Lastly, PD has been shown to be more effective in improving teachers' knowledge and skills when it is integrated

into a wider set of opportunities for teacher learning and development (Garet, Porter, Desimone, Birman, & Yoon, 2001).

NYC Commitment to Talent Development

As part of NYC's strong commitment to developing teacher talent, the city is implementing *Advance*, a system of teacher evaluation and development. The system was designed to provide teachers with both accurate feedback on their performance and the support necessary to improve their practice, with the goal of improving student outcomes to ensure all students graduate college- and career-ready. Though *Advance* was formally established on June 1, 2013, in alignment with the NYS Education Department's education law 3012-c on teacher and school leader performance reviews, its design was informed by three years of pilot work in NYC's schools. *Advance* uses multiple measures to provide teachers, school leaders, and families with a more accurate understanding of teacher effectiveness than ever before. Through *Advance*, all teachers receive an assessment of their practice using Charlotte Danielson's 2013 Framework for Teaching; multiple classroom observations by their Principal or other administrator; review of up to eight artifacts or documents demonstrating their efforts to plan and prepare instruction and participate in their professional community; feedback on all observations and artifacts of teacher practice; and, for teachers in grades 3–12, student feedback via the Advance Student Survey.

School support systems in place throughout the NYCDOE will be used for PD to increase student achievement. Schools will receive PD and transactional supports from their Borough Field Support Centers (BFSCs) across a number of areas, including the following:

- teaching and learning—instructional practices, academic policy
- business services—budget, human resources procurement, payroll
- operations—school foods, transportation, facilities

- student services—guidance, school climate, crisis/safety, health and wellness
- special education—instructional practices, implementation of Shared Path to Success
- ELLs—instructional practices, compliance, program development

Comprehensive Approach to Magnet School Professional Development

The proposed D8-11 magnet schools will need to provide a concentrated program of PD for teachers and school leaders to prepare them for effectively meeting the student achievement needs of their magnet students. Research studies have underscored the fact that, due to the array of educational, social, and cultural challenges confronting magnet schools, PD is of paramount importance (Ben-Ari & Strier, 2010). In fact, studies have found that student diversity often comes as a challenge for the teaching workforce, which is largely women and White. Many teachers do not have experience working or living in diverse environments, which makes it difficult for them to help prepare students for working with diverse groups (Robinson & Clardy, 2011).

NYCDOE and D8-11 are committed to identifying effective and innovative methods of delivering customized PD and support services to staff in order to better enable them to develop and implement high-quality instructional programs. As outlined in the performance measures in the QPE, each school will provide 50 hours or more of magnet-related PD to at least 25% of pedagogical staff in Year 1 of the grant, 50% in Year 2, 100% by year three and all new teachers in years four and five.

District-level Magnet School Professional Development Initiatives

The PD plan for the D8-11 magnet initiative will provide experiences that are of sufficient quality, intensity, and duration to lead to improvements in teacher practice. In order to support the transformation of teaching and learning across the four magnet schools, D8-11 will provide intensive PD to school leaders, MSAP-funded staff, classroom teachers, and other support staff in

each school.

The training will focus on evidence-based instructional strategies that will equip teachers with knowledge and skills to conduct inquiry-based instruction, develop and implement interdisciplinary units, and integrate problem-based learning into learner-centered environments. As described in CPP2, Looking at Student Work involves engaging teachers in structured and collaborative analysis of their own students' work to discuss evidence of student understanding of the unit. There is strong evidence supporting the impact of this practice on student academic achievement. It is a key component in the PD that will be provided by the BIE at each of the four magnet schools over the five-year grant period. CTSC's *Innovating Instruction: Design, Situate, Lead* model includes training in Systemic Transformation of Inquiry Learning Environments (STILE) for STEM which will also be implemented across the four schools and throughout the five-year grant period. There are high-quality research findings that STILE is likely to improve student outcomes (see citation 2 in CPP 2).

The magnet grant will enable D8-11 to provide intensive, on-site support from the MSAP-funded Project Director, Curriculum Specialist, Outreach and Technology Coordinator, and the school-based Resource Specialists to reinforce the PD being provided by outside partners so that the practices and strategies become institutionalized in each building by the end of the five-year grant. A summary of these district-level PD initiatives follows.

The Buck Institute for Education. Project-based learning is an innovative approach to education that focuses on creating student-centered learning that supports "deeper learning through active exploration of real-world problems and challenges" (Pellegrino & Hilton, 2012). While there is no firm definition of PBL, researchers and practitioners agree upon a set of essential components of a PBL approach. First, PBL units or lessons should be motivated by a driving

question or problem to be solved. Second, PBL curricula target significant learning goals (Krajcik & Shin, 2014), and last, PBL units should use hands-on experiences to promote learning (Condliffe, 2015) and be conducted over a period of time in order for students to delve deeply into research (Parker, et al., 2013). Researchers agree that if PBL is designed effectively, it produces significant benefits to students' learning, including promoting construction of knowledge, cultivating student engagement, providing scaffolding for student learning, encouraging student choice, and supporting student collaboration (Condliffe, 2015).

The BIE supports schools in implementing effective PBL instructional practices, training and coaching more than 10,000 teachers in the U.S. and abroad each year. BIE will provide the four D8-11 schools with rigorous PD, in the form of training and coaching, on how to design and implement PBL activities that engage and motivate students. BIE will help bring coherence to PBL practices and support the creation of schoolwide processes and structures to support PBL and STEM education.

Education Closet. Through a district partnership with Education Closet, the four D8-11 schools will receive intensive training and support for integrating STEAM into the core curriculum. Education Closet provides consulting services to schools and school districts in developing, implementing, and assessing STEAM approaches to education. These services are provided through their website, EducationCloset.com, as well as through individual consultative services. Education Closet offers hands-on, and practical understandings and applications of research-based approaches to learning via PD and collaborative planning to teachers, schools and districts across the United States. Their PD is focused on increasing student achievement through an educational approach that uses Science, Technology, Engineering, the Arts and Mathematics as access points for guiding student inquiry, dialogue and critical thinking.

For the four proposed magnet schools, Education Closet will provide a three-tiered training model over the course of the grant using STEAM as a core strategy for student success in academic achievement. The three tiers of the model are staff development, implementation, and fostering community connections to create a self-sustaining STEAM model. Over the five years of the grant, Education Closet will provide the schools with in-person, hands-on teacher trainings and workshops focused on building staff capacity to integrate STEAM into the Common Core; co-teaching, job-embedded coaching; curriculum and assessment mapping and lesson writing; strategies for partnering with teaching artists and community members to support STEAM learning; and coaching and supplemental support for teaching teams through a virtual training platform, The Learning Studios. Education Closet will collaborate on an ongoing basis with school and district leaders and magnet specialists to ensure that they are supporting the needs of their staff and will support the schools in cultivating community support and establishing partnerships to support STEAM integration. In the second and third years of the program, the services provided by Education Closet will build upon and reinforce what was provided in the previous years. In the fourth and final years, supports will focus on sustainability and include assistance in shifting the capacity for extension to school leaders and staff.

Center for Technology and School Change at Teachers College. The Center will partner with D8-11 to support transdisciplinary STEM teaching across the four sites through their PD model, *Innovating Instruction: Design, Situate, Lead*©. This approach is based on research findings from over a decade of work with teachers and leaders across pre-K–12 schools and the most recent research regarding how teachers and students learn effectively. As part of this work,

University facilitators will engage in a variety of activities including (1) helping teachers design student centered, authentic learning experiences, (2) embedding PD within individual schools, and

(3) preparing and supporting schools' sustainable change. The model includes interactive, technology-rich, hands-on workshops; collaborative planning sessions; and structured classroom-based work. Facilitators will introduce new technologies within the context of structured design work to support key content-based understandings across the STEM disciplines.

The PD will be tailored to each school's magnet theme; school-based participants will include the Magnet Resource Specialists, as well as representatives from each grade-level team, or teams of teachers identified in collaboration with the Principal. Participants will work alongside the facilitators to design appropriate STEM-based experiences for their students. Participants will explore innovative approaches to project-based learning in STEM and will continue to enrich their own project designs, building on work initiated with other magnet partners, such as BIE.

Unchartered Play. Founded in 2011, Unchartered Play is a Harlem-based STEM sector energy company with a mission of democratizing energy access worldwide. The company develops kinetic-based play products that are able to store clean energy, allowing anything that moves to be turned into a portable power source. In addition to their clean energy work, Unchartered Play has developed a STEM curriculum, *Think Out of Bounds* (TOOB) based on four pillars: (1) inspire through play, (2) teach STEM, (3) create social solutions, and (4) scale impact. Uncharted Play's TOOB curriculum engages students in engineering, collaboration, creative thinking, entrepreneurship, and social innovation via real-world projects while fostering the 21st century learning skills of communication, collaboration, creativity, and critical thinking. To facilitate this work, Unchartered Play engineers and employees provide STEM training to school staff, presentations/workshops to families, residencies in classrooms, and after-school programs for students. The organization works with educators world-wide to encourage creative thinking and social invention through STEM.

Mid-Atlantic Equity Consortium (MAEC). Founded in 1991, the MAEC is dedicated to providing access to high quality education for culturally, linguistically, and economically diverse learners. The mission of the MAEC is to promote equity and excellence in education to achieve social justice, and as the U.S. Department of Education's Equity Assistance Center for Region 1, MAEC works to provide PD to help improve the quality and effectiveness of educators serving diverse students. As part of this work, the MAEC focuses on issues such as the identification and placement of English Learners in supportive and appropriate instructional environments; creating positive and safe schools; increasing participation of girls and students of color in STEM, and addressing disproportionality in discipline. D8-11 will partner with the MAEC to provide PD in the areas of equity related to culturally responsive teaching/leading, addressing the educational needs of English Learners, and increasing family, school and community engagement.

School-Level Professional Development

In addition to participating in the array of district-sponsored PD, each magnet school will implement a coordinated staff development effort for all instructional staff and school leaders to directly support the implementation of the magnet program. The Magnet Resource Specialists will participate in all PD activities so they can then provide in-classroom support to the classroom teachers and other instructional staff in their buildings. School administrators will monitor the impact of training activities on staff knowledge and skills in order to evaluate their effectiveness. Furthermore, teachers will be encouraged to transmit their knowledge to their peers through turnkey training, co-teaching, and modeling activities in order to build staff capacity in these areas in subsequent years. Examples of school-specific PD plans are discussed below.

Several support and professional development initiatives will assist the staff of IS 123 in STEAM-themed curriculum development and implementation. The school will partner with the

Innovative Design for Education Corporation (**IDE**) to assist staff in the development of thematic, project-based curricula which will infuse technology into learning, and create student-centered classrooms. Staff from the **New York Historical Society** will provide social studies teachers with professional development and job-embedded training aligned to interdisciplinary STEAM-themed units of study and science teachers will work with the PBIS curriculum developers at "It's About Time" to create projects aligned to the units of study. The **Teachers College Reading and Writing Project** will support teachers with monthly professional development workshops and job-embedded coaching focused on informational, argumentative and research projects embedded in the interdisciplinary units. Finally, all teachers will work with the **school administration** and **instructional cabinet** to ensure curriculum coherence in the STEAM-themed units of study across all content areas and grade levels.

Professional development at PS 160 will augment the cross-site professional development initiatives offered by the MSAP team. School-specific professional development will focus on a variety of different topics such as theme-based curriculum planning, PBL, integrating technology into the teaching and learning process, STEAM and parent engagement. PD activities will include differentiated study groups, PLCs, and inter-visitations of showcase schools.

In order to create an environment to develop and sustain magnet programming, PS 178 will provide a wide array of professional development opportunities for school staff. In addition to participating in the cross-site professional development initiatives the MSAP team will be offering, PS 178 teachers will participate in professional learning activities in robotics, engineering, computer engineering, and mathematics in collaboration with **Lego Education** and the **NY Hall of Science**. Additionally, professional learning in theatrical script writing and print media will be provided by Story Pirates, and materials from media organizations (e.g., PBS Learning Media,

National Geographic News, The New York Times, and Time for Kids) will be leveraged to support teachers as they learn how to effectively teach article writing.

The goal of staff development at PS 567 is to deepen teacher understanding, integration, and practices in using research-based, interdisciplinary, project-based instructional strategies for the purpose of increasing student engagement and achievement. In addition to participating in the cross-site professional development initiatives the MSAP team will be offering, PS 567 will provide a variety of other professional development opportunities on topics such as defining rigor, analyzing student work, integrating technology to create innovative learning environments, and STEM. Differentiated professional development will be provided via in-house resources (expert teachers) and external resources (e.g., Google consultant). As part of this work, teachers will select topics they are interested in, attend small group meetings, and engage in activities such as sharing of best practices, vertical planning, book clubs, grade-level/content-specific PLCs, and meeting with peer coaches cycles of 4-6 weeks.

Continuous support structures for PD will provide opportunities for our teachers to gain exposure to new concepts from educational experts; however, we also understand that to truly have an impact on teaching and learning, PD needs to be an ongoing, job-embedded process. As such, the magnet initiative includes structures to foster continuous learning through support provided by the MSAP-funded Project Curriculum Specialist and magnet Resource Specialists (whose roles are described in Quality of Management Plan and Quality of Personnel) and through effective use of school-based PLCs. The district-based Project Curriculum Specialist will provide ongoing assistance to the magnet staff across each school to implement PD plans that provide support for classroom teachers. The Magnet Resource Specialists will be responsible for providing the support through coaching, co-teaching, and lesson modeling, as well as identifying instructional resources

and assisting with curriculum development. The Magnet Resource Specialists will also help facilitate conversations in grade-level and subject-level PLCs about implementation of magnet curricula and instructional practices highlighted through magnet staff development. During the PLCs, teachers will share best practices, lessons, and curriculum connections that are inquiry- and problem-based in order to create a collection of resources for teachers. The embedded PD will expand teachers' exposure to concepts provided during training and create a culture that fully supports the transformation of teaching and learning.

With the comprehensive plan for PD, we will expose *all* MSAP-funded pedagogical staff in each of four magnet schools to a minimum of 50 hours of PD in inquiry-based instruction, problem-based learning, and interdisciplinary approaches. As a result, we are confident that teachers and staff will demonstrate increased collaboration in developing and implementing interdisciplinary instructional units of study and improved knowledge, skills, and use of inquiry and problem-based instruction (as outlined in QPE).

(2) The Secretary considers the extent to which the proposed project is supported by strong theory.

The D8-11 magnet initiative is designed with a strong theory of change that is fully aligned with the NYCDOE's instructional goals and frameworks and will serve to advance the schools' missions to increase equity by raising the academic bar for all students and decreasing achievement gaps. **The theory of change states that by transforming teaching and learning in four new whole-school magnet programs through innovative, inquiry-based programs of instruction with a thematic focus, D8-11 will increase equity of access to programs of choice, help improve academic achievement and other outcomes for all students and staff, and reduce MGI in the magnet schools.**

To support the theory of change, D8-11 developed a project logic model for the initiative. This is provided on the following page.

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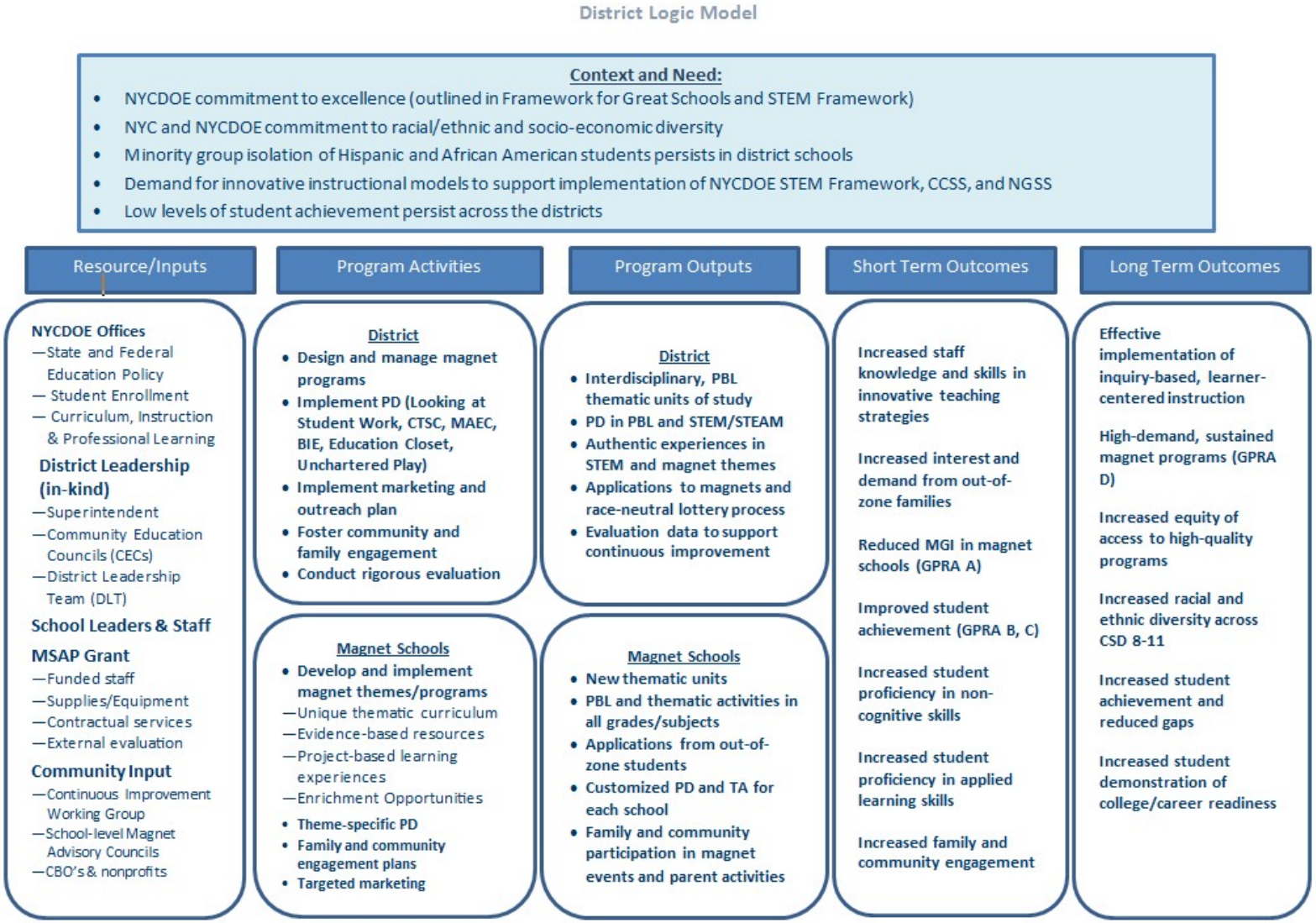

(C) Quality of Management Plan

The Secretary considers the quality of the management plan for the proposed project.

(1) The Secretary considers the adequacy of the management plan to achieve the objectives of the proposed project on time and within budget, including clearly defined responsibilities, timelines, and milestones for accomplishing project tasks

MSAP Project Management Framework

The management plan for the D8-11 MSAP initiative has several core elements that in combination will ensure the success of the project and the attainment of all of the project's objectives and performance measures:

- a leadership and accountability structure in place within the NYCDOE that fosters innovation but holds all instructional leaders in the school system to rigorous performance standards;
- an efficient staffing and management structure for the MSAP initiative within and across D8-11 magnet schools, including reporting and accountability mechanisms to ensure the timely, effective, and efficient implementation of all key MSAP activities;
- a detailed project implementation plan to achieve the project's objectives and performance measures, supported by a reasonable and cost-effective budget and leveraged in-kind resources designed to promote capacity building and sustainability of the project beyond the federal funding period; and
- a continuous improvement process that engages MSAP stakeholders in ongoing feedback, assessment, and refinement of project activities.

A detailed discussion of the four pillars of the project management framework is provided in in the following paragraphs.

Leadership and Accountability Structure

D8-11 are two of the 32 community school districts under the aegis of the NYCDOE. Each is headed by a Community Superintendent who performs the statutory duties for the schools within the District's geographic jurisdiction, including appointing, supervising, and rating Principals and approving school budgets. The Superintendent also serves as the liaison to the Community Education Councils (CECs), which replaced the Community School Boards in July 2003. The function of the CEC is primarily advisory in nature, providing critical input on what the community views as priorities and ensuring that parents have a voice in how the NYC public schools are run.

In their leadership and supervisory roles for the two districts that are partnering on this application, the Superintendents will provide guidance and support to the MSAP initiative and will make available to the Magnet Project Director and the magnet schools under their jurisdiction the support of their teams. These include the following constellation of personnel:

- The Principal Leadership Facilitator serves as the Superintendent's primary designee.
- The Field Support Liaison acts as an intermediary between the Superintendent's office and the Borough Field Support Center (BFSC). The Field Support Liaison supports schools with any concerns regarding BFSC services and provides guidance on streamlining supports.
- The Family Support Coordinator serves as the point of contact for family concerns.
- The Borough and District Family Advocate works closely with the school community, including families, School Leadership Teams, and Parent Associations.
- The Teacher Development and Evaluation Coach ensures that school leaders have the information and support they need to meet the expectations of the Framework for Great Schools through effective implementation of *Advance* and CCLS.

- The Director of School Renewal supervises the implementation of the School Renewal Plan and coordination of supports in districts with Renewal Schools.
- The District Director of Early Childhood Education supports and manages the district-wide implementation of Pre-K programs in district schools. Early Childhood Directors report directly to District Superintendents, and provide direct oversight of district Pre-K centers, where applicable.

The MSAP Project Director will work under the direct supervision of the Senior Advisor to the Chancellor within the NYCDOE Office of State and Federal Education Policy to oversee the programmatic and administrative management of the magnet initiative. The Office of State and Federal Education Policy is housed within the Office of Senior Deputy Chancellor Dorita Gibson, who oversees the Superintendents and the implementation of various citywide initiatives, including the Equity and Access Initiatives and Policy. The NYCDOE Office of Enrollment, under the Deputy Chancellor for Strategy and Policy, will interface with the MSAP Project Director in matters of student selection and placement. In addition, the MSAP Director will also interface with the NYCDOE Office of Curriculum, Instruction and Professional Learning on a variety of PD and STEM initiatives.

Project Staffing and Management Structure

Summarized in Table 14 is the proposed staffing structure for the D8-11 MSAP initiative, followed by a detailed description of the roles and responsibilities of these key staff. We believe that this staffing plan provides the optimal infrastructure at both the district and school levels to support the attainment of the MSAP initiative's ambitious objectives and outcomes.

Table 14. MSAP-Funded Staff

Personnel	Number	Level of Effort
District-Level Staffing		
Project Director	1	1.0 FTE
Project Curriculum Specialist	1	1.0 FTE
Project Outreach and Technology Coordinator	1	1.0 FTE
Project Secretary	.4	0.4 FTE
School-Based Staffing		
Magnet Site Coordinators	4	1.0 FTE
Resource Specialists	4	1.0 FTE

District-Level Staffing. The MSAP Project Director will work directly with the magnet staff and planning teams at each school to ensure that the magnet programs are developed and implemented in alignment with the purposes of the MSAP statute and the approved grant application and that they are using best practices that will ensure that the goals and performance measures of the MSAP initiative are met. In this role, the duties of the MSAP Project Director will include the following:

- recruiting, hiring, and supervising the district magnet staff;
- coordinating regular meetings with magnet school staff and collaborating partners to disseminate pertinent information regarding MSAP guidelines and build a professional support network among school-based staff with similar responsibilities and interests;

☐ providing workshops and organizing conferences for school and district leaders, BFSC representatives, and teachers on the latest evidence-based practices related to NYS P-12 CCLS, curriculum mapping, technology and arts integration, PBL, cultural competence, and other strategies being piloted by the magnet school programs;

☐ developing cohorts of teacher leaders, including recruitment teams and curriculum design teams, to ensure the sustainability of the magnet programs well beyond the funding period;

☐ coordinating district-wide and school-based staff training activities, including those facilitated by outside agencies;

☐ providing technical assistance to magnet school leadership on all outreach and recruitment efforts, including organizing multimedia advertising campaigns, developing promotional materials (e.g., brochures, press releases), and planning events (e.g., open houses, school tours);

☐ monitoring the applicant pool and enrollment data for the magnet and feeder schools;

- editing district-wide magnet publications, collaborating on the magnet website, and using social media outlets to support the District's marketing efforts;
- developing positive community support for the District's magnet programs through public presentations at widely advertised parent workshops, CEC meetings, and other community forums, and supporting the school-based Parent Coordinators in their efforts to increase parent involvement;

☐ serving as the primary liaison to the USDOE MSAP Program Officer and ensuring compliance with all requirements laid out by the USDOE and the Office for Civil Rights;

☐ monitoring all project expenditures and providing school staff with technical assistance in meeting fiscal and budgetary guidelines;

- providing guidance and support to the school-level Magnet Advisory Councils (MACs; described in Section 2);
- overseeing a rigorous and ongoing process of continuous improvement, which will entail convening regular meetings with magnet Principals, parents, teachers, students, and project partners to solicit and share feedback on program activities; and
- serving as a liaison to the project evaluator, assisting schools in the collection of required program data and documentation; providing feedback to the evaluator on the evaluation design, instrument development activities, and data collection procedures; preparing required reports; and disseminating results to key stakeholders.

The MSAP grant will be used to support a full-time **MSAP Curriculum Specialist** who will work under the direction of the Project Director. The Curriculum Specialist will be responsible for working with school teams to facilitate theme implementation in each magnet program and ensure that all magnet curricula are fully aligned with NYS P-12 CCLS. In this role, the Curriculum Specialist will perform the following responsibilities:

- collaborate with the schools' curriculum and PD teams on the development and alignment of new magnet theme curricula and train staff in their use;
- serve as a liaison with outside consultants providing on-site training for school staff;
- create and maintain partnerships with CBOs and other agencies participating in the project and offering services to families;
- schedule, develop, and participate in PD activities in collaboration with the Magnet Resource Specialists;

- facilitate program development activities related to the magnet themes, innovative instructional strategies, standards alignment, and program implementation and adjustment; and
- facilitate mapping theme integration and curriculum development activities.

The MSAP **Outreach and Technology Coordinator** will be responsible for planning, coordinating, and implementing a comprehensive magnet outreach program using technology and multimedia resources. This staff member will also support technology integration at the magnet schools, engage in PD and training activities that incorporate research-based instructional practices and new technology tools into the magnet program. Additionally, the Outreach and Technology Coordinator will work with the Project Director, Curriculum Specialist, school teams, MACs, and others to enhance the effectiveness and impact of the school-based magnet programs as well as the initiative as a whole. The specific roles and responsibilities of the Outreach and Technology Coordinator are:

- developing magnet materials, products, and technology tools such as websites, flyers, brochures, banners, advertisements, and social media items for outreach and recruitment;
- collaborating with the Project Director to develop, implement, and monitor a plan for program promotion and outreach and with the Site Coordinators on school-specific plans;
- participating in local, regional, and national conferences to identify best practices in magnet school promotion and the use of instructional technology to support magnet program implementation;
- providing PD and coaching to magnet school staff that results in increased capacity to infuse technology tools, applications, and resources into the thematic curricula and to foster communication and collaboration among schools, parents, and community partners; and

- assisting the Project Director, Curriculum Specialist, and other district- and school-based staff with other aspects of the magnet program, including documentation, evaluation, and compliance monitoring.

Finally, the part-time **MSAP Project Secretary** will support the Project Director on projects related to recruitment, student selection, and preparation of MSAP budgets. The Secretary will maintain all administrative and data files to support program implementation, fiscal monitoring, and the program evaluation. The Secretary will be responsible for communicating with program stakeholders, including families, external partners, and the USDOE, and for assisting the Project Director in scheduling and convening project staff meetings, staff development sessions, and marketing events.

School-Level Staffing. The **magnet school Principals** will be responsible for overseeing the implementation of the magnet programs in their buildings and ensuring that the magnet school planning teams, the SLTs, and the MACs communicate regularly. They will also supervise all teaching staff working either directly or indirectly on magnet-related programs and activities, including the Site Coordinators and Resource Specialists, whose responsibilities are described later in this section, during and beyond the regular school day and year.

At each school, the magnet grant will pay for the salary of a **full-time Magnet Site Coordinator**, who will have major responsibility for all administrative aspects of the magnet program, including budget management and data collection activities, and play a lead role in school-based outreach and recruitment and family and community engagement activities. The Site Coordinator will be responsible for sharing information about the magnet program with members of the school community through the development and distribution of magnet program brochures

and other outreach materials, speaking with parents and community members, and fostering partnerships to support the program.

In addition, the magnet grant will pay for the salary of one **full-time Resource Specialist** at each school, who will have major responsibility for planning, implementing, and refining the magnet instructional program and coordinating all school-based, magnet-related PD initiatives. Although their roles will be customized to the curriculum and instructional needs at each magnet school, in general, the Resource Specialists will be responsible for the following activities:

- working with regular classroom teachers to develop or modify magnet theme-related enrichment materials;
- working with the MSAP Curriculum Specialist to coordinate development of magnet program curricular units and materials;
- assisting the Project Director in providing the teacher training necessary to implement the newly created curricular materials;
- designing and providing theme-based instruction;
- participating in the school's magnet planning committee and MAC;
- meeting regularly with the Project Director to coordinate curriculum development efforts; and
- participating in staff development workshops specific to their relevant subject areas and in magnet-related parent involvement activities.

Throughout the five-year grant, the Project Director will convene group meetings with the Site Coordinators and Resource Specialists from the four schools on a monthly basis. These meetings will be held on a rotating basis at the various magnet schools, which will give staff from across the magnet schools an opportunity to experience their colleagues' programs firsthand. Meeting

topics will include, for example, effective strategies for outreach and recruitment, theme-based curriculum development and implementation, resources for PD, successes and challenges of working with outside partners, strategies for engaging hard-to-reach and non-English-speaking parents, and evaluation activities and findings. At each meeting, the Site Coordinators will provide an update of their schools' progress in implementing the various components of the program, share effective strategies, and brainstorm solutions to implementation challenges encountered. Other meeting participants will include the local evaluator, magnet school Principals, and staff members from the BFSCs, as needed.

At the school level, in addition to the Principals, D8-11 will provide the services of classroom teachers, professional support staff, parent coordinators, and paraprofessionals **at no cost to the grant** to support implementation.

- Classroom teachers will be responsible for providing magnet school students with theme-based instruction, and the out-of-classroom teachers, such as cluster teachers and school library media specialists, will provide direct instruction to students in the areas of the magnet themes at their schools.
- To ensure that students and their families are able to fully participate in and benefit from the magnet school programs, school-based support staff (e.g., guidance counselors, social workers) will offer access to a wide range of social services designed to meet students' health, social, and emotional needs.
- Parent coordinators will play a key role in implementing parent outreach activities and representing the needs and interests of parents on the schools' magnet planning teams and MACs.
- Paraprofessionals will be responsible for assisting the classroom teachers in providing

magnet school students with theme-based instruction.

In addition to these personnel resources, each school has existing equipment, supplies, and facilities that will be leveraged to support the implementation of the magnet programs in their buildings. Information about these resources was provided in the individual school descriptions in the QPD section.

Project Implementation Plan

D8-11 seeks to achieve four overarching project-level objectives with the MSAP initiative. These objectives are directly aligned with the purposes of the MSAP and the Government Performance and Results Act (GPRA) measures that have been established by the USDOE for the program. This section lists the four grant objectives (and how each is aligned with the program purposes) along with a summary of the magnet program activities that will be carried out (a detailed description of the activities was provided in the Desegregation and QPD sections). Following this discussion is a detailed project implementation timeline that includes key activities, responsible parties, and target dates by project objective.

Project Objective 1: Reduce MGI among Hispanic or African American students in the proposed magnet schools. This objective is aligned with the purpose of the MSAP to support the *elimination, reduction, or prevention of minority group isolation (MGI) in elementary and secondary schools with substantial proportions of minority students*. All four proposed magnet schools meet the NYCDOE's definition of MGI. Two of the D8-11 schools (PS 567 and IS 123) have MGI that will be reduced among Hispanic students, and in two schools (PS 160 and PS 178) MGI will be reduced among African American students. (Specific enrollment targets for each school for each year of the project are provided in enrollment tables Table 3 in the attachments, and are summarized in the QPE section.) The MSAP grant will help reduce the isolation of these

racial groups by attracting a new and more racially diverse population of students to the schools through the implementation of a multifaceted approach:

- creation of unique magnet themes that will be attractive to students of diverse racial, ethnic, and socioeconomic backgrounds and academic needs and interests *and* that are not available in other public schools in the District;
- a strategic, targeted, and aggressive outreach and recruitment plan to be carried out by magnet program staff and by each magnet school in its local and surrounding neighborhoods, with a focus on feeder schools (both horizontal and vertical) that have greater diversity than the proposed magnet sites (see Table 4 in the attachments and the discussion of outreach and recruitment in the Desegregation section); and
- a race-neutral student selection process that does not take any academic criteria into consideration in order to ensure equitable access for all students to the magnet programs (see narrative in response to CPP 3 and Table 5 in the attachments).

Project Objective 2: Ensure that all students attending the magnet schools meet challenging academic standards and are on track to be college- and career-ready. Objective 2 supports the MSAP purpose for the *development and implementation of magnet school programs that will assist local educational agencies (LEAs) in achieving systemic reforms* and *providing all students the opportunity to meet challenging state academic content and achievement standards.*

The four proposed magnet schools have not yet been successful in helping all students meet state learning standards. As of spring 2016, in each of these schools, approximately one third or less of students met or exceeded the state learning standards in ELA and math. Additionally, the schools had ELA and math proficiency rates lower than the district averages in almost all cases.

The magnet programs will provide new opportunities for all students to meet and exceed the

learning standards by providing a rigorous and enriched theme-based magnet curriculum that will be integrated across core subject areas. The magnet curricula are designed to support, deepen, and expand the curricular frameworks and initiatives that have been put into place citywide (described in the QPD) and will be fully aligned with NYS P-12 CCLS. In addition, plans for the D8-11 magnet programs will supplement the instructional programs at the schools by incorporating innovative, research-based instructional approaches, and an evidence-based approach to PD (see CPP 2) to help teachers better address the learning needs of *all* students, including students with special needs, such as ELLs and students with disabilities.

Project Objective 3: Ensure that all students attending the magnet schools benefit from the magnet's educational offerings and have equal opportunities to gain magnet theme-specific value-added skills and knowledge. This objective aligns with two purposes of the MSAP: to *ensure that all students enrolled in magnet school programs have equitable access to high-quality education that will enable them to succeed academically and continue with postsecondary education or productive employment* and to *provide courses of instruction that will substantially strengthen the knowledge of academic subjects and the attainment of tangible and marketable career, technological, and professional skills.*

The magnet schools will provide whole-school programs that will expose *all* students to theme-based curriculum and enrichment opportunities. The magnet planning teams understand that the needs and interests of students can vary drastically depending upon the opportunities and experiences they have been awarded prior to enrolling in the magnet schools. Therefore, the programs will align with other services in the schools and across the two Districts to address the needs of students, including learning, language, economic, behavioral, and other needs (see Section A3 for a discussion of programs and services to ensure equal access and treatment). The

instructional staff who provide services to students with disabilities and ELLs at the proposed magnets will participate in magnet curriculum development and professional development to ensure that instructional units and materials are designed to meet the learning needs of all students.

Furthermore, through a wide array of district- and school-based partnerships, the magnet program designs incorporate opportunities for students to go beyond the walls of their schools and boundaries of their communities to experience the real-world applications of what they are exploring in school (see the QPD). These enrichment activities, which will be scheduled as part of the regular school day, as well as in out-of-school-time programs (including after school and during weekends and summers), will help enhance students' content knowledge, build their repertoire of 21st-century skills (e.g., communication, collaboration, persistence, digital literacy), and serve to close the opportunity gap that exists between high-poverty, minority group–isolated schools and those serving more advantaged peers.

Project Objective 4: Build the capacity within the magnet schools to provide rigorous, theme-based instructional programs that will help promote choice and diversity in the D8-11 schools. Objective 4 supports two purposes of the MSAP: *improving the capacity of LEAs, including through PD, to continue operating magnet schools at high performance after federal funding for the magnet schools is terminated* and *encouraging the development and design of innovative educational methods and practices that promote diversity and increase choices in public schools.*

D8-11 has incorporated several mechanisms into the design of each magnet school program to increase the capacity of the school staff and community to implement high-quality magnet programs and to sustain them after the federal funding ends. D8-11 realizes that the MSAP grant provides seed money to develop magnet programs and that these mechanisms must be developed

and implemented from Day 1 of the grant in order to prepare the schools with the resources and knowledge to implement and expand the programs beyond the grant period. By creating sustainable magnet programs, D8-11 will increase choice and promote diversity for all students.

The NYCDOE MSAP planning team, in collaboration with the proposed magnet schools, has developed a strong plan of professional and curriculum development to enhance the knowledge and skills of all instructional staff and school leaders in theme-based topics and evidence-based instructional approaches and to develop rigorous magnet curricula and lessons that will be provided to all students (see the QPD for detailed descriptions of curriculum and PD activities and CPP 2 for the evidence-based approaches to PD). District-level efforts to support curriculum and PD will include annual curriculum planning institutes, monthly study groups centered around key research of relevance to the focus of the magnet schools, and ongoing venues to facilitate knowledge sharing across the participating schools. School-level partnerships with outside vendors, including institutions of higher education, arts and cultural organizations, local businesses, and other CBOs, will offer training and technical assistance in the specific themes and related instructional strategies being delivered by each school. Monday and Tuesday contracted PD time can be used for PLCs. PLCs can consist of data inquiry teams, book clubs for targeted academic topics, action research teams for targeted areas of focus, peer observation teams, and inter-visitation teams focusing on tuning protocols and various methods to observe and assess teacher practice, student work, etc.

Continuous Improvement Process

As described in the QPD, the D8-11 continuous improvement for the MSAP grant will be implemented as a six-step process around a framework of Plan, Do, Check, Act. This framework was developed by W. Edwards Deming as a business model that is frequently applied in education.

The six parts of D8-11's continuous improvement process are (1) goal setting, (2) implementation and testing of program activities, (3) timely and regular feedback, (4) measuring and monitoring quality of investments, (5) strategies to publicly share information, and (6) opportunities for ongoing corrections.

The MSAP Project Director will convene a Continuous Improvement Working Group (CIWG) comprising members of the district magnet team, representatives from the magnet schools (including funded and non-funded staff), and the external evaluation team to guide and modify the process for continuous improvement as the project develops. The Continuous Improvement Working Group will provide high-level direction to ensure the successful implementation of the grant, including the process of continuous improvement, and will serve as a sounding board for ideas and solutions to critical issues that arise through implementation. As discussed in the section that follows, the magnet program participants—students, families, teachers, and school leaders—will play an integral and active role in the continuous improvement process to ensure that it provides meaningful and timely information. Furthermore, the project's external evaluator will conduct a comprehensive formative and summative evaluation of the initiative to provide external feedback on the implementation and effectiveness of program activities (see the QPE).

A timeline showing the key activity benchmarks by project objective, target date, and responsibility center is provided in Table 15.

Magnet Schools Assistance Program (2017-2022)

New York City Community School Districts 8 and 11—Bronx, New York

MSAP Project Implementation Timeline: Key Activities and Benchmarks by Objective

MSAP Objective 1: Reduce Minority Group Isolation						
Key Activities	**YR 1 Benchmarks 10/17–9/18**	**YR 2 Benchmarks 10/18–9/19**	**YR 3 Benchmarks 10/19–9/20**	**YR 4 Benchmarks 10/20–9/21**	**YR 5 Benchmarks 10/21–9/22**	**Responsible Parties***
• Create district-wide marketing and outreach campaign that builds on existing DOE frameworks of communications	• Develop templates for marketing materials (e.g., flyers, brochures) for customization by magnet schools	• Disseminate information on new magnet programs districtwide and build community awareness of and interest in magnet programs				PD, OTC
• Design and conduct school-level targeted and multi-faceted outreach campaign to profile the new magnet themes	• Develop suite of marketing materials (e.g., flyers, brochures) and establish social media presence for the magnet programs (Facebook, Twitter) • Translate marketing materials into languages spoken by the magnet school parent communities • Use new promotional materials in conducting outreach to feeder schools and other venues	• Update and disseminate marketing materials • Continue to build and expand social media presence • Conduct marketing and outreach activities in targeted community locations				SC, OTC, P, D
• Implement a fair, equitable, and race neutral student selection and placement process	• Develop application for new magnets that is aligned with DOE's choice process • Process applications for magnets • Run race-neutral lottery process for the following school year if schools are over-selected	• Process applications for magnets • Run race-neutral lottery process for the following school year if schools are over-selected				PD, S, D

MSAP Objective 2: Improve Students' College and Career Readiness						
Key Activities	**YR 1 Benchmarks 10/17–9/18**	**YR 2 Benchmarks 10/18–9/19**	**YR 3 Benchmarks 10/19–9/20**	**YR 4 Benchmarks 10/20–9/21**	**YR 5 Benchmarks 10/21–9/22**	**Responsible Parties***
• Design, implement, and refine thematic curricula	• Develop 1 interdisciplinary unit focused on inquiry and PBL per grade per school	• Refine Yr 1 unit • Create 1-2 new interdisciplinary units per grade		• Refine Yr 1-3 units • Implement four interdisciplinary units per grade		CS, RS, PP
• Incorporate research- and evidence-based instructional strategies aligned to CCSS, NGSS, and NYC curriculum frameworks	• Pilot implementation of innovative and effective instructional strategies to support the implementation of the magnet themes in at least half of the grades served by the school	• Expand implementation of innovative instructional strategies to all grades served by the school	• Schoolwide implementation of innovative instructional strategies in all classes and grades			CS, OTC, RS, P

MSAP Objective 3: Provide Equal Access to Magnet Program Offerings						
Key Activities	**YR 1 Benchmarks 10/17–9/18**	**YR 2 Benchmarks 10/18–9/19**	**YR 3 Benchmarks 10/19–9/20**	**YR 4 Benchmarks 10/20–9/21**	**YR 5 Benchmarks 10/21–9/22**	**Responsible Parties***
• Provide staff development in cultural competence for magnet teachers	• Finalize scope of services with MAEC to provide PD to all magnet schools in culturally responsive teaching, including baseline needs assessment, and begin training	• Provide ongoing consultation in culturally responsive teaching to magnet school staff in all magnet schools	• Continue to provide ongoing consultation in culturally responsive teaching to magnet school staff in all magnet schools			PD, P, PP
• Adapt thematic curricula and instructional strategies to meet the needs of ELLs and SWDs	• Modify the 1 interdisciplinary unit focused on inquiry and PBL per grade per school to meet the needs of ELLs and SWDs	• Review and revise interdisciplinary units, as needed to align with needs and resources of ELLs and SWDs				CS, RS, CT, D
• Provide enrichment opportunities within and beyond the regular school day to level the playing field for students attending high-poverty, MGI schools	• Finalize scope of services with all external partners for curriculum enrichment • Begin implementation of enrichment activities	• Refine scopes of services based on feedback • Continue implementation	• Expand implementation of enrichment activities to serve all grades			PD, SC, PP

MSAP Objective 4: Build Capacity to Sustain Magnet Programs						
Key Activities	**YR 1 Benchmarks 10/17–9/18**	**YR 2 Benchmarks 10/18–9/19**	**YR 3 Benchmarks 10/19–9/20**	**YR 4 Benchmarks 10/20–9/21**	**YR 5 Benchmarks 10/21–9/22**	**Responsible Parties***
• Develop and implement a rigorous plan of PD for magnet program teachers	• Draft magnet PD plan for each school and implement 50 hours of PD for each pedagogical staff member	• Revise PD plan based on feedback and evaluation findings • Provide at least 50 hours of PD (per year) for each pedagogical staff				PD, CS, RS, P, PP
• Conduct school-level processes to share best practices and assess program implementation	• Include magnet as agenda item on all SLT, PA meetings • Establish Magnet Advisory Council to bring diverse perspectives to discussion of program status, challenges, and lessons learned	• Include magnet as agenda item on all SLT, PA meetings • Convene 3-4 meetings of the Magnet Advisory Council per year to bring diverse perspectives to discussion of program status, challenges, and lessons learned •				SC, P, RS, CT, MAC
• Conduct district-level processes to share best practices	• Conduct monthly MSAP meetings to discuss magnet theme and implementation of innovative instructional strategies • Convene bi-monthly study groups for magnet school staff • Expand DOE digital platform for collaboration to include new magnet schools	• Conduct monthly MSAP meetings to discuss magnet theme and implementation of innovative instructional strategies • Convene bi-monthly study groups for magnet school staff • Expand content of DOE digital platform for collaboration to include materials from all 4 magnet schools				PD, OTC
• Design and conduct a rigorous continuous improvement process to assess program implementation and inform sustainability	• Establish Continuous Improvement Working Group, convene 2-3 meetings	• Convene 4-6 meetings per year of the Continuous Improvement Working Group				PD, PE

*Responsible Parties: PD= Magnet Project Director; CS= Curriculum Specialist; OTC= Outreach/Tech Specialist; S= Project Secretary; P= Principals; SC= Magnet Site Coordinators; RS=Resource Specialist; CT= Classroom Teachers; PE= Project Evaluator; MAC= Magnet Advisory Committees; PP= Project Partners; D= Other district staff

(2) How the applicant will ensure that a diversity of perspectives are brought to bear in the operation of the proposed project, including those of parents, teachers, the business community, a variety of disciplinary and professional fields, recipients or beneficiaries of services, or others, as appropriate.

Should D8-11 be awarded an MSAP grant, a solid foundation of collaboration, excitement, and momentum that was fostered during the proposal development phase will be leveraged to support the high-quality implementation of the project (highlighted in the QPD). Several mechanisms are built into the project design and management structure that will ensure that a diversity of perspectives is encouraged and incorporated into the ongoing operation and refinement of the magnet project.

Community Education Councils (CECs)

CECs are parent-run deliberative bodies that help to shape educational policies and priorities in their districts. CEC members are parent volunteers who provide hands-on leadership and support for their community's public elementary and middle schools. Each CEC has 11 voting members, including nine parents and two district residents and/or business owners. The CEC also includes one nonvoting high school senior and elected student leader residing in the district who is appointed by the Community Superintendent. Parents from the D8-11 magnet schools will be encouraged to attend CEC meetings and, if interested, to run for positions on this board.

School Leadership Teams (SLTs)

SLTs are vehicles for developing school-based educational policies and ensuring that resources are aligned to implement those policies. SLTs assist in the evaluation and assessment of a school's educational programs and their effects on student achievement. Three members of the school community are mandatory members of the SLT: Principal, PA/PTA President, and United Federation of Teachers (UFT) Chapter Leader. The remainder of the team is composed of elected parents and staff members (the SLT must have an equal number of parents and staff). An SLT may also include students and representatives from CBOs that work with the school. New York State Education Law Section 2590-h requires every NYC Public School to have an SLT. In addition, Chancellor's Regulation A-655 establishes guidelines to ensure the formation of effective SLTs in every NYC public school.

Magnet Advisory Councils (MACs)

Upon notification of the grant award, each Principal, with support from the Magnet Project Director, will use a wide variety of communication vehicles to inform his or her school community of the school's magnet status and revisit the commitments the school has made to implement the

various components of the grant. The MAC that will be established in each magnet school will be the primary mechanism to ensure that the voices of all magnet stakeholders are heard and heeded on an ongoing basis. Established either as a subcommittee of the SLT or a stand-alone body, the MAC will serve a critical role in ensuring that the perspectives of magnet program and school staff (including the teachers' union), parents, students, and members of the larger school community are taken into account when reviewing the progress of the magnet initiative in each building. As noted above, a representative of the MAC will participate in the CIWG convened by the Magnet Project Director. The charge of the MACs, which will meet on a quarterly basis over the life span of the grant, will be as follows:

- review project updates from the school magnet staff, including challenges, accomplishments, and proposed refinements;
- review formative and summative evaluation data provided by the external evaluator to identify potential issues with meeting performance measures;
- identify NYCDOE, UFT, and Council of School Supervisors and Administrators policies and practices that can be leveraged in support of magnet program goals and those that have the potential to impede program progress, to be flagged to the district magnet team; and
- confer with other D8-11 MACs to share knowledge and help to build a magnet culture and community within the two school districts.

Within three months of the grant award notification, each school will be asked to provide the names and affiliations of the MAC team members to the Magnet Project Director.

While the literature clearly shows the benefits that accrue to students when their parents or caregivers are engaged in school activities, schools serving large numbers of low-income students in challenged communities are often hard-pressed to garner substantial parent involvement,

particularly among parents considered "hard to reach" due to a variety of factors (e.g. those who speak a language other than English, those who work long hours).

Outreach to traditionally "hard-to-reach" families, which may include non-English speaking, low-income, single parents, and families living in temporary housing, is especially challenging for many schools (Fowler, et al., nd.). Many of these families have limited time or resources to engage in school activities or may face cultural or linguistic barriers in accessing information (Southwest Educational Development Laboratory, 2000). For these reasons, research has been conducted to identify and highlight strategies that have proven effective in reaching "hard-to-reach" populations. Some of these strategies include using print and video communications in a variety of languages, using parents from the community as recruiters, and having continued contact with families (Fowler, et al. nd).

In addition to the typical parent involvement activities that most schools conduct, each of the D8-11 magnet schools has crafted a parent engagement component specific to the thematic focus of the magnet grant (see school descriptions in the QPD). Ensuring that parents' perspectives are well represented on the MACs, the D8-11 magnet initiative will carry out the following practices, which have been found in the literature to be particularly effective in encouraging parents to serve as decision makers in their children's schools:

- use personalized approaches and phrases to build trust and interest;
- communicate with parents often and with a variety of communication mediums;
- organize smaller events, such as grade-level nights, rather than whole-school events;
- create venues for families to provide input and receive feedback online and in person;
- conduct outreach in community spaces, such as libraries, grocery stores, family recreational events; and

- communicate with parents in native languages and ensure that all school events incorporate bilingual staff members.

(D) Quality of Personnel

(1) The Secretary reviews each application to determine the qualifications of the personnel the applicant plans to use on the project.

The NYCDOE has assembled an exceptionally well-qualified team to oversee the implementation of the D8-11 magnet program. Should this application be funded, the NYCDOE will ensure that the D8-11 magnet project will benefit from the wealth of knowledge and expertise resident within the system at the central office, district, and school levels in support of MSAP objectives.

(a) The Secretary determines the extent to which the Project Director (if one is used) is qualified to manage the project.

The MSAP Project Director will have programmatic and administrative responsibility for the project and will commit 100% of his/her time to magnet responsibilities (see position description in Quality of Management Plan section). Qualifications for this position include an advanced or professional degree in supervision and administration, NYS school district administrator certification, and a NYC educational administrator license; at least five years of experience in curriculum development; at least five years of experience as a staff developer or teacher trainer; at least three years of experience as a district-level supervisor or administrator preferably in Funded Programs; successful experience in grant administration; knowledge of federal mandates and regulations concerning magnet grant funding; knowledge of and competence in strategies for designing and implementing effective reform models and innovative programs; knowledge of the educational needs of a diverse population of students; knowledge of budgeting of funded programs;

experience in developing and coordinating community partnerships; ability to collect and analyze data and to produce oral and written reports; and ability to serve as a resource to school-based staff with regards to all magnet-related issues. Other desired qualifications include strong interpersonal and leadership skills, the ability to establish and maintain productive working relationships, and strong organizational abilities. The districts have a portfolio of qualified people from which to draw who will meet these specifications.

(b) The Secretary determines the extent to which other key personnel are qualified to manage the project.

District Leadership

The MSAP Project Director will receive support and guidance from the Superintendent of D8, Karen Cohen Ames, and the Superintendent of D11, Meisha Ross Porter (see the Appendix for both of their résumés). Ms. Cohen Ames and Ms. Ross Porter are both skilled administrators and educators with extensive experience mentoring school leaders, training educators, and developing curriculum, in addition to supporting instructional efforts to raise the level of student achievement and close the achievement gap.

Prior to her current position, Dr. Cohen Ames served in various leadership roles within the NYCDOE. Before becoming Superintendent of D8 in 2014, Dr. Cohen Ames was Chief Academic Officer and Deputy Cluster Leader for 300 schools across 10 networks. Prior to this position, she served for one year as Assistant Superintendent and three years as Deputy Network Leader for Curriculum, Instruction, and Student Achievement. Previous to this, she served as Senior Education Administrator for Student Achievement. While serving in these positions, Dr. Cohen Ames demonstrated substantial leadership and management skills to improve student achievement. Dr. Cohen Ames also gained extensive curriculum development experience as a reading and social

studies teacher. Dr. Cohen Ames belongs to numerous professional organizations, including the Tri-State Diversity Council, an organization focused on promoting diversity and inclusion within companies, schools, and communities. As Superintendent of D8, Dr. Cohen Ames oversees 39 schools within the District. She is a certified NYS School District Administrator and School Administrator and Supervisor. She holds a doctorate of education in educational leadership and technology and a professional diploma in school district administration from Dowling College, as well as an MS in graduate reading education from Adelphi University.

Ms. Ross Porter has served as Superintendent of D11 since 2015, where she manages the D11 team, leads the establishment of the District's instructional objectives, and supports the design and implementation of new programs and initiatives across the District's schools. Ms. Ross Porter previously served as Principal of the Bronx School for Law, Government, and Justice for 11 years, during which time she organized a professional learning community, monitored staff according to a research-based teaching model, and created a student data tracking system. Prior to this, Ms. Ross Porter developed her curriculum development skills as an English teacher at the Bronx School for Law, Government, and Justice, where she oversaw classroom instruction for grades 10 and 12. Ms. Ross Porter's school leadership and education experience is strengthened by her other professional experience managing and implementing community projects such as at NYC's Urban Assembly. Committed to her own PD, she has attended two Summer Institutes at the Harvard Graduate School of Education. She holds an MS in school administration and supervision from Mercy College and a School District Leader certification from the College of Saint Rose.

Key MSAP District Staff

Working closely with and reporting to the Project Director will be the full-time, district-level, MSAP-funded **Curriculum Specialist**, who will support all four magnet schools through the

design, facilitation, and oversight of curriculum development and thematic integration activities. The Curriculum Specialist will build capacity at each magnet school as curricula and programs are developed over the lifetime of the grant. The responsibilities of this position will include designing and implementing PD on magnet theme curricula and instructional approaches, serving as a liaison with magnet school teams and NYC and District staff in all magnet curriculum areas, and creating and maintaining partnerships with CBOs and other partner agencies serving D8-11 families. Qualifications for this position include an advanced degree in education, NYC and NYS teaching licenses (either common branch or a secondary core subject area, e.g., ELA, math, science, or social studies); at least 5 years of experience as a staff developer/trainer; at least 5 years of experience in curriculum development and implementation; demonstrated skills in providing differentiated PD; at least five years of experience as a teacher working with students and families from diverse backgrounds; knowledge of all relevant learning standards (including CCLS, NGSS, and NYCDOE Curriculum Frameworks); at least 5 years of experience incorporating STEM instructional approaches into at least three content areas; and experience as a magnet specialist or in another leadership role in a magnet school. Other desired qualifications include excellent written and verbal communications skills, strong organizational abilities, the ability to manage multiple tasks simultaneously, and the ability to establish and maintain productive working relationships with a range of stakeholders in a multicultural, multilingual setting.

The third key member of the D8-11 magnet team will be the full-time **Community Outreach and Technology Coordinator,** who will be responsible for planning, coordinating, and implementing a comprehensive magnet outreach program using technology and multimedia resources. This staff member will also support technology integration at the magnet schools, engaging in PD and training activities that incorporate research-based instructional practices and

new technology tools into the magnet program. Additionally, the Outreach and Technology Coordinator will work with the Project Director, Curriculum Specialist, school teams, Magnet Advisory Councils, and others to enhance the effectiveness and impact of the school-based magnet programs as well as the districtwide initiative as a whole.

The Community Outreach and Technology Coordinator will be required to have the following credentials: an advanced degree in education; 5 years of experience in staff development/teacher training; experience as a Magnet Resource Specialist or in another leadership role in a magnet school; demonstrated ability in facilitating standards-based instructional practices that lead to increased student achievement; 5 years of experience incorporating instructional technology strategies; experience with website development and graphic design; experience in creating multimedia materials and documents using technology; familiarity with the use of presentation tools and media; experience in working with students and families from different backgrounds; superior organizational skills needed to support a multifaceted magnet program, including maintaining required program records and documentation; demonstrated ability to work as part of a team; the capacity to prioritize and coordinate both school-based and community-based program activities; the ability to be creative, flexible, and project-oriented in a large, grant-funded initiative serving multiple schools; and excellent communication and interpersonal skills suitable for collaboration with all constituencies involved in the program. Districts 8 and 11 have a supply of qualified and experienced candidates who have served in former magnet schools to fill these positions.

School Leadership

All of the Principals of the proposed magnet schools are highly qualified, visionary leaders, eminently capable of implementing the magnet school initiative. The magnet school Principals

will oversee the implementation of the program at their buildings and ensure regular communication between the magnet school planning teams, SLTs, and the Magnet Advisory Councils. Periodically, the Principals will meet as a group to exchange ideas and discuss topics of interest to all magnet schools in the District. In addition, the Principals will use the magnet grant website to share and disseminate pertinent materials. Brief descriptions of the skills and expertise of each magnet school Principal follow; résumés are included in the attachments.

Richard Hallenbeck, the Principal of IS 123, has a proven record in creating educational environments that support improved learning outcomes for all students. Through the implementation of best pedagogical practices for teaching and learning, Mr. Hallenback has improved student independence and outcomes. After just one year at IS 123, Mr. Hallenbeck's efforts have led to an increase in the number of students performing at grade level as measured by New York State ELA examinations from 5% to 16%. Similarly, there was 43% growth in students scoring at grade level as measured by the NYS mathematics examination. Mr. Hallenbeck continues to demonstrate his commitment to high-quality instruction by creating a program that highlights the school's commitment to technology and the arts and that enables teachers to participate in staff development by providing an additional period each week for professional development or instructional planning. Prior to his appointment at IS 123, Mr. Hallenbeck served as an Assistant Principal at PS/IS 49 and demonstrated his commitment to academic rigor by emphasizing professional learning and collaboration through technology and the arts, teaching and modeling math instruction for teachers, and establishing the implementation of lesson study practices among the staff. Additionally, Mr. Hallenbeck served as an Assistant Principal of PS 188, where he implemented school-wide improvement efforts that resulted in raising the school's NYCDOE report card grade from a C in 2009–10 to an A in 2010–11. Mr. Hallenbeck holds a

Master's of Education in school leadership from the Teachers' College at Columbia University and an MS degree in Middle Childhood Education of Mathematics from Brooklyn College. He also holds certification in NYS as a school building leader and a math teacher.

During her 13 years as Principal of PS 160, Lori Baker has provided extensive instructional leadership and curriculum development to her staff to raise the level of student achievement and close the achievement gap. Ms. Baker is responsible for the planning and implementation of the school's curriculum, teacher PD, and the use of data to drive instructional practices. Her previous experience includes one year as the Literacy School Professional Developer and six years teaching grades K–4 at PS 28 in Manhattan. During her time as a teacher, Ms. Baker gained extensive experience in developing interdisciplinary thematic curriculum and classroom learning centers. Ms. Baker holds two MS degrees from Mercy College, one in school administration and supervision and the other in elementary education. She holds a NYS certification in school administration and supervision and was a participant in the first cohort of NYC's Department of Education Leadership Academy.

Deborah Levine has served as the Principal of PS 178 since 2011, and prior to her tenure, served as Assistant Principal in District 19 for 9 years. Before becoming an administrator, Ms. Levine served as an instructional specialist in the Professional Development Academy in District 27. Her teaching experience encompasses general education, early childhood education, and special education, which spans across 15 years. During her career, Ms. Levine has developed expertise in curriculum development with a focus on literacy programming, mentoring teachers, and implementing professional development to raise the level of student achievement and close the achievement gap. Ms. Levine holds an MS in administration and supervision from the College of New Rochelle and an MS in elementary education from Queens College. She is certified in

NYS as a school district administrator and has professional training in the NYCDOE's Reading First Initiative, as well as Teachers' College Reading and Writing Project.

In 2012, Lisa DeBonis was selected by the Chancellor's Office to be the founding Principal of PS 567. In this role, Ms.DeBonis created the mission, vision, and structures of PS 567 to emphasize targeted instructional support and programming that fosters critical and creative thinking skills. Prior to this position, Ms. DeBonis has had extensive school leadership experience: she served as Principal of a Bronx elementary school for three years, Aspiring Principal of the NYC Leadership Academy, and Assistant Principal of JHS 22. She was selected specifically for the Assistant Principal position at JHS 22, a Chancellor's Impact School, to provide curriculum and organizational support. Within one year, Ms. DeBonis helped improve the school's Progress Report grade from a C to an A and helped the school achieve a score of Well Developed on the Quality Review. During this time, Ms. DeBonis also facilitated the school's Student Intervention Team and Instructional Support Team, which provided social-emotional and academic supports to students, respectively. Ms. DeBonis also has four years of experience designing and leading PD workshops in NYC schools on topics such as literacy and writing instruction, strategies to promote academic rigor, and developing rubrics and curriculum development. Ms. DeBonis holds an MS as a reading specialist from Lehman College and NYS certifications in supervision and administration.

Key School-Based MSAP Staff

At the school level, the Magnet Site Coordinator will work closely with the school Principal to spearhead the implementation of the magnet program in their buildings. Desired qualifications for the Magnet Site Coordinators include experience with magnet school development and implementation, experience in staff development and coaching, extensive familiarity with the

school and parent community, demonstrated effectiveness in time management and attention to detail, and a demonstrated ability to work well with all constituents of the school community, including students, teachers, and parents.

(c) The Secretary determines the extent to which teachers who will provide instruction in participating magnet schools are qualified to implement the special curriculum of the magnet schools.

The instructional personnel for the D8-11 magnet initiative will consist of **Resource Specialists**. The Resource Specialists will be highly qualified individuals who will be appropriately licensed in the subject areas for which they will be assigned, as will all classroom teachers in the four magnet schools. Specifically, the Resource Specialists will have demonstrated competence in the following areas: instruction of heterogeneously grouped classes consisting of children from diverse ethnic, racial, and socioeconomic backgrounds with varying levels of academic skills; use of various innovative, evidence-based teaching methods (e.g., PBL, arts integration, STEM methodologies) and materials to address the learning styles of different students; development of theme-related curriculum materials that have been effectively used with elementary and/or middle school students; demonstrated effectiveness in differentiating instruction and in the evaluation of student academic performance, including the use of authentic and/or performance-based assessment methods within their subject area or specialty; familiarity with implementing culturally-competent approaches designed to foster positive and productive interactions among students of different backgrounds; and the ability to work effectively with students, parents, teachers, and administrators. Additional qualifications for the position of Resource Specialist include an MA or MS in education, NYC common branches or subject area licenses, and at least three years of experience in a magnet school (preferred).

Currently, each proposed magnet school has several staff members who will directly contribute to the design and implementation of the thematic curricula of the magnet school. Provided in the bullets below are examples of this resident expertise at each school. Should teaching vacancies occur during the lifespan of the magnet grant, the Principal, working with the school-based magnet team and the MSAP project team and following all NYCDOE and UFT contracting rules, will make every effort to recruit a staff member who brings relevant experience as well as a passion for the magnet program on board.

- At **IS 123**, Monique Redwood, a math teacher, is a former Noyce Scholar for the NYS Department of Education Mathematics and Science Partnerships Program and an Americorps volunteer for Jumpstart, where she provided coaching and leadership to team members for preparing preschool children in low-income neighborhoods for later school success.
- At **PS 160**, Iris Cannizzo created, maintains, and provides daily instruction in the school's Technology Lab. Ms. Cannizzo also provides school-wide technology leadership and implements an Hour of Code program for all students. Wendy O'Keefe, a science lab teacher, has taught at PS 160 for 21 years and works to provide experiential learning for students through daily science instruction in the science laboratory. Ms. O'Keefe also facilitates hands-on family workshops for parents and students. Nathan Keidel has served as PS 160's music teacher since 2002 and is a classically trained guitarist, who reads, writes, and speaks fluent French.
- At **PS 178** a former special education teacher, Allison Hayden, is currently a UFT Teacher Center Instructional Coach, where she develops CCSS-aligned units to support citywide instructional expectations and works collaboratively with consultants, colleagues, and

administration to construct, implement, enhance, and disseminate curriculum, teaching strategies, research findings, and classroom practices. Ms. Hayden has written and obtained three grants from Donorschoose.org. Jean Staudt is a Math Coach and Data Specialist with extensive experience teaching elementary school and providing Academic Intervention Services. Ms. Staudt also has extensive knowledge of how to use technology in educational settings and lectured on this topic at Manhattanville College.

- At **PS 567**, Jamie Sorhaindo serves as the assistant principal where she provides instructional leadership and coordinates with the school's Positive Behavioral Interventions and Supports team to create structures that set high standards for academic rigor and embedded support systems. Ms. Sorhaindo developed her leadership expertise in her previous position as Education Administrator and Talent Coach, where she coached school leaders and collaborated with leaders to identify PD opportunities in schools. Tiffany Bergen, a second grade teacher, has nearly a decade of early childhood teaching experience. In her current position, Ms. Bergen develops curriculum for all content areas and incorporates activities, including debates and open discussions, designed to foster students' independent thinking and leadership competencies. Ms. Bergen is also knowledgeable of the Reggio Emilia approach and has incorporated project-based learning into her classes.

Within each D8-11 magnet school, the effectiveness of Resource Specialists and classroom teachers will be evaluated using *Advance*, the NYCDOE's teacher development and evaluation system that considers what teachers do and how students perform. As highlighted in the QPD, the magnet initiative will implement a robust program of PD to build the capacity of the school staff to address the instructional priorities of the school system through the lens of the specialized

magnet curriculum, which will benefit the students attending the magnets well beyond the funding cycle.

(2) To determine personnel qualifications, the Secretary considers experience and training in fields related to the objectives of the project, including the key personnel's knowledge of and experience in curriculum development and desegregation strategies

With support from MSAP funding, and leveraging citywide PD initiatives (e.g., STEM), D8-11 district- and school-based staff have participated in training in fields related to the objectives of the magnet program, including conferences sponsored by Magnet Schools of America, which will help to ensure the Districts' and schools' effectiveness in meeting the objectives of the grant. This includes the following collective skillset:

- magnet school development and implementation, including Superintendents, Principals, and school staff with extensive experience working with and within highly minority group isolated magnet schools;
- designing innovative, rigorous, and attractive programming that fosters equity, student leadership and innovation; and
- designing and conducting PD and peer coaching initiatives to improve the rigor and relevance of teaching practices.

(E) Quality of Project Evaluation

The Secretary considers the quality of the evaluation to be conducted of the proposed project.

The project evaluation of the proposed D8-11 magnet initiative will include formative and summative components to provide continuous feedback to the District on the effectiveness of program implementation and activities in meeting project objectives and performance measures,

and a well-designed impact study that uses a rigorous research design to test for theoretical linkages between implementation of at least one key project component and at least one relevant outcome presented in the logic model.

The evaluation design will guide the collection of data from multiple sources and stakeholder groups to provide feedback and findings to examine several overarching research questions:

1. To what extent are the MSAP-related outreach and student recruitment activities helping the district to meet the MGI targets outlined in the grant? How can outreach and student recruitment activities be improved?
2. To what extent is grant-funded PD building the capacity of teachers and staff to implement and integrate evidence- and research-based instructional strategies into classroom instruction? How can PD offerings be improved?
3. How has the grant supported the development of unique thematic curricula and enrichment activities? How can curriculum development efforts and products be improved?
4. To what extent are academic achievement outcomes of all subgroups of students in the magnet schools improving over the five-year grant period?
5. Are there differences in academic achievement gains among subgroups of students, such as by demographic characteristics, level of teacher participation in MSAP-related PD, and by home school (within or outside zone); and to what extent do those difference or gaps change over the five-year grant?
6. What impact does implementation of the CTSC *Innovating Instruction* model of PD in each of the three elementary magnet schools have on student academic achievement outcomes in reading and math? How do achievement gains of treatment students compare to those of non-treatment comparison students?

D8-11 proposes to retain Metis Associates to conduct the impact study (as described in section 1) and the comprehensive project evaluation of the MSAP grant (described in section 2). Metis is an education research and evaluation firm that has provided technical assistance and professional support for a wide range of education and human services initiatives for the past 39 years. Metis has conducted evaluations of MSAP initiatives over the past 10 MSAP funding cycles for 11 community school districts in NYC; Broward County, FL; Baltimore County, MD; Champaign, IL; Orangeburg County, SC; and Beacon, NY. Metis has also conducted system-wide evaluations and audits of magnet and choice programs for several large school districts including for Montgomery County (MD) Public Schools in 2015, Broward County (FL) Public Schools in 2014, Baltimore County (MD) Public Schools in 2013, and Pittsburgh Public Schools in 2008.

The evaluation of the D8-11 magnet initiative will be directed by Claire Aulicino, a Senior Associate at Metis (see résumé in attachments). Ms. Aulicino has more than 17 years of experience in designing and conducting program reviews and evaluations in the area of K-12 education. For the past 13 years, the focus of her work has been on school choice and magnet programs. She has directed evaluations of MSAP grants over the past six MSAP funding cycles and has served as the lead evaluator for 13 MSAP grants, including seven in NYC. Ms. Aulicino also served as the lead researcher on the district-wide evaluations of magnet and choice programs for Montgomery County Public Schools in 2015, Broward County Public Schools in 2014, and Baltimore County Public Schools in 2013. She also conducts evaluations in the areas of educational technology, STEM education, and out-of-school time programs.

For the impact study, Ms. Aulicino will be supported and advised by Metis's Senior Associate for Design and Analysis Dr. Zhu (see résumé in attachments). Dr. Zhu is an expert in research design, statistical analysis, survey research, and data management functions. She has played a key

role in developing and/or implementing rigorous designs (both experimental and quasi-experimental) and applying advanced statistical techniques to evaluate intervention effectiveness and help programs become evidence-based. Dr. Zhu is in the company of only approximately 300 researchers nationwide who are certified as eligible to review education research studies for inclusion in the What Works Clearinghouse (WWC)—an initiative of the U.S. Department of Education Institute of Education Sciences—and thus is intimately familiar with the level of evidence that is specified in the Notice of Funding Availability and that the evaluation is expected to address. Metis is certified as Dr. Zhu's organizational affiliation. Dr. Zhu holds a Ph.D. in Quantitative Research, Evaluation, and Measurement, and a M.A.S. in Applied Statistics, both from The Ohio State University.

In her role as Evaluation Director, Ms. Aulicino will be supported by highly qualified staff, including Dr. Zhu, and will regularly consult with Metis's Design Consulting Committee (DCC) on all aspects of the evaluation. The DCC ensures that evaluation designs and analyses that are carried out are sound, of high quality, and appropriately address the key research questions. The DCC is a key component of Metis's quality management process and provides a systematic review of the data and assurance of high technical standards in line with the accuracy standards of the Joint Committee on Standards (JCS), and with the American Evaluation Association's (AEA's) principles for Systematic Inquiry. In addition, Metis has a duly constituted Institutional Review Board (IRB) that is registered with the U.S. Department of Health and Human Services (IRB #00003465) and assures compliance with Federal-Wide Assurance (FWA) requirements for the Protection of Human Subjects (FWA #00004755). Members of the IRB are specialized in various social sciences and are experienced in all aspects of field-based research and evaluation. Metis's IRB meets as needed to review evaluation designs and guarantee protection to human subjects for

Metis's research studies. The IRB has submitted and gained approval for study protocols from numerous external IRBs from school districts around the country.

Furthermore, to obtain extant data to support research and evaluations within localities, Metis has successfully negotiated data sharing agreements to gather identifiable (when warranted) and de-identified individual student- and teacher-level data with numerous local education agencies across the United States.

(1) The Secretary determines the extent to which the methods of evaluation will, if well-implemented, provide evidence of promise.

Guided by the *What Works Clearinghouse (WWC) Procedures and Standards Handbook* (v3.0, 2014), Metis proposes to conduct a rigorous evaluation that is capable of producing evidence of promise if well-implemented. The rigorous evaluation, or impact study, will be conducted to establish empirical evidence to support the theoretical linkage between implementation of the CTSC *Innovating Instruction* PD model (key component) and student achievement in reading and math (relevant outcomes) as presented in the logic model in the QPD section.

The impact study will build the research base on the effect of the CTSC *Innovative Instruction* PD model on student achievement outcomes. As described in CPP 2 and the QPD, CTSC has produced high quality research findings resulting from an NSF planning grant that studied implementation of the model in two NYC public schools. CTSC's research is being expanded to 12 NYC schools through an NSF design and development grant that was awarded in 2016. The impact study for the proposed D8-11 magnet grant will further test the effects of the *Innovating Instruction* model across the three NYC elementary magnet schools on student achievement outcomes, and will add to an emerging body of positive evaluation findings on the impact of the PD model on student learning.

The impact study will be informed by qualitative and quantitative data to measure implementation of the *Innovating Instruction* model. These data, as described below in section 2, will be collected from multiple sources and methods to measure fidelity of implementation of the model and will describe any variations in implementation fidelity, such as whether implementation varies across grades, schools, and time. Guided by implementation data, the impact study will use a rigorous design to estimate the impact of the PD model on intended student outcomes at different points in time based on treatment-comparison contrasts.

Study Design: Given that the *Innovating Instruction* model intervention will be implemented school-wide in each of the three elementary magnet schools and the target schools have attendance zones, it is not feasible to randomly assign students to the treatment. Because a randomized controlled trial (RCT) design would not be viable for this study, in accordance with the WWC guidelines, Metis is proposing a rigorous, quasi-experimental matched comparison group design based on a propensity score matching (PSM) approach. PSM is often considered the best available approach to generating a comparable group of non-participants without random assignment (Guo & Fraser, 2009). Under the PSM framework (Rosenbaum & Rubin, 1983, 1984, 1985; Rosenbaum, 1991, 2002), any initial statistically significant imbalances on observed covariates (e.g., demographic variables and baseline achievement) between treated and comparison groups can be greatly reduced or even removed. PSM techniques first summarize all pertinent characteristics observed prior to treatment (i.e., the matching variables) into a single score (i.e., the propensity) that indicates the predicted conditional probability of an individual participating in a given program. After propensity score estimation, PSM techniques typically match each participant with one or more comparison students with similar propensity scores.

Using PSM, students who are enrolled in the tested grades in the three elementary magnet

schools in fall 2017 will be matched 1:1 with comparable students in similar non-participating schools in the same school district based on important observed baseline characteristics related to the outcomes of interest*1. Depending on data quality and availability, the matching variables may include, but not be limited to: (1) at the student level – baseline achievement (previous ELA and Math scale scores as measured by the New York State (NYS) assessments), grade level, age, gender, race/ethnicity, FRL eligibility, ELL and special education status, and previous school year average daily attendance; and (2) at the school level – enrollment size, percent FRL, percent by race/ethnicity, percent male, percent ELL students, percent special education students, and percent previous cohort proficient in NYS assessments in ELA and Math. After PSM, tests of baseline equivalence of the treatment and comparison groups in each analysis sample will be conducted to ensure that the evaluation eliminates overt selection bias and meets the WWC evidence standards, albeit with reservations owing to the fact that unobserved variables may not be equated between the two groups.

Analysis Plan: To provide information for project implementation and improvement as well as to better interpret project impacts, every effort will be made to track data on key project inputs (e.g., number of sessions of PD provided). To investigate the impact of the *Innovating Instruction* PD model as implemented, Metis will use regression-type analyses for each year's outcome analyses, in addition to providing descriptive and/or correlational analyses of quantitative data. Since the study will involve multiple grades, achievement test scores in each grade (as necessary) will be converted to z-scores or another common metric, when needed, to produce combined

*1 Note that student joiners after the project starts will be removed from matching and analysis if determined necessary.

impact estimates. The analysis models employed will statistically control for multiple covariates (e.g., students' pre-test and demographic variables, and school-level characteristics). Statistical significance adjustment procedures (e.g., Benjamini-Hochberg, Bonferroni) will be applied when multiple comparisons are involved for confirmatory contrasts specified in the same outcome domain. In addition, appropriate effect size indices (e.g., Hedges' *g*, Cox index) will be calculated to measure the practical importance of the findings. All aspects of the analysis plan will be aligned with the latest WWC requirements.

Sample Sizes and Minimum Detectable Effect Sizes (MDESs): Given the parameters of this proposed study, we obtained an estimated MDES of 0.114 standard deviations for key outcomes in overall impact analyses. This calculation was based on a sample of 1,200 subjects (600 treatment/600 matched comparison) and would provide adequate power (.80) to detect the above stated estimated MDES, assuming pertinent covariates explain 50% of variation in a given outcome at a significance level of .05 for a two-tailed test under the regression framework. The proposed study is therefore capable of detecting relatively small project impacts.

Key Outcomes and Measures: The project logic model identifies ELA and Math academic performance as key target student outcomes. The NYS assessments (ELA and Math scores) administered by the district in each year of implementation will be used to measure student achievement. To meet the WWC outcome standards, Metis will ensure that each outcome measure used for the project impact evaluation has face validity, adequate reliability, and consistency in measurement in both treatment and comparison groups, without over-aligning with the intervention.

(2) The Secretary determines the extent to which the methods of evaluation include the use of objective performance measures that are clearly related to the intended outcomes of

the project and will produce quantitative and qualitative data to the extent possible.

In order to assess implementation and impact of the D8-11 magnet initiative, Metis will conduct a project evaluation designed to assess the implementation of all project activities and the extent to which the activities support achievement of all of the project outcomes and outputs, as articulated in the D8-11 MSAP logic model and the project and GPRA-level performance measures. The evaluation design includes formative and summative components and utilizes multiple measures over multiple groups of subjects. Data from all sources will be synthesized and analyzed to maximize precision of outcome information and enrich the capacity of the Project Director and the NYCDOE and D8-11 MSAP stakeholders to make informed and timely decisions about program development and implementation.

The formative evaluation will focus on program implementation and assessment of project activities. Ongoing formative feedback will be provided to the Project Director and the school-based magnet teams about the extent to which project activities are being implemented as planned and in line with the intended outcomes. This feedback and data will be critical for ensuring that the project is well-positioned to meet its objectives and performance measures and to make adjustments as part of a continuous improvement model. As described in the Quality of Project Management section, the continuous improvement process will be instrumental to ensuring the project activities are planned, implemented, assessed, and modified, as needed in order to achieve the grant objectives. The Project Director and key stakeholders will regularly use evaluation data to "check" activities to ensure they yield the desired results.

Formative evaluation methods, including documentation reviews, written surveys, interviews, and biannual field observations, will be conducted to answer key questions about: the outreach and recruitment strategies being used; how the schools are planning, developing, and implementing

the themes and ensuring that all students have access to magnet thematic curricula and activities; the types of staff development being offered and the levels of participation in these; and the collaborations, among instructional staff, within the school community, and with external partners, being fostered to support the program. Quarterly written project status reports, monthly telephone and email communications, and presentations by the evaluator will provide the Project Director, NYCDOE stakeholders, and the D8-11 Community Superintendents with formative feedback on program implementation and best practices.

The Project Director and other MSAP staff will provide opportunities for other stakeholder groups, such as parents, staff, students, and community and business members to review and provide feedback on evaluation findings through a variety of methods. The MSAP staff will conduct presentations of evaluation findings and recommendations to these and other stakeholder groups, including parents and staff at PTA and faculty meetings and during school family events; students at assemblies and through morning announcements; and to community and business members in partner meetings and community meetings such as CEC meetings. The Project Director will also work with the NYCDOE Office of Communications and Media Relations to share information through press releases, social media posts, and information on school websites.

Summative evaluation activities will be conducted to assess the program's attainment of the intended outcomes, as outlined in the logic model and project performance measures. The summative evaluation methods will include the analysis of data collected through monthly program implementation logs, stakeholder surveys, student checklists, enrollment and applicant pools, and standardized test achievement scores.

This section presents the project performance measures that will be used to assess the extent to which the four project-level objectives that are described in the Management Plan are being met

in each year of the grant and the specific methods that will be used to collect and analyze data to evaluate impact on each performance measure.

Project Objective 1: Reduce or eliminate MGI among African American and Hispanic students in proposed magnet schools. The following performance measures will be used to evaluate the extent to which Project Objective 1 is met over the five-year grant period.

Performance Measure 1.1 (GPRA Measure): Through implementation of a whole-school magnet program, each magnet school will achieve reductions in MGI among African American or Hispanic students. The proportions of students in the targeted MGI group will be reduced at each school by the following percentages for each year, based on the enrollment projections presented in Table 3 in the attachments.

	Baseline (2016-17)	**Year 1 (2017-18)**	**Year 2 (2018-19)**	**Year 3 (2019-20)**	**Year 4 (2020-21)**	**Year 5 (2021-22)**
Reduce MGI among African American students						
PS 160 (D11)	61.4%	60.0%	58.5%	56.3%	54.3%	49.6%
PS 178 (D11)	60.6%	60.1%	58.4%	56.1%	53.5%	49.1%
Reduce MGI among Hispanic students						
PS 567 (D11)	62.6%	61.9%	60.3%	58.3%	56.1%	52.2%
IS 123 (D8)	72.4%	71.4%	70.1%	69.0%	67.5%	65.4%

Performance Measure 1.2: As a result of ongoing outreach and student recruitment efforts and the development of innovative educational programming, the number of applicants to each of the magnet schools will increase by 5% in each of Years 2 through 5 of the grant over the prior year, compared with baseline data collected in Year 1.

Evaluation Methods for Project Objective 1: Data to assess Performance Measure 1.1 will be obtained from an annual analysis of student enrollment data from the NYCDOE registers for all active students as of October 1 of each project year. Frequency calculations will conducted by school and grade to determine the number and proportion of students by racial/ethnic group. Data to assess Performance Measure 1.2 will be collected from kindergarten and magnet application data to determine the number of applicants by school in each year of the grant. Results from the enrollment and application data will be synthesized with data on outreach and recruitment logs and marketing materials for each school and the district to assess the effectiveness of the outreach and student recruitment plans.

Project Objective 2: Ensure that all students attending the magnet schools meet challenging academic standards and are on track to be college- and career-ready.

The following performance measures will be used to evaluate the extent to which Project Objective 2 is met over the five-year grant period.

Performance Measure 2.1 (GPRA Measure): At each magnet school, students in each racial/ethnic group, students with disabilities, low-income students, and ELLs will demonstrate measurable improvements in academic achievement in ELA as measured by an increase of four or more percentage points in the proportion of students in each tested grade who meet the grade-level standards on NYS assessments in ELA (Grades 3-8) *in each project year* and, by Year 5, the overall increase will be statistically significant.

Performance Measure 2.2 (GPRA Measure): At each magnet school, students in each racial/ethnic group, students with disabilities, low-income students, and ELLs will demonstrate measurable improvements in academic achievement in Math as measured by an increase of four or more percentage points in the proportion of students in each tested grade who meet the grade-

level standards on NYS assessments in Math (Grades 3-8) *in each project year* and, by Year 5, the overall increase will be statistically significant.

Performance Measure 2.3: At each magnet school, students in each racial/ethnic group, students with disabilities, low-income students, and ELLs will demonstrate measurable improvements in academic achievement in Science as measured by an increase of four or more percentage points in the proportion of students in each tested grade who meet the grade-level standards on NYS assessments in Science (Grades 4 and 8) *in each project year* and, by Year 5, the overall increase will be statistically significant.

Evaluation Methods for Project Objective 2: The standardized instruments for student assessments include the **NYS assessments which** are administered annually to students in ELA and Math in grade 3-8 and in Science in grades 4 and 8. Results for these tests are expressed both in scale scores and performance level equivalents. Scale scores are equal-interval, criterion-referenced scores that create a continuous scale that extends across grade levels. For each grade, scores are categorized into one of four performance levels: Level 1 (well below proficient), Level 2 (partially proficient), Level 3 (proficient), and Level 4 (exceeds).

Student achievement results for ELA and Math will be derived from performance level analyses using matched data to calculate the proportions of students in each year who meet or exceed the learning standards (Performance Levels 3 and 4). Because the Science assessments are administered only in grades 4 and 8, cohort analyses will be conducted to measure changes in proportions of students who meet or exceed the standards. Chi Square Tests of Independence or other appropriate statistical measures, such as McNemar tests, will be conducted to determine if changes in student achievement occur from one year to the next and if differences in achievement by student subgroup are statistically significant and educationally meaningful. All analyses will be

conducted by school, by grade level, and by student subgroup, including each major racial and ethnic group, students with disabilities, low-income students, and ELLs, except in cases where the number of students in a category is less than 10 and therefore insufficient to yield statistically reliable information, and/or where the results yield personally identifiable information.

Project Objective 3: Ensure that *all* students attending the magnet schools benefit from the magnet's educational offerings and have equal opportunities to gain magnet theme-specific value-added skills and knowledge. The following performance measures will be used to evaluate the extent to which Project Objective 3 is met over the five-year grant period.

Performance Measure 3.1: As part of the magnet program at each school, all (100%) students will be exposed to at least one new thematic curriculum unit in Year 1; at least two new thematic curriculum units in each of Years 2 and Year 3; and at least four new thematic curriculum units in each of Years 4 and 5.

Performance Measure 3.2: Through their participation in the magnet program, the proportion of students in each school who demonstrate mastery of a set of unique magnet value-added standards and skills will increase by at least five percentage points in each year of the grant, compared with baseline data collected in Year 1.

Evaluation Methods for Project Objective 3: Data to assess Performance Measures 3.1 will be derived from a systematic review of curriculum development and implementation logs and copies of thematic curriculum units and magnet elective course registration and enrollment data. Data to assess Performance Measure 3.2 will be obtained from the annual administration of authentic student performance assessments that will be developed by the magnet staff at each school in collaboration with district MSAP staff, the external evaluator, and program partners and based on published literature and research. The assessments, which will be completed by teachers for each

student, will measure student attainment and mastery of unique magnet value-added skills. The skills will include theme-related content skills and 21st century skills, such as motivation, persistence, and communication, and will be specific to each school's magnet theme and curriculum. The assessments will be administered in the spring of each project year and analyzed by school, by grade, and student subgroup using frequencies and cross-tabulations to determine the proportion of students who master the skills in each year. The assessments will be pilot-tested in Year 1 with item analyses and reduction conducted to ensure validity and reliability of the items in measuring the intended outcomes.

Qualitative data to provide contextual information about the implementation of thematic curriculum units and elective courses at each school and student attainment of magnet value-added skills will be obtained from biannual site visits by the evaluator to each magnet school in each project year that will include class observations and interviews and focus groups with planning team members, teachers, parents, and students.

Project Objective 4: Build the capacity within the magnet schools to provide rigorous, theme-based instructional programs that will help promote choice and diversity in D8-11 To build staff capacity, each magnet school will develop a comprehensive five-year PD plan that describes implementation of staff development directly related to the magnet theme and evidence- and research-based instructional practices that are outlined in the MSAP grant application. The following performance measures will be used to evaluate the extent to which Project Objective 4 is met over the five-year grant period.

Performance Measure 4.1: Based on the PD plans, the following proportions of pedagogical staff in each school will participate in 50 or more hours of magnet-related PD in each year of the grant: 25% or more in Year 1, 50% or more in Year 2, 100% by Year 3, and all new teachers in each of

Years 4 and 5.

Performance Measure 4.2: Through their participation in magnet-related PD, the proportion of teachers in each school who report using strategies and concepts related to the magnet theme and innovative instructional strategies will be at least 25% in Year 1, 50% in Year 2, and 100% in each of Years 3-5 of the grant.

Performance Measure 4.3: In each year of the project, the percentage of parents/guardians at each of the four magnet schools who express a high level of satisfaction with the rigorous, theme-based instructional program at each school will increase by at least 10 percentage points in each of Years 2 and 3, compared with baseline data from Year 1, and by an additional five percentage points in each of Years 4 and 5.

Evaluation Methods for Project Objective 4: Data to assess Performance Measure 4.1 will be derived from a review of each magnet school's annual PD plan, school and district PD activity logs, and PD agendas and sign-in sheets. Data to assess Performance Measure 4.2 will be derived from an analysis of checklists completed by instructional staff that will be developed by the external evaluator in consultation with the school and district MSAP staff to collect data on classroom practices and use of instructional strategies presented in grant-funded PD and job-embedded coaching. Data will be collected annually and analyzed by school and for the project using frequency and cross-tabulation calculations. Performance Measure 4.3 will be assessed with data collected on annual parent/guardian surveys that will be administered to all families in each year of the grant.

In addition, in each year of the grant, surveys will be administered to instructional staff, parents/guardians, and students (in Grades 3-8) in each magnet school. All surveys will be administered online and in paper version in the spring of each project year. The parent survey will

be available in English, Spanish, and other languages as needed. The staff survey will be administered to collect data from staff about their satisfaction with grant-funded PD, perceptions about impact of the PD on staff's knowledge, skills, and confidence in key concepts addressed in the magnet PD, and areas in which they need or would like additional PD. The survey will also measure staff's awareness and support for the magnet program and their participation in and satisfaction with program planning.

The parent/guardian survey will collect data on parent/guardians' awareness of, satisfaction with and participation in magnet program activities including family engagement efforts, as well as perceptions about impact of the program on student outcomes and suggestions for improvement. The student survey will also collect data on participation in and satisfaction with different magnet program activities, perceived impact of the magnet program on student learning and other outcomes, such as interest in theme-related careers, and suggestions for improvement. All surveys will be anonymous and will be analyzed by school and for the project using frequency calculations and cross-tabulations. These data will be used for formative evaluation of the PD and will be used by the Project Director and Site Coordinators for program development. The surveys will be pilot-tested in Year 1 with item analyses and reduction conducted to ensure validity and reliability of the items in measuring the intended outcomes.

All data collected through the project evaluation will be triangulated to incorporate perspectives from the diversity of program stakeholder groups. The findings will be synthesized to objectively *document* the effort expended to implement program activities and determine the *effectiveness* of project activities and *efficacy* of the project in relation to outcomes achieved. Results of the external evaluation will be provided to the Project Director through monthly communications and status updates and biannual summary reports. The evaluator will also provide

ongoing informal feedback as data are collected and participate in project management meetings that are conducted by the Project Director. Ongoing feedback will ensure that the evaluation supports continuous improvement of the project.

The results of the quantitative and qualitative data analyses will be synthesized and presented by D8-11 to the USDOE in the Annual Performance Reports and Ad-Hoc Reports for each project year, including a final report at the end of the grant period. Metis will assist D8-11 MSAP staff in preparing the reports to present succinct findings about the success of the project in meeting the intended outcomes that are outlined in the project objectives and performance measures. The Districts will also provide data to the USDOE to report on progress on the five program level measures as required by Government Performance and Results Act (GPRA).

Below is the measurement framework that will be used to guide the program evaluation. The framework outlines the indicators; measures of change; and the data collection methods, sources, and timeline of the activities that will be conducted to assess progress toward meeting each of the MSAP objectives to be addressed over the five-year MSAP grant.

Magnet Schools Assistance Program (2017-2022)

New York City Community School Districts 8 and 11—Bronx, New York

D8-11 MSAP Program Evaluation Measurement Framework

Outputs/Outcomes (as per logic model)	Indicators	Measures of Change	Data Collection Methods	Data Sources	Frequency of Data Collection
Program Outputs					
Thematic units of study for all grade levels (Performance Measure 3.1)	Implementation of thematic curriculum units	Proportion of students exposed to thematic curriculum units	Review of program documentation and curriculum, teacher focus group, principal interviews, class observations	Curriculum development and implementation logs and copies of thematic curriculum units, observation and interview protocols	Biannually
Professional development (Performance Measure 4.1)	Staff participation in magnet-related professional development	Proportion of teachers and school leaders enrolled in grant-related training and PD	Review of program documentation and PD participation data	PD plan, PD activity logs, and PD agendas and sign-in sheets	Biannually
MSAP Outcomes (Short-Term)					
Reduced minority group isolation in magnet schools (Performance Measure 1.1)	Proportion of students in each racial/ethnic group within each school population	Reduction in the proportion of African American/Hispanic/ Asian students in each school population	Analysis of the proportion of students by racial/ethnic group enrolled in each school	NYCDOE Official Student rosters as of October 1	Annually
Increased interest and demand from out of zone students (Performance Measure 1.2)	Number of magnet applications submitted for each program	Increase in number of applications submitted for each school	Analysis of number of applications	NYCDOE magnet application data files as of October 1	Annually
Improved student achievement (Performance Measures 2.1, 2.2, and 2.3)	Student proficiency on state assessments in ELA, math, and science	Increase in the proportion of students who meet or exceed grade-level expectations on state assessments	Analysis of student scores on state assessments	NYS assessments in ELA and math (Grades 3-8) and science (Grades 4 and 8)	Annually
Increased student mastery of unique magnet value-added skills (Performance Measure 3.2)	Demonstration of magnet value-added skills	Increase in proportion of students who demonstrate mastery of magnet value added skills	Analysis of data collected on locally-developed student checklists	Teacher-completed student checklists	Annually
Increased staff implementation of innovative teaching strategies (Performance Measure 4.2)	Use of skills related to magnet themes and PD	Increase in proportion of staff who report using strategies and concepts related to magnet themes and PD	Analysis of staff checklists and surveys, teacher focus groups, principal interviews, class observations	Staff checklists and surveys, observation and interview protocols	Annual checklist and survey, biannual site visits
Increased parent satisfaction with theme-based instructional programs in magnet schools (Performance Measure 4.3)	High level of parent satisfaction with magnet program instruction	Percentage of parents/guardians who express a high level of satisfaction with theme-based instructional programs	Analysis of parent surveys and parent focus group responses	Parent surveys and focus groups	Annually

(3) The Secretary determines the extent to which costs are reasonable in relation to the objectives, design, and potential significance of the proposed project.

The evaluation costs reflect the total amount of resources that is needed to address the research questions and meet the MSAP program evaluation goals, in terms of providing formative and summative data for continuous program improvement of the project and addressing the GPRA and project-level performance measures in each year of the grant period. The location of Metis in NYC greatly supports a cost-effective approach to the work.

At the same time, the evaluation budget provides an adequate level of resources to conduct a well-designed and well-implemented impact study that will build evidence of promise for the impact of the project on the intended outcomes. In order for the study to produce evidence of promise, Metis has proposed a quasi-experimental design using PSM to identify a well-matched comparison group. PSM is an iterative process that requires a one-to-one matching of treatment and comparison students on a comprehensive set of demographic and pre-intervention achievement variables in order to accurately assess the impact of the intervention and associate causal relationships. Building evidence of promise through the impact study will contribute to the growing knowledge base about the type of magnet program interventions that are proven to have positive and educationally meaningful effects of student achievement outcomes. This knowledge base serves as an essential resource for districts across the country for designing instructional programs and interventions to address student learning and achievement needs. The inclusion of an impact study components requires the robust level of resources that have been allocated in the budget.

The evaluation design includes resources for a robust set of on-site data collection activities, including biannual visits to each proposed magnet school to collect formative and summative

feedback from multiple stakeholder groups through focus groups, interviews, and classroom observations. Additionally, resources are allocated to administer annual surveys of magnet school staff and other key stakeholders to provide opportunities for all stakeholders to provide feedback, in an anonymous and sanction-free environment. Resources are also allocated for the proper processing and analysis of these qualitative data to ensure that all human subjects rights are adhered to and respected.

Finally, included in the evaluation budget are costs associated with implementing a comprehensive set of qualitative and quantitative data analyses and reporting activities. For example, the evaluation requires a detailed analysis plan to assess outcomes of students in each school and by subgroup (racial and ethnic groups, low-income students, ELLs, and students with disabilities) to evaluate progress of the grant in meeting the ambitious goal to improve student achievement. The evaluation budget includes funds for the adequate reporting of data, both formative and summative, to ensure that project staff can effectively integrate findings, in real time, into the continuous improvement process. The reporting structure includes annual summative reports as well as interim reports from the biannual site visits and monthly formative feedback mechanisms, such as teleconferences and email communications.

We believe that the evaluation costs are reasonable in terms of the benefits and potential significance of the proposed project. The evaluation has also been designed with attention to cost efficiencies, e.g., avoiding redundant data collections and relying on administrative data files to the extent possible, using multiple methods of data collection and triangulating findings and implementing minimally intrusive data collections. Altogether, the evaluation costs represent less than 3% of the total grant request, a small investment in light of the expected return in knowledge gains regarding effectiveness of the proposed MSAP program model.