MARCH 2018

EVALUATION OF THE YMI CORNERSTONE MENTORING PROGRAM

Role in Supporting Engagement in School and Learning

Christina A. Russell
Yavette Francis

Prepared for:
Department of Youth and Community Development
Mayor's Office for Economic Opportunity
New York, NY

POLICY STUDIES ASSOCIATES

1120 20th Street NW Suite 200N
Washington, DC 20036

policystudies.com
202.939.9780

Executive Summary

The New York City Young Men's Initiative (YMI) is a cross-agency initiative that aims to address the disparities in socioeconomic outcomes between young Black and Latino men and their peers. In support of this vision, the New York City Department of Youth and Community Development (DYCD) launched a mentoring program in its Cornerstone Community Centers in January 2012. Cornerstone Community Centers, operated by nonprofit provider organizations, are located in New York City Housing Authority (NYCHA) facilities throughout the city. Centers offer a range of programming to youth and adults, including afterschool programming that provides homework assistance as well as recreational and enrichment activities.

The YMI Cornerstone Mentoring Program, initiated in 25 Cornerstone centers, aims to support youth in fifth through ninth grade in key life and educational transitions as they progress into middle and high school. Compared to the traditional afterschool programming at Cornerstone centers, mentoring programs immerse participants in a richer, small-group experience. Each Cornerstone center receives $32,000 in YMI funding to serve 12 mentees. Mentors are recruited from many arenas, including through the community, through local colleges, and through an online volunteer recruitment site operated by NYC Service. Many mentors are Black and Latino men with some connection to the Cornerstone community: some are staff members in nearby schools or housing facilities, while others are adults who grew up in the surrounding neighborhoods and who are now working professionals. The mentoring program is overseen by a mentor coordinator in each center, with a ratio of one mentor to four youth, although the structure of the group mentoring format varies by center. Centers have flexibility to determine the mentoring schedule and programming, but are expected to offer at least one and a half hours of mentoring each week during the school year and two mentoring sessions over the summer. Mentoring activities typically include group discussions, sports, field trips, meals, academic support, and community service projects.

In 2014-15, DYCD and the Mayor's Office for Economic Opportunity (NYC Opportunity), which oversees the implementation, performance monitoring, and evaluation of YMI programs, asked Policy Studies Associates (PSA) to conduct a study of the approaches used in the YMI Cornerstone Mentoring Program to support mentees' academic success and of the mechanisms used to engage mentees in this process. It is important to note that YMI Cornerstone Mentoring Programs are not explicitly identified as academic support programs. Rather, mentoring programs aim to shift mentees' perspectives on school, their behavior in school, and attitudes toward teachers and peers so that they come to school ready to learn.

Profile of YMI Cornerstone Mentoring Participants

The YMI Cornerstone Mentoring Program is designed to support youth in grades 5 through 9. Reflecting the overarching goals of the citywide YMI initiative, recruitment of mentees focuses on young men of color, although young women are also eligible for the program. Although some Cornerstone centers struggled with meeting enrollment goals for the mentoring program, programs generally succeeded in reaching the targeted group of mentees.

- **Program enrollment.** The number of programs that successfully met their enrollment target of 12 mentees increased over the first four years of the YMI Cornerstone Mentoring Program, ranging from eight of 25 programs at inception to 20 of 24 programs in 2015, according to data captured in DYCD Online, the agency's data management system. These patterns suggest that centers improved their recruitment methods of mentees over time.

- **Demographics.** In each year of the program, about two-thirds of youth enrolled in mentoring were African-American, and about one-third were Hispanic or Latino, based on data from the New York City Department of Education (NYCDOE). A majority of mentees were male. However, the proportion of mentees who were male decreased from year to year—from 82 percent in 2012 to 67 percent in 2015—suggesting a potential shift in recruitment efforts to include more young women in the program.

- **Eligibility for special services.** The majority of mentees (at least 86 percent) were eligible for free or reduced-price lunch, according to the NYCDOE. In addition, depending on the program year, between 21 percent and 30 percent of mentees were eligible for special education services, considerably higher than the 2014-15 citywide average of 14 percent.

- **Educational characteristics.** NYCDOE records indicated that YMI Cornerstone Mentoring participants performed below proficient on the New York State English Language Arts (ELA) and mathematics assessments. The majority of mentees scored below proficient in ELA (ranging from 81 percent in 2012 to 94 percent in 2014) and in math (ranging from 65 percent in 2012 to 91 percent in 2013).[1] Mentees also had high rates of chronic school absenteeism. More than a quarter of mentees were absent from school for 20 or more days during the first three years of the mentoring program (ranging from 26 percent to 29 percent), exceeding citywide averages.

- **Level of program participation.** DYCD expects that mentoring will be offered for least 1.5 hours for 42 weeks during the school year, plus a minimum of at least two additional sessions over the summer months. In total, mentees received an average of 41 to 46 hours of mentoring per year from 2013 through 2015, according to records in DYCD Online. In 2015, 37 percent of mentees participated in mentoring programming at high intensity (defined as more than 53 hours, or 80 percent of the estimated mentoring time offered). About one-third (35 percent) participated in the YMI Cornerstone Mentoring Program for more than one year. Twenty-five percent received mentoring for two years, and 10 percent remained in the program for at least three years.

This profile suggests that the YMI Cornerstone Mentoring Program engaged youth at significant risk of low achievement, increased dropout, and reduced readiness for college and careers, who could benefit from the supports to stay engaged in school at key transitions to middle and high school. The level of engagement in mentoring varied, however, indicating that programs may struggle to recruit and serve mentees at levels required to achieve impact.

[1] A new state accountability assessment was introduced in New York State in 2013, resulting in a decrease in student performance levels in both ELA and mathematics throughout the city and state.

School Supports Framework

This study was designed to illuminate the ways in which the YMI Cornerstone Mentoring Programs prepare mentees for school and learning. The goal of the mentoring program is to support youth through key transitions into middle and high school. Exhibit A summarizes the themes that emerged about how the YMI Cornerstone Mentoring Program supports the educational success of mentees, and the conditions and structures that enable that support. Instead of offering direct academic support such as tutoring, mentor coordinators and mentors typically consider their primary role to be helping youth develop skills that enable them to reframe their attitudes toward the importance of school, which they see as a first necessary step in helping youth achieve academic success.

Strategies to Address Foundational Needs

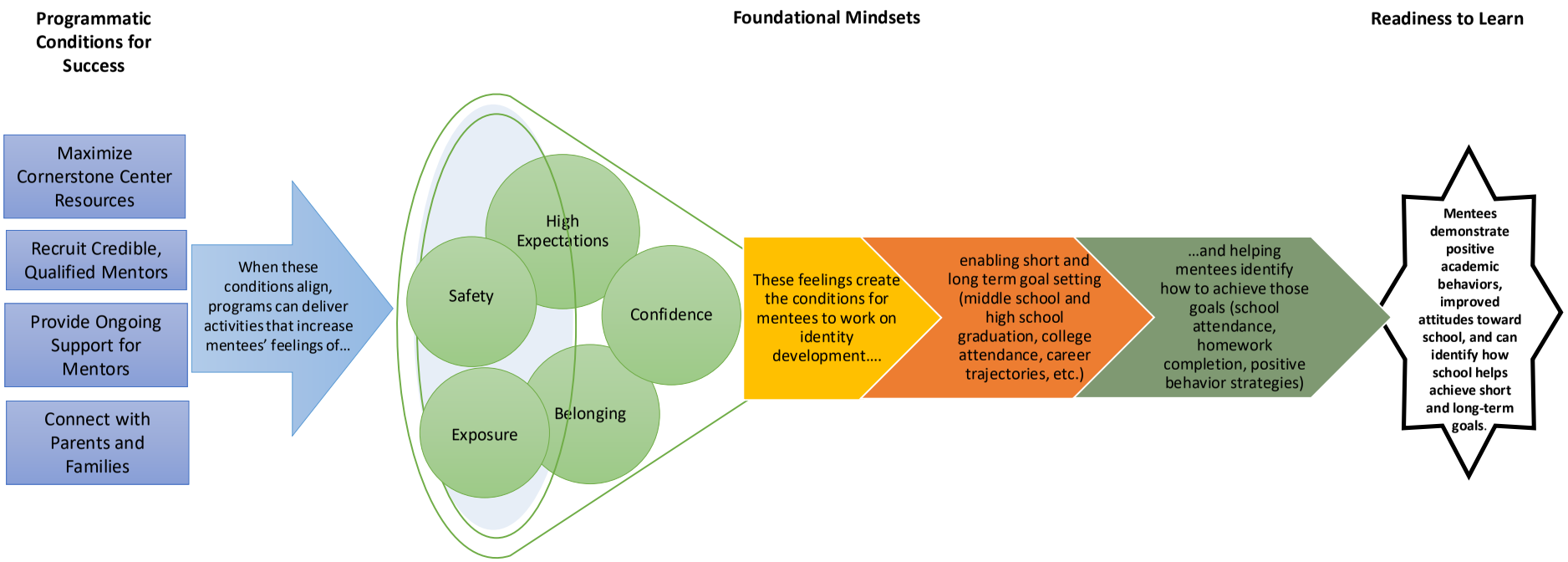
The evaluation explored the strategies used by the YMI Cornerstone Mentoring Program to develop the foundational mindsets of young people, identified in Exhibit A. These strategies are summarized below.

- Sense of belonging. YMI Cornerstone Mentoring Program staff emphasized that building positive relationships between mentees and staff is foundational for supporting the personal and academic needs of youth. Mentors intentionally and informally influence mentees' feelings of belonging to create conditions for them to be successful in school and life. Mentors demonstrate that they care for mentees, and create a safe space for mentees to discuss issues that may affect their learning.

- Self-efficacy. Mentoring programs helped youth develop a sense of self-efficacy for learning, and tools to deal with challenges and failure, through role-modeling, encouragement, and recognition of effort rather than ability.

- High expectations. YMI staff communicated high expectations to mentees to foster personal accountability for learning. They encouraged mentees to do well in school and to think about the ways in which their attitudes and decisions play a consequential role in their present and future accomplishments by monitoring their academic progress, providing incentives, and serving as role models.

Exhibit A
Supporting school success in the YMI Cornerstone Mentoring Program



- **Emotional and physical safety.** Mentors talked with mentees about strategies that they could use to navigate stressful situations in their school environment, such as bullying, peer pressure, and student-teacher conflicts. Given that mentees' attitudes about school are related to their direct experiences and perceived safety in school, staff noted that before pushing directly for academic outcomes, it was important to address any safety concerns that might prevent mentees from fully engaging in school.

- **Exposure to new experiences.** The YMI Cornerstone Mentoring Program engaged mentees in learning by exposing them to content and academic development in new ways, and by providing programming that exposed mentees to opportunities that they would not otherwise have.

Programmatic Conditions for Success

The evaluation also identified the program setting, mentor recruitment, and mentor support as primary conditions facilitating the implementation of the YMI Cornerstone Mentoring program.

Implementing mentoring services in the Cornerstone setting enables the program to support mentees in learning in two distinct ways. First, YMI Cornerstone Mentoring programs can access the resources and services available within the Cornerstone center (which vary by center). Second, because each Cornerstone center, by design, is located near the community it serves, YMI program staff are accessible to mentees and their families and, for mentees attending neighborhood schools, their school-day teachers.

The YMI Cornerstone Mentoring Program also engaged mentors and staff who were "credible messengers," valued education, and could contribute a unique skill to the program. These characteristics helped to develop the relationships between mentors and mentees and to support positive school and learning outcomes. Mentor coordinators and mentors agreed that the ability to connect with youth was an important characteristic for adults interacting with mentees, and they described being thoughtful about cultural diversity in selecting mentors who met this criterion. Mentors received support in doing this work primarily from the YMI Cornerstone Mentoring Program coordinators and other Cornerstone leaders, who shared knowledge and experiences and articulated their overall expectations for the mentoring relationship.

Benefits of the YMI Cornerstone Mentoring Program

Analyses explored the impact of the YMI Cornerstone Mentoring Program on mentees, compared to a matched group of Cornerstone participants from centers that were part of the YMI Cornerstone Mentoring Program, but who did not receive mentoring. The two groups were matched to be similar in terms of demographic characteristics, baseline educational performance, and grade level. The impact of mentoring was examined on three measures:

- Engagement in the overall Cornerstone Center programming
- School attendance
- Grade promotion

However, readers are urged to remember that the YMI Cornerstone Mentoring Program only requires that programs offer one and a half hours of mentoring per week during the school year and two sessions during the summer. In addition, the YMI Cornerstone Mentoring Program is not primarily considered an academic support program, and program activities are not designed with these outcome measures as goals. Therefore, expectations for measurable program impact on engagement in learning must be tempered.

Impact on Cornerstone Program Engagement

Impact on overall Cornerstone Center program engagement. Engagement in a program provides insight into the perceived value of the program by participants, and into the program's success in fostering a welcoming community in which participants can thrive and receive supports and resources. We explored the impact of the YMI Cornerstone Mentoring Program by comparing rates of retention in the Cornerstone center for mentees and non-mentees. Particularly for youth who may be at risk of becoming disengaged from school, program retention can be important for receiving supports in transitions to ensure future success, prevent school drop-out, and receive necessary resources in a structured, supportive setting.

YMI Cornerstone Mentoring Program participants continued enrollment in the Cornerstone center (regardless of whether they continued mentoring) at significantly higher rates than did non-mentees: 55 percent of mentees remained enrolled in the Cornerstone center for two years, and 26 percent for three or more years. In contrast, 59 percent of non-mentees enrolled for only one year, compared to just 18 percent of mentees. This suggests that YMI Cornerstone Mentoring Program participants are effectively forging a sense of belonging in the Cornerstone center and receiving valued supports.

Impact on school attendance. Mentors encourage YMI Cornerstone Mentoring participants to remain engaged in school by role modeling and setting expectations, by exposing them to enriching learning experiences that highlight the connections to learning, and by providing them with developmentally appropriate tools to address social barriers to school attendance. We conducted Poisson regression analyses to examine the effect of participation in the mentoring program, controlling for baseline school attendance, race, and gender. We hypothesized that participation in mentoring could have a negative association with the number of days absent from school. Our analyses confirmed this hypothesis—participants who receive more hours of mentoring attend school more ($p < 0.001$). Participants who received 37 hours of mentoring missed one less day of school; 49 percent of participants received at least this amount of mentoring in 2014-15.

Impact on grade promotion. The YMI Cornerstone Mentoring Program encourages mentees to set high expectations for themselves in school, to persist through educational challenges, and to set and achieve goals for school completion. We hypothesized that the mentoring program could have an impact on the grade promotion of mentees as they progress through key educational transitions into middle and then high school. To test this hypothesis, we examined whether mentees and non-mentees were registered in the next higher grade at the start of the new school year following each year of Cornerstone participation.

We did not find any significant differences in the rates of grade promotion between mentees and non-mentees. We caution that this does not necessarily imply a lack of impact on the mindsets and

behaviors that may be associated with educational persistence, goal-setting, and aspirations. Rather, the data reveal a "ceiling effect" with little room to demonstrate growth and change in grade promotion rates: more than 95 percent of youth, both mentees and non-mentees, in both middle and high school, are promoted in each year.

Questions Raised by Findings

As NYC Opportunity, DYCD, and Cornerstone leaders reflect on these findings and their implications for the YMI Cornerstone Mentoring Program, consider the following:

The YMI Cornerstone Mentoring Program currently expects a minimum of 1.5 hours of mentoring per week during the school year and two mentoring sessions during the summer months. Is it realistic to expect measurable educational outcomes with that level of exposure to mentoring? What is the desired outcome of the mentoring program, and what level of mentoring services would be required for that outcome to be achieved?

- **Exposure.** The YMI Cornerstone Mentoring Program does not currently consider itself explicitly an academic support program. Center staff and mentors envision that mentoring will indirectly support learning outcomes by supporting the development of "soft skills" that promote positive changes in youth attitudes, enable youth to adjust successfully to new school environments, and cultivate leadership skills and an ethic of service in youth. With that approach to mentoring, how should the success of the mentoring program be assessed? If the goal of the program is in fact to have a measurable impact on school engagement or learning, how would the mentoring program need to be altered?

- **Expected impact.** The YMI Cornerstone Mentoring Program is engaging a high-risk group of mentees. Are the mentees currently being served in fact the targeted youth? What are the implications for what outcomes can be expected when serving these youth, as opposed to other youth who may be less at risk educationally but still in need of support during key transitions? What expectations are communicated to Cornerstone centers?

- **Targeted participants.** How, if at all, should YMI Cornerstone Mentoring Program resources be redistributed to deepen the program impact, based on the responses to the questions above? How can Cornerstone centers allocate resources to ensure that mentors have training and support, are connected with the families and schools of mentees, and that mentees have access to the resources and opportunities that can engage them in learning and support them through transitions?

- **Resource distribution.** How, if at all, should YMI Cornerstone Mentoring Program resources be redistributed to deepen the program impact, based on the responses to the questions above? How can Cornerstone centers allocate resources to ensure that mentors have training and support, are connected with the families and schools of mentees, and that mentees have access to the resources and opportunities that can engage them in learning and support them through transitions?

Contents

Overview

The New York City Young Men's Initiative (YMI) is a cross-agency initiative that aims to address the disparities in socioeconomic outcomes between young Black and Latino men and their peers. In support of this vision, the New York City Department of Youth and Community Development (DYCD) launched a mentoring program in its Cornerstone Community Centers in January 2012. Cornerstone Community Centers, operated by nonprofit provider organizations, are located in New York City Housing Authority (NYCHA) facilities throughout the city. Centers offer a range of programming to youth and adults, including afterschool programming that provides homework assistance as well as recreational and enrichment activities.

The YMI Cornerstone Mentoring Program, initiated in 25 Cornerstone Community Centers, aims to support youth in fifth through ninth grade in key life and educational transitions as they progress into middle and high school. Compared to the traditional afterschool programming at Cornerstone centers, YMI mentoring programs immerse participants in a richer, small-group experience. Each Cornerstone center receives $32,000 in YMI funding to serve 12 mentees. Mentors are recruited from many arenas, including through the community, through local colleges, and through an online volunteer recruitment site operated by NYC Service. Many mentors are Black and Latino men with some connection to the Cornerstone community: some are staff members in nearby schools or housing facilities, while others are adults who grew up in the surrounding neighborhoods and who are now working professionals. The mentoring program is overseen by a mentor coordinator in each center and delivered in a group format. Mentoring structures and programming vary by center, but typically include up to four youth working with an individual mentor and group discussions, sports, field trips, meals, academic support, and community service projects. Mentoring occurs year round; DYCD generally expects centers to offer at least one and a half mentoring activity hours each week during 42 weeks of the school year and a minimum of two mentoring sessions in July and August (approximately 66 hours of mentoring total per year).

Policy Studies Associates (PSA) conducted an evaluation of the YMI Cornerstone Mentoring Program that examined participation patterns in the program the programmatic practices through which programs aimed to benefit mentees (Dibner, Woods & Russell, 2014). The evaluation identified dialogue, role modeling, trips, and academic support as four primary impact levers for supporting mentees' growth. The evaluation also found that mentees were engaged in learning experiences, had very positive relationships with their mentors, and, compared to Cornerstone participants who did not participate in the mentoring program ("non-mentees"), were significantly more likely to report positive attitudes about their ability to do well in school.

In 2014-15, DYCD and the New York City Center for Economic Opportunity (CEO), which oversees the implementation, performance monitoring, and evaluation of YMI programs, asked PSA to conduct a study of the approaches used in YMI Cornerstone Mentoring Program to support mentees' school success and of the mechanisms used to engage mentees in this process. This study, which builds on the prior evaluation of the YMI Cornerstone Mentoring Program, is guided by the following questions:

- What is the impact of Cornerstone mentoring on student engagement in school and learning, as measured by school attendance, grade promotion, and youth reports of positive mindsets? In particular, what is the value-added of participation in Cornerstone mentoring compared to participation in other Cornerstone programming?

- How do the mentoring program impact levers identified in the previous evaluation, including dialogue, role modeling, trips, and academic support, contribute to more positive mentee attitudes towards school and greater levels of engagement in learning at crucial transition points? What conditions support the effectiveness of these levers? How could effectiveness be further strengthened?

It is important to note that YMI Cornerstone Mentoring Programs are expected to offer only one and a half hours of mentoring each week for approximately 42 weeks during the school year, in addition to a minimum of two additional sessions during the summer months, and that that these programs are not explicitly identified as academic support programs. Rather, the approach of YMI Cornerstone Mentoring Programs is consistent with a foundational approach of youth programs to develop "sets of behaviors and skills, attitudes, and strategies that are crucial to academic performance" (Nagaoka et al., 2015). YMI Cornerstone Mentoring Programs aim to shift mentees' perspectives on school, their behavior in school, and attitudes toward teachers and peers so that they come to school ready to learn and are supported during transitions into middle and high school. In the sections that follow, we describe the ways in which programs use the four previously identified impact levers to deliver mentoring supports that prepare mentees for school and learning. We introduce a framework that describes the YMI Cornerstone Mentoring Program approach, explain the programmatic conditions that enable successful delivery of the mentoring program, and offer recommendations to further strengthen the impact of the program at Cornerstone centers.

Evaluation Methods

Findings in this report are based on an analysis of qualitative data collected by the PSA evaluation team, an analysis of program enrollment and participation data tracked by Cornerstone staff, and an analysis of demographic and school performance data maintained by the New York City Department of Education (NYCDOE).

Interviews. We conducted interviews in five Cornerstone centers in July and August 2015. We worked with DYCD to identify centers that met four criteria: (1) offered at least 1.5 hours of mentoring activities per week during both the 2013-14 and 2014-15 school years, consistent with minimum program expectations; (2) achieved full enrollment of the mentoring programming (12 mentees); (3) demonstrated high rates of mentee participation; and (4) had regular participation of non-mentees in grades 5 through 9 in other Cornerstone program offerings. During visits to these five centers, we interviewed mentor coordinators, mentors, mentees, and non-mentees.

Cornerstone enrollment and participation data. Cornerstone centers track enrollment and participation in center activities, including in the mentoring program, in DYCD Online, the agency's management information system. We requested an extraction of these data for all Cornerstone participants, including both mentees and non-mentees, listed in DYCD Online as being in grades 5 through 9 at any point from 2011-12 (the year of inception of the YMI Cornerstone Mentoring Program) through 2014-15. The non-mentees served as a pool of comparison students for analyses of program outcomes, described later in the report.

NYCDOE data. We worked closely with staff from both DYCD and NYCDOE to match the DYCD Online roster of Cornerstone participants to the student-level files on demographic data and academic performance maintained by the NYCDOE. Participation records from DYCD Online were sent directly to NYCDOE to be matched with administrative records so that evaluators would not have access to identifying student information. This file included each participant's name and date of birth.[1] Staff from NYCDOE used this identifying information to link Cornerstone data with student-level administrative records maintained in NYCDOE files,[2] and matched 5,528 records out of an estimated 8,371 records across all years, for approximately a 66 percent match rate in each year. Upon completing the matching process, NYCDOE provided de-identified data files for each school year to the evaluation team. We prepared these files for analysis, including removing records for students who had not attended an NYCDOE school. The resulting sampling frame for our analyses is displayed in Exhibit 1.

Exhibit 1
Number of DYCD Online Cornerstone participation records matched to NYCDOE student-level records, by year

School Year	Number of youth	
	Mentees	Non-mentees
2011-12	178	1,337
2012-13	265	1,330
2013-14	236	1,554
2014-15	338	2,217

Exhibit reads: For 2011-12, NYCDOE data were received for 178 mentees and 1,337 non-mentees.

Profile of YMI Cornerstone Mentoring Participants

The YMI Cornerstone Mentoring Program is designed to support youth in grades 5 through 9. Reflecting the overarching goals of the citywide YMI initiative, recruitment of mentees focuses on young men of color, although young women are also eligible for the program.

Mentoring program enrollment. YMI Cornerstone Mentoring Programs recruit mentees in the targeted grade levels from within the general Cornerstone Center afterschool program through direct outreach by staff, and through word-of-mouth among participants. Staff typically seek to enroll mentees who they believe would benefit from mentoring and would make the commitment to participate in the mentoring program throughout the year. The number of programs that successfully met their enrollment target of 12 mentees increased over the four years of the YMI Cornerstone Mentoring Program, ranging from eight of 25 programs at inception to 20 of 24 programs in 2014-15, according to data in DYCD Online (Exhibit 2). These patterns suggest that centers improved their recruitment methods over time. It is also important to note that in the first year of the program, most

[1] There were too few OSIS numbers—the unique student identifier used by the NYCDOE— in the DYCD Online file to use in the matching process.

[2] The matching approach used by the NYCDOE is dependent on the quality of the data provided for the match (e.g., accuracy of student birth date and consistent spelling of student name in the DYCD Online and NYCDOE records).

Cornerstone centers launched later in the year; this late start likely affected the capacity of programs to reach enrollment goals.

Exhibit 2
YMI Cornerstone Mentoring Program enrollment, by year

Year	Number of YMI Cornerstone Mentoring Programs	Number of programs that met target enrollment (12 mentees)	Average enrollment	Minimum enrollment	Maximum enrollment
2011-12	25	8	10	0	19
2012-13	25	17	15	6	32
2013-14	25	15	12	1	25
2014-15	24*	20	17	0	32

Source: DYCD Online

*For the 2014-15 year, one YMI Mentoring Program contract was transferred to a new Cornerstone center and was excluded from analysis.

Exhibit reads: In 2011-12, 8 of the 25 YMI Cornerstone Mentoring Programs met their targeted enrollment goal of 12 mentees. Programs enrolled an average of 10 mentees, ranging from 0 to 12 mentees.

In each year of the program, about two-thirds of youth enrolled in mentoring were African-American, and about one-third were Hispanic or Latino, based on NYCDOE data (Exhibit 3). A majority of mentees were male. However, the proportion of mentees who were male decreased from year to year—from 82 percent in 2012 to 67 percent in 2015—suggesting a potential shift in recruitment efforts to include more young women in the program.

Exhibit 3
Demographic characteristics of mentees, by year

Year	Percent of mentees				N
	Male	African-American	Hispanic/ Latino	Other Race	
2011-12	82%	64%	32%	4%	178
2012-13	80	63	32	5	265
2013-14	75	64	34	2	236
2014-15	67	64	32	4	338

Source: NYCDOE

Exhibit reads: In 2011-12, 82 percent of YMI Cornerstone Mentoring Program participants were male, 64 percent were African-American, 32 percent were Hispanic/Latino, and 4 percent were another race.

In each year, the YMI Cornerstone Mentoring Program successfully recruited and enrolled mentees in the targeted grades 5 through 9 (Exhibit 4).[3] A smaller proportion of mentees were in grade 9 than in the lower grades in all years. Beginning in 2012-13, programs also served a relatively lower percent of

[3] The few mentees not enrolled in grades 5 through 9 appeared to be of the appropriate ages for the targeted grades.

mentees in grade 5. In 2014-15, program efforts appeared to be focused primarily on mentees in the core middle grades 6 through 8 (a total of 74 percent of all mentees that year).

Exhibit 4
Grade level of mentees, by year

Year	Percent of mentees in each grade							N
	Grade							
	2-4	5	6	7	8	9	10-12	
2011-12	0%	25%	21%	26%	18%	10%	0%	164
2012-13	1	12	29	21	20	16	<1	248
2013-14	2	17	18	29	20	13	<1	218
2014-15	<1	13	27	23	24	11	<1	319

Source: NYCDOE

Exhibit reads: In 2012, none of the YMI Cornerstone Mentoring Program participants were in grades 2-4.

The YMI Cornerstone Mentoring Program served an at-risk population of youth, as defined by poverty and eligibility for special education services. As shown in Exhibit 5, the majority of mentees were eligible for free or reduced-price lunch. In addition, depending on the program year, between 21 percent and 30 percent of mentees were eligible for special education services, considerably higher than the citywide average of 14 percent for the 2014-15 school year.[4]

Exhibit 5
Eligibility for special services characteristics of mentees, by year

Year	Percent of mentees			N
	Eligible for free or reduced-priced lunch	Eligible for Special Education Services	English language learner	
2011-12	98%	21%	5%	164
2012-13	86	27	3	248
2013-14	88	30	3	218
2014-15	86	29	3	319

Source: NYCDOE

Exhibit reads: In 2011-12, 98 percent of YMI Cornerstone Mentoring Program participants were eligible for free or reduced-price lunch, 21 percent were eligible for special education services, and 5 percent were English language learners.

[4] http://schools.nyc.gov/AboutUs/schools/data/stats/default.htm

Educational characteristics. In each year of the program, YMI Cornerstone Mentoring participants had low performance on the New York State English Language Arts (ELA) and mathematics assessments (Exhibit 6). The majority of mentees (ranging from 81 percent in 2011-12 to 94 percent in 2013-14) scored at Level 1 (well below proficient) or Level 2 (below proficient) in ELA. Similarly, the majority of mentees performed below proficient in math (ranging from 65 percent in 2011-12 to 91 percent in 2012-13).[5] For comparison, citywide, 53 percent of students scored at Level 1 or 2 on ELA assessments in 2011-12, and 40 percent received a Level 1 or 2 score on math assessments. In 2014-15, 69 and 64 percent of students scored at Levels 1 or 2 on ELA and math assessments, respectively.

Exhibit 6
Educational characteristics of mentees, by year

Year	Percent of mentees			N
	Level 1 or 2 in ELA	Level 1 or 2 in Math	Chronic school absence	
2011-12	81%	65%	27%	160
2012-13	92	91	26	241
2013-14	94	88	29	209
2014-15	89	88	23	295

Source: NYCDOE

Exhibit reads: In 2011-12, 81 percent of YMI Cornerstone Mentoring Program participants performed at Level 1 or Level 2 on the New York State ELA assessment.

Mentees also had high rates of chronic school absenteeism, defined as being absent from school for 20 or more days in a year, or the equivalent of missing at least one month of instruction. More than a quarter of mentees were chronically absent from school during the first three years of the YMI Cornerstone Mentoring Program (ranging from 26 percent to 29 percent). Although a slightly smaller proportion were chronically absent in school year 2014-15 (23 percent), this proportion continued to exceed the citywide rates of chronic absenteeism, according to a report for the NYC Mayor's Interagency Task Force on Truancy, Chronic Absenteeism & School Engagement. This report found that one of five students (20 percent) were chronically absent between 2010 and 2013 and also noted that: (1) 79 percent of youth in the juvenile justice system had records of chronic absenteeism just prior to their arrest and (2) that students with good attendance were more than twice as likely to score "proficient" on state tests as those who were chronically absent (Balfanz & Byrnes, no date).

Together, these patterns suggest that the YMI Cornerstone Mentoring Program engaged youth at significant risk of low achievement, increased dropout, and reduced readiness for college and careers, who could benefit from the supports to stay engaged in school at key transitions into middle and high school.

Mentoring program participation. After 2011-12 (when mentoring was not offered for a full year), mentees received an average of 41 to 46 hours of mentoring per year, according to records in DYCD

[5] A new state accountability assessment was introduced in New York State in 2013, resulting in a decrease in student performance levels in both ELA and mathematics throughout the city and state.

Online. The reported level of participation in mentoring varied widely, from just one hour to more than 200 hours per program year (Exhibit 7).[6] This relatively low level of annual average exposure to mentoring likely has implications for the measurable outcomes on learning that YMI Cornerstone Mentoring Programs can be expected to achieve in their work with youth. Looking cumulatively across all years of the YMI Cornerstone Mentoring Program, mentees received an average of 60 hours of mentoring, ranging from 1 to 504 hours.

Exhibit 7
Hours of YMI Cornerstone Mentoring Program participation, by year

Year	Number of hours			n
	Average	Minimum	Maximum	
2011-12*	31	1	133	178
2012-13	46	1	240	265
2013-14	42	1	204	236
2014-15	41	1	202	296

Source: DYCD Online

Note: The YMI Cornerstone Mentoring Program started partway through the 2011-12 program year; the number of hours of participation reflect the reduced hours offered.
Exhibit reads: In 2012-13, mentees participated in YMI Cornerstone Mentoring Program activities for an average of 46 hours, ranging from 1 hour to 240 hours.

About one-third of mentees (35 percent) participated in the YMI Cornerstone Mentoring Program for more than one year (Exhibit 8). Twenty-five percent received mentoring for two years. Ten percent—67 mentees—remained in the mentoring program for at least three years.

Exhibit 8
Number of years of participation in the YMI Cornerstone Mentoring Program

Years of mentoring	Number of mentees (n=690)	Percent of mentees (n=690)
1	450	65%
2	173	25
3	49	7
4	18	3

Source: DYCD Online

Exhibit reads: 450 mentees (65 percent) participated in a total of one year of the YMI Cornerstone Mentoring Program.

[6] It is likely that some of this variation results from differences in the ways in which programs captured YMI Cornerstone Mentoring Program data in the DYCD Online system, including which activities were attributed to the mentoring program specifically rather than to each Cornerstone center's programming more generally.

High-intensity mentoring participation. We also conducted analyses to examine the patterns of participation for mentees who participated at high levels of intensity in mentoring the 2014-15 program year. Based on the expectations for an average of 1.5 hours of mentoring offered per week for at least 42 weeks during the school year and at least twice during the summer, we estimated that programs should have offered a minimum of 66 hours of mentoring activities in a year.[7] We conducted analyses to identify mentees who were engaged in mentoring at high intensity, calculated as at least 80 percent (53 hours) of the estimated 66 hours of mentoring offered.

In 2014-15, 37 percent of mentees participated in mentoring programming at this level of high intensity, averaging 98 hours. The majority of these high-intensity mentees were either in grade 6 (26 percent) or grade 8 (23 percent), suggesting that the program was reaching mentees at high levels in key times of transition, during the first year of middle school or as they prepared to transition to high school. Among mentees who participated at high intensity in 2014-15, 64 percent were in their first year of participation, and 36 percent had participated for one or more prior years. These trends were similar for non-mentees: 69 percent were in their first year, and 31 percent had attended previous years, suggesting that little association between program retention and intensity of participation.

School Supports Framework

In the previous evaluation of the YMI Cornerstone Mentoring Program, we found that four program impact levers—or practices—were the primary mechanisms used by mentor coordinators and mentors to promote positive outcomes among participants (Exhibit 9) (Dibner et al., 2014). The mentoring program levers were:

- **Dialogue**—formal or informal processes for discussing issues pertinent to youth—was consistently present in YMI Cornerstone Mentoring Programs as mentors engaged mentees in relevant, age-appropriate conversation.

- **Role modeling**—the act of representing a caring, successful, and admirable adult figure for youth—served an important, necessary function for mentees. Mentors reported that a primary responsibility was to serve as an example of a strong, positive adult for the mentees, and one of the roles of the mentors was to reinforce among mentees the value and importance of school and education. Mentors also helped mentees learn how to navigate the complicated terrain of race and class, and, importantly, to build and sustain positive relationships with adults.

- **Trips**—excursions away from the Cornerstone center—were a regular part of the mentoring experience. The trips augmented recruitment and retention in the program, provided enriching experiences that engaged and exposed mentees to new ideas and environments, and provided a means for mentors and mentees to bond and strengthen relationships.

- **Academic support**—including tutoring and homework help—allowed program staff to set high academic expectations for mentees while encouraging them to try their best and reinforcing the

[7] Programs are expected to offer summer mentoring activities but can adjust the frequency to accommodate mentor schedules and other summer programming.

importance of education. Mentor coordinators and mentors reported that they expected mentees to go to school and do their homework, communicating these expectations to mentees by checking in with them frequently about their school work.

Exhibit 9
Mentoring program pathways

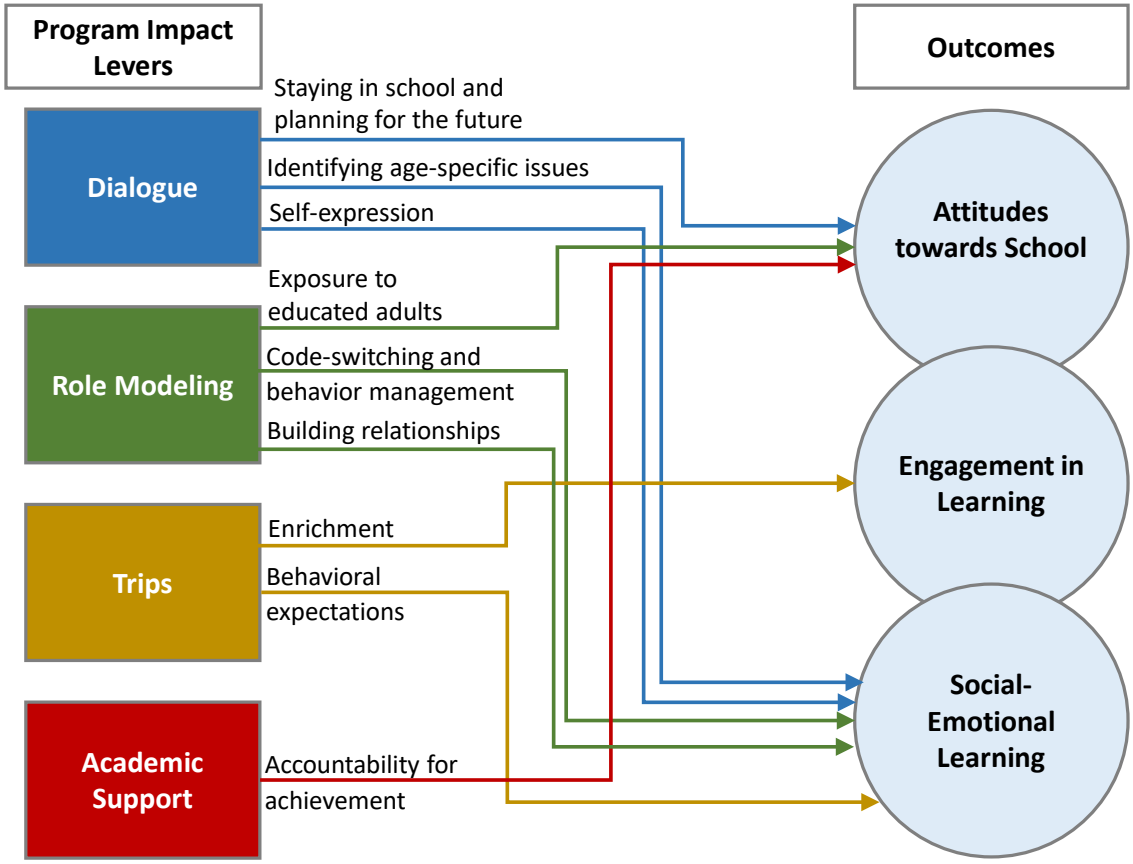


Exhibit originally created for Dibner et al. (2014). Full report available at: http://www.nyc.gov/html/ymi/downloads/pdf/ymi-cornerstone-mentoring-report-august-2014.pdf

Foundations for School Readiness

How did the YMI Cornerstone Mentoring Program go about the work of "moving the dial" on readiness to learn and succeed in school? This study is designed to illuminate the ways in which the program impact levers (role modeling, dialoguing, trips, and academic support) prepare mentees for school success. The goal of the mentoring program is to support youth through key transitions into middle and high school. Instead of offering direct academic support such as tutoring, mentor coordinators and mentors typically consider their primary academic support role as helping youth to reframe their attitudes toward school, which they see as a first necessary step in helping youth achieve school success. As one mentor said, "Once we change their attitude and their minds a little bit, they start feeling a little bit more confident. They're like, 'You know what? I'm at least going to try [to succeed in school].'"

As summarized in Exhibit 10**,** our interviews revealed a set of programmatic features that facilitate the efforts of the YMI Cornerstone Mentoring Program in supporting mentees in school and learning, including capitalizing on the resources of the Cornerstone centers; recruiting and training qualified mentors; and connecting with parents and families through the mentoring process (see: Programmatic Conditions for Success section of this report). The combination of these factors creates an environment in which mentors and staff are able to prepare mentees to be ready to learn.

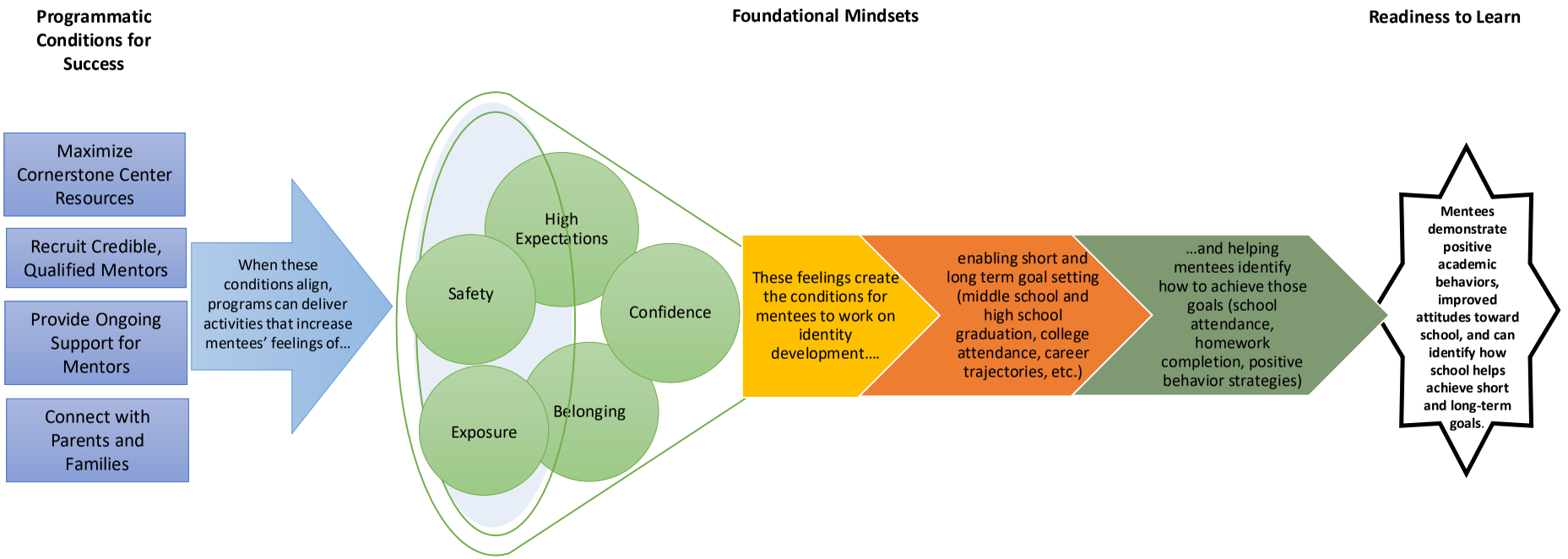
Impact levers. With these conditions in place, mentoring programs use the four program impact levers (dialogue, role modeling, trips, and academic support) to help youth develop the mindsets and knowledge needed for readiness to learn: sense of belonging, self-efficacy, accountability, emotional and physical security, and exposure (see: Foundational Needs section). As mentors increasingly addressed these needs and build mentee capacity, mentors reported seeing clear shifts in how mentees were engaging in school. This work is intentional: slowly and deliberately, mentors reinforce values that reorient mentees' attitudes toward their own ability to succeed. For example, in one center, mentors commented on the value of encouraging youth to take responsibility for their own learning:

> *When they get interested in something, they start engaging like, "Oh, have you seen that? I didn't know about this." They start looking for stuff online like, "I want to read a book about this."*

The mentoring program maximizes mentees' shifting attitudes toward school in order to help mentees (a) identify specific big-picture goals such as high school graduation and college attendance, and then (b) break down the daily, actionable steps toward achieving those goals. In other words, once a foundation is laid for success by adjusting mentees' attitudes toward success, mentors can help redefine how mentees imagine their education and personal trajectories. Mentors, then, can consistently reinforce the importance of school in achieving one's goals, outlining pathways in which school plays an integral role in getting from one stage of life to another. Mentors are intentional in reinforcing these messages, both by describing their own pathways to success and by encouraging mentees to set goals. As one mentee said, "We talk about where we want to go to college. They want us to plan ahead before we get there so we can set a goal and then work hard to accomplish it." Another mentee said how his mentor relayed his own pathways through school, "My mentor [and I have] the same interests a little bit. He went to college for [law enforcement] …and that's kind of like what I want to pursue. So he talked to me about how it works and everything like that…he helped me along with my interest."

By reinforcing these messages, the mentoring program helps mentees to find their own pathway into adulthood. When mentees identify these trajectories, mentors can then break the steps down into smaller, practical actions for mentees to accomplish in order to achieve their goals. These real-world actions range from immediate and daily steps (completing one's homework, going to school every day) to longer-term actions (passing necessary exams, completing applications, etc.).

Exhibit 10
Supporting school success in the YMI Cornerstone Mentoring Program



It is in this way that the YMI Cornerstone Mentoring Program most directly impacts mentees' positive attitudes toward school: when mentees understand that success in school is necessary toward achieving their goals, they realize (both conceptually and practically) how their own behaviors can move the dial toward that success.

Research on Readiness to Learn

The YMI Cornerstone Mentoring Program's approach to supporting mentees in engagement in school and learning is consistent with research that argues there are certain pre-conditions that need to be developed for students to show up at school ready to learn. While content knowledge and academic skills play an important role in determining educational outcomes, Nagaoka et al. (2015) identify five reinforcing academic readiness factors that impact school performance: academic mindsets, social skills, academic perseverance, learning strategies, and academic behaviors. These factors address how students see themselves as learners, their time management and study skills, attitudes about school, and their relationships with peers and adults. These pre-conditions are even more necessary for youth who experience a series of personal adversities and setbacks, which can impact their engagement with school.

Academic tenacity.

Dweck, Walton, and Cohen (2011) offer a similar perspective on the skills that promote long-term learning, exploring the importance of academic tenacity. These researchers define academic tenacity as "the mindsets and skills that allow students to look beyond short-term concerns to longer-term or higher-order goals and to withstand challenges and setbacks to persevere towards these goals." The three primary factors contributing to a student's academic tenacity include: mindset and goalsetting, social belonging, and self-regulation and control. Students with a growth mindset—the view that intelligence is not fixed but can be increased through effort and learning—perform better academically over time because they have a strong sense of self-efficacy and resilience. Students who adopt this mindset tend to establish learning goals (instead of performance goals) and view school as necessary in achieving short- and long-term goals. The researchers also report that social belonging, or students feeling connected to their school, teachers, and peers, contributes to students' academic tenacity because social belonging influences the level of students' engagement and motivation. Finally, self-regulation prompts students to stay on task and avoid distractions. Based on their findings, the researchers conclude that academic tenacity has a greater impact on student success than academic ability alone.

Guiding adults.

However, students need adults who can help them develop these factors for academic readiness and who can also teach them how to transfer it to different settings (Nagaoka et al., 2015). Prior research has shown evidence that when middle-grades students are paired with a "guiding adult" figure whose role is to provide individualized support and attention, they may feel more equipped to successfully transition into high school and avoid dropping out. Research suggests that "the single most important variable predictive of student persistence to high school graduation was the presence of an adult who supported the student and his or her quest to earn a high school diploma" (Montecel, Cortez, & Cortez, 2004). When students who were expected to graduate from high school were paired with trusted adult figures, they were more likely to remain on a "positive trajectory toward academic success," whereas those without a parent or teacher relationship "were more likely to drop out of high school despite doing well academically and behaviorally" (Englund, Egeland, & Collins, 2008). As a result, guiding adults often serve as a critical resource for students when they are most challenged: students who can turn to an adult may be better able to problem solve and/or receive encouragement and stay on track to achieve their academic goals.

Recent research has expanded on the role of a guiding adult, and has focused on the impact of having a network of supportive relationships from various sources (e.g., family, school, church, community). Each person in the network contributes different types of support at different levels; together this network helps students to persevere through adversities so that they can remain engaged in school and focus on academics (America's Promise Alliance, 2015). Nagaoka et al. (2015) offers a similar framework of youth being embedded in a network of individuals and institutions that shape their mindset, values, and skills. Through these relationships, youth are engaged in experiences that respond to their needs.

Strategies to Address Foundational Needs

The YMI Cornerstone Mentoring Program addresses the foundational needs of the young people served to help create conditions that enable them to positively engage in school and learning. As illustrated in the framework in Exhibit 10, these needs include sense of belonging, self-efficacy, accountability, emotional and physical security, and exposure to new experiences. Below, we describe strategies that programs use to foster this effort.

Sense of Belonging

YMI Cornerstone Mentoring Program staff emphasized that building positive relationships between mentees and staff is foundational in supporting the personal and educational needs of youth. Strong relationships foster belonging and help youth feel safe, supported, and cared for by adults in their life. This, in turn, helps build the capacity of youth to learn, motivating them to work harder in school, communicate their needs, and feel confident in their abilities (Herrera, DuBois, & Grossman, 2013; Rhodes, Grossman, & Resch, 2000). Program staff, particularly mentors, intentionally and informally influence mentees' feelings of belonging and closeness to create conditions for them to be successful in school and life.

By being a constant presence in mentees' lives, mentors demonstrate that they genuinely care for mentees and are committed to the relationship. For example, in one Cornerstone center, a staff member hired specifically to support academic needs noted that mentee-mentor rapport was key to mentees fully benefiting from the program. This staff member said that mentors must first build this rapport and address mentees' perception of self before addressing their academic needs:

> *The foundation is based on how they feel about themselves. [Mentees believe], "If I'm not comfortable showing somebody that I need help, I won't reach out." This relates to their interest in learning. "Am I interested in this? Do I want support?"*

In another center, mentors defined the process of relationship-building as displaying genuine love and showing mentees that they cared about their needs. One mentor from this center noted that mentees typically experience a "safe haven" where they can vent about school and learning, providing an opportunity for mentors to identify potential issues and offer candid feedback. He said, "If they need help, sometimes they might not know that they need help. So by speaking about it or venting about it,

we have a mentee or a mentor in place to correct that. If they don't know, we go and do the research for them and show them that together we're doing it and it becomes problem solving."

Mentees across centers shared that they felt supported, cared for, and encouraged to be the best version of themselves in school and beyond. One mentee said:

> *I feel like without my mentor I would still be doing not so well in school. I don't think I would've gotten into the school I got into. I feel wiser now that I've talked to my mentors, and I know that my mentors helped put me on the right track. I know that as long as I'm in the mentoring center, I have someone who can help me.*

Self-Efficacy

YMI Cornerstone Mentoring Programs viewed self-efficacy as necessary to support mentees' capacity to learn. Bandura (1997) describes self-efficacy as "people's beliefs about their capabilities to produce effects." Staff across centers commonly noted that, through the use of dialogue and, to some extent, role modeling, they worked to build feelings of self-efficacy among mentees, empowering them to do well in school and improve their attitudes about learning. These conversations were intentional and critical, designed to continually help mentees change their attitudes through constant reinforcement. As one staff member said, "I think it is important to build the kids up because, without that, then how would they have a creative bone or the courage to learn something new or excel in school?" while another argued that it would be hard for a child to "prosper" if adults did not support a healthy concept of self as a learner.

Dealing with challenges and failures.

Perhaps one of the most common ways in which mentoring program staff reported building self-efficacy in mentees was by providing tools to deal with challenges and failure. The theme emerged often as interviewees stated that perceived setbacks could influence a mentee's attitude as a learner. "We're trying to teach them that failing is not always a bad thing. It kind of helps you to learn more," one mentor said. The mentor coordinator at one center described an example of his lead mentor's role modeling, and how he often shared his personal stories about school-related obstacles and perseverance.

> *He shared his stories with the young people constantly, about him not finishing school on his own, but then going to a transfer school. Looking at a college and all that, so he was sharing his day-to-day stuff as far as the academics and his challenges and stuff in order for them to see where he was, the mistakes he made, the setbacks he had. Not mistakes, the setbacks he'd had, but then how he recovered from them and moved forward.*

In this same regard, mentors noted that they try to relay to mentees that their success in school should not be contingent on external factors, especially when those factors fail to meet their expectations. One mentor said that through daily conversations he teaches his mentees that, despite limited resources, they are capable of completing a task. He noted:

> *They feel [that if they lack something], [they need] to give up like, "I don't have a computer at home, so I'm not going to do the homework. I don't have such-and-such or whatever, so I'm not going to even bother trying that because it's not going to look right." Just the fact that [the teachers] ask [you] to do something, [you] need to work*

with what you got. There's plenty of times we [mentors] don't have what we want for our lesson plans, but we have to make it work. That's what we're trying to teach them.

He extended this by saying that he wanted his mentees to understand that this notion is applicable in school and beyond. "It's the same thing for life. You may not always have what you want. You may not have that coach that's always going to put you in. You're not going to have that teacher, just because you come in, they see that you're nice, they're going to pass you. You're going to have to work for some stuff," he said. Another mentor from the same center validated this point by noting that he witnessed some positive changes in mentees as a result of consistently and continuously having these types of conversations with his mentees:

The attitudes for school started changing when they started seeing that it was not the teachers that are holding them back, it was themselves. Now they're at the schools like, "Oh, my teacher didn't really hate me, because they just passed me." It's because they did the work. Now, the attitudes have changed, and now they're going to learn more.

Providing recognition for effort. Mentoring program staff highlighted the importance of *effort* rather than *ability* when building up mentees' self-efficacy related to school and learning. For example, adults would often reinforce positive messages by communicating the importance of studying, working hard, and not giving up to achieve school success. As one mentor said, "I tell my kids I don't want to hear, 'I can't.' 'I can't' is not a proper sentence." Another said, "Once we change their attitude and their minds a little bit, they start feeling a little more confident. They're like, 'You know what? I'm at least going to try.' You never know, if you're already giving up."

The concept of valuing *effort* rather than *ability* is just as important when working with mentees who are so confident in their abilities or "too cool" that they don't think it is necessary to put in any effort in school and learning. During interviews, mentors discussed strategies used to support such mentees. One mentor shared that he used himself as an example when teaching his mentees to value the process of learning. He shared, "You show them, 'Because you're smart doesn't mean that you know everything.' You lead by example. I'm horrible in spelling. I know a child that is excellent in spelling. I went to them and asked them, 'How do you spell this?"'

In interviews, mentees noted that their interactions and conversations with mentors helped to increase their confidence in subject areas and willingness to work towards a goal. One mentee specifically gave an example of his mentor encouraging him to put in extra effort in a science class that ultimately led to a positive outcome:

I was in the Regents science class, and I wasn't doing so well. I had a talk with my mentor and he encouraged me to try hard to make it into the Regents because in the Regents class they only pick out a certain amount of people that they get to take the Regents class. I ended up doing better and I took the Regents test.

High Expectations

YMI Cornerstone Mentoring Program staff often set and communicate high expectations with mentees with the hopes of fostering personal accountability for their learning. Mentor coordinators and mentors reported that they continuously encouraged mentees to do well in school and to think about the ways in

which their attitudes and decisions play a consequential role in their present and future accomplishments. This is primarily reinforced through strategies tailored for mentees who are in different stages of learning and receptiveness.

Monitoring school progress. One of the chief ways in which YMI Cornerstone Mentoring Programs supported mentees' accountability was by developing mechanisms, whether formally or informally, to offer mentees consistent and regular access to an adult to discuss their progress. This included report card reviews, conversations about homework, behavioral updates, and, in some cases, meeting mentees with their parents and/or teachers.

Mentoring programs used varied approaches to identify and address challenges that keep mentees accountable for their success in school. One mentor coordinator said:

> *This year we began again asking for report cards, checking in, the mentors having more in-depth conversations about "why are you struggling in math, why are you struggling in [this] subject, or doing better in that subject" and when it was challenging with the teachers, then we would try to get them different kind of avenues for them to address these kinds of challenges and issues with the teachers. Then we talked to the parents more often as well, [asking]" what you are hearing about in school."*

In other centers, mentors developed and employed their own approaches for monitoring progress with individual mentees. For example, one mentor said that his goal for his mentees is to earn "good grades" and when schools distribute progress reports, he intentionally avoids any discussions related to extracurricular activities with mentees until they show that they earned high marks or demonstrated that they made some improvements. Another mentor said that he takes notes on his mentees so that he can identify and address any problem areas that his mentees may be having in school.

This constant reminder that an adult cares for them and is available for consultation on tough issues allows mentees to take responsibility for their actions and gives them an opportunity to consistently troubleshoot for problems before they become roadblocks. One mentee said:

> *There's somebody out there who wants you to succeed besides people that you are related to, like your mom and dad. [Your parents] always want you to succeed, but you know there are other people who want you to succeed and you know that your mentor is out there for you, if you ever need to help. If you do better, so you can more or less impress them.*

Similarly, another mentee described becoming more motivated to complete his homework after a mentor encouraged him to do so:

> *I've gotten better with it because before I was, like, I don't like it so I'm not going to do it. Now my attitudes changed towards it since I realized that I can do well. I really didn't need that much help. I could do it, it's just that I didn't feel like I wanted to do it, so I didn't do it. Now that I am in the mentoring center, somebody wanted me to do better and I started doing better and better, and I got more consistent with the homework. That's how I passed and stuff.*

Challenges to monitoring school progress. Mentors and mentor coordinators wished that they had better systems in place for getting the necessary information to understand mentees' academic needs. Some mentoring programs leveraged their contacts with parents and/or schools to monitor progress in school, while others reported that they needed support to strengthen their connections with parents and schools. Even in one program where the Cornerstone center had periodic communication with school staff, some mentors felt disconnected from the school and uninformed about the progress of their mentees. One mentor described an instance occurring over several sessions in which one of his mentees convinced him that he did not have homework. Although the mentee's classroom teacher eventually alerted the program that the mentee was not completing his homework, and the mentor was then able to address the importance of homework with the mentee, the lack of a systematic communication process between the school and the program resulted in a lack of access to information that might have prevented the mentee from falling behind in the first place.

This mentor suggested that it would be useful for a system to be in place so that mentors are able to communicate with teachers more regularly about homework assignments as well as mentees' progress. With similar concerns, a mentor coordinator from another program said he needed support to help find ways to increase engagement with schools. He added that he would like for mentors to interact more intentionally with teachers and wanted support on guiding his mentors on having conversations with school staff.

Modeling desired outcomes. Mentors often served as positive role models who encouraged mentees to reflect on the ways they can be accountable and to take responsibility for their own success in school. Mentors focused on the fruits of hard work and perseverance by providing examples from their own personal growth and work ethic. One mentor who described himself as a music artist said, "[Mentees] see my craft and I tell them I take it seriously and at the beginning I was not as good as I am now, but I had to work on it. I didn't have any one to push me, but if I really wanted it bad, I should work for it." Along these same lines, the mentor coordinator at the same center, a professional actor, said that he often discusses his experiences to help mentees think about long-term goals and the importance of making it a priority to work towards those goals early. He also noted that he has introduced mentees to his actor friends who reinforced the same sentiments. Other mentors have also displayed their accolades to visibly demonstrate their accomplishments and the benefits of doing well in school. "Well, for me, I show them degrees, I show them report cards and it gives them something to reach for. The kids are competitive so they want to be better [than you], if not [just like] you."

Mentees appeared to understand and value the benefits of school after hearing more about the personal experience of their mentors. When asked about the ways in which their mentors inspired them to prioritize their school work, one mentee noted:

> *Yeah, because in school, I didn't really do homework. I don't like homework at all. I'll go home and not do it. My mentor told me how he was like me. He was really smart, and he didn't do homework. That bogged down his grades. But then when he started to do homework again, he was one of the top students.*

With an understanding of the value of school and homework, this mentee noted that while he still doesn't like homework, he now does it regardless.

Providing incentives. YMI Cornerstone Mentoring Program staff reported providing different incentives to increase mentees' motivation and accountability for school success. Leveraging mentees'

appeal for competition was reported as one strategy to motivate improvement in school. In one program, the mentor coordinator encouraged mentees to set personal weekly goals. If and when mentees met their weekly goal, they were rewarded with incentives such as movie tickets. In another center, the mentoring staff developed a series of program incentives to help motivate mentees to improve grade point average, including a program called, "A's for Jay's" that allowed mentees to earn Michael Jordan sneakers and other rewards. Other centers reported incentives such as pizza parties and participation in sporting activities.

Emotional and Physical Safety

To support mentees' experiences with school and learning, YMI Cornerstone Mentoring Program staff reported that they often dialogued with mentees about strategies that they could use to navigate stressful situations in their school environment, such as bullying, peer pressure, and student–teacher conflicts. Given that mentees' attitudes about school, in part, are related to their direct experiences and perceived safety in school, staff emphasized the importance of these kind of conversations; they noted that before pushing directly for academic outcomes, it was important to address any physical or emotional safety concerns that might prevent mentees from fully engaging in school. Research argues that a student whose personal safety is a concern may avoid school or may have challenges concentrating in the classroom (Osher et al., 2008).

One mentor commented, "I believe that a kid that is scared to go to school, they lose a day, if they lose a day, they are going to fall back. Once [a kid] falls back, it's hard to catch up. But I see that a lot of kids are afraid to go to school because a bully is picking on them." Across centers, staff used dialogue and role modeling to help mentees work through their problems, teaching them to become their own advocates in school. One mentor coordinator described how she and staff intentionally role-modeled conflict resolution skills using her staff as examples.

> *Sometimes we did stuff on purpose to disagree, like start a topic that we definitely knew we were going to disagree on, so they can see where we're at, how we handle it.*

Mentors also advocated for mentees by offering to intervene and address potential issues with school staff when necessary. The willingness to speak on mentees' behalf further instilled problem solving skills and the idea that mentors were part of mentees' support system.

Mentees across centers provided examples of other supports provided by the program and their mentors. One mentee reported that her mentor gifted her a diary to write about her feelings, while another said that he had spoken with his mentor about "the epidemic of bullying" and "violence in the streets" and how it affected him and his peers. Another mentee reported that as a result of his participation in the program he was able to focus more in class by blocking out negative things going on around him.

Other mentees provided insight on how their mentors helped them feel emotionally safe, which enabled them to engage in school. One mentee said, "[My mentor helped me] with just dealing with people. Say if you don't like someone in school, [start] ignoring them. Because before YMI, I really had a bad temper with people that I didn't like. Mentors taught me how to ignore them and not stoop to their level, because that's exactly what they want." Another described how the mentoring experience helped him feel welcomed and, as a result, become more engaged in school and enrichment activities:

[The program] helped me [get] to the school that I'm in right now. I'm just a really shy guy. And then the next thing you know, I broke out of my shell, and now, I'm doing everything. I speak to people from major companies like Google, like Microsoft, Apple.

Exposure to New Experiences

The YMI Cornerstone Mentoring Program also engaged mentees in learning by exposing them to content and academic development in new ways and by providing programming that exposed mentees to opportunities that they would not otherwise have. For example, one mentor coordinator said that the trips offered through the mentoring program "help them in school 100 percent and [the trips] also help them think outside the norm and be open to new things."

Mentees had opportunities to participate in enriching and recreational outings, organized either directly by the mentor coordinator or by DYCD, for all YMI Cornerstone Mentoring Programs. For example, the Intrepid Sea, Air, & Space Museum trip, organized by DYCD and often cited as a favorite across programs, provided an opportunity for program staff to enrich mentees' learning experience. In one program, the mentor coordinator tailored the Intrepid experience by designing scavenger hunts for mentees as an effort to positively influence their attitudes about learning. Mentees also reported benefitting from the Intrepid trip and applying what they learned in school. One mentee, for example, said that he learned a lot about World War II during the trip and was able to "join the conversation, and contribute more to it" in school. Trips were also used to help mentees discover interests that they may want to pursue in the future. In another center, for example, mentoring staff commented that in a behind-the-scenes Applebee's Kitchen Tours, mentees learned the basics of food safety and restaurant operations. Mentees were exposed to different positions in the restaurant industry and discussed ways of moving in that direction if they so wished.

A couple of YMI Cornerstone Mentoring Programs also had a distinct focus on community service-oriented trips. In one center, for example, mentees were required to participate in community service activities, and, in some cases, mentees received school credit for their participation in such activities. During interviews, mentees described the importance and commitment of giving back to their community; they also discussed how community service could help them in their own academic goals. One mentee provided an example, stating that because of his discussion with his mentor, he understood the value and implications for future goals:

Community service helped me because I thought it will look good on my college resume. Because I can put that kind of stuff on my college resume when I go to college. I feel like that definitely helped me out, and if I keep doing things like that it will help me get into a good college that I want to get in to.

Programmatic Conditions for Success

In the previous section, we discussed the different strategies that the YMI Cornerstone Mentoring Program uses to address the foundational needs (sense of belonging, self-efficacy, accountability,

emotional and physical safety, and exposure) that are essential in enabling learning and school engagement. There are also elements of program structures that can provide the conditions with which this work can happen, as described in Exhibit 10. Through conversations with program staff, we learned that mentors and program leaders are best able to serve the needs of mentees when programs maximize the resources that are available in Cornerstone centers; recruit credible, qualified mentors and provide them with ongoing support; and engage parents and families**.** This section describes the ways in which centers actualize these programmatic conditions.

Maximize Cornerstone Center Resources

Implementing mentoring services in the Cornerstone setting ideally enables the YMI Cornerstone Mentoring Program to support mentees in two distinct ways: (1) programs can use the overall Cornerstone center resources and (2) because each Cornerstone center, by design, is located near the community it serves, program staff are accessible to mentees and their families and, for mentees attending neighborhood schools, their school-day teachers. Consequently, mentoring program staff reported leveraging the accessibility and resources provided by the Cornerstone centers to better focus on and build mentees' capacity to learn, as described below.

Access to Cornerstone center resources.

Location within Cornerstone centers allowed the YMI Cornerstone Mentoring Program to offer mentees resources that enhanced the mentoring program and helped to support positive school and learning outcomes. In several YMI Cornerstone Mentoring Programs, for example, mentees had access to homework help sessions and other enrichment opportunities that were part of general Cornerstone afterschool programming. In one case, mentees were also able to participate in activities offered by Upward Bound, a college- and career-readiness program that provides high school students with educational and career guidance. Similarly, mentees at another YMI Mentoring program participated in an activity hosted by the Cornerstone center that combined a basketball tournament with a series of workshops focusing on high school and college readiness.

Accessible community facility.

Mentor coordinators also highlighted the value of location within the Cornerstone centers when discussing their proximity to mentees' school and home. Because the Cornerstone centers are located in the same community as some of the schools that mentees attend, mentors, in some cases, are afforded the opportunity to establish relationships with teachers and principals. As a result, mentors reported that they were better able to advocate on their mentees' behalf and to hold them more accountable by gathering information about mentees' assignments and by monitoring their progress. According to one mentor, an additional advantage is the ability to engage mentees outside of a school setting, since Cornerstone centers are located in NYCHA facilities where mentees live. He commented, "It's different from being in the school, and being in the community. When you're in the school, it's hard to reach a kid in the school because they want to get out."

Recruit Credible, Qualified Mentors

The YMI Cornerstone Mentoring Program engaged mentors and staff who were "credible messengers," valued education, and could contribute a unique skill to the program. These characteristics helped to develop the relationships between mentors and mentees and to support positive school and learning outcomes.

Credible messenger. Mentor coordinators and mentors agreed that the ability to connect with youth was an important characteristic for adults interacting with mentees, and they described being thoughtful about cultural diversity in selecting mentors who met this criterion. In one program, a mentor coordinator argued that it was important to recruit mentors who either "look like" mentees and/or have similar experiences to those of mentees. He emphasized that commonalities allowed mentors to connect, engage, and build relationships with mentees. This was especially true when providing mentees with the personalized guidance to support the unique challenges that they face in school and learning. YMI program staff believed that before focusing on direct academic outcomes, it was important that mentees first trust and feel comfortable with mentors. Once this relationship was established and mentees viewed their mentors as a credible presence in their life, mentors believed that mentees were more likely to open up about their aspirations and the challenges they face in school, allowing mentors the opportunity to effectively address their needs.

Values education. One mentor coordinator intentionally recruited mentors who were in college or who possessed a college degree to serve as models for the mentees. Other YMI programs had a mix of college-educated and non-college educated mentors. The college-educated mentors were equipped to help mentees understand the steps to successfully matriculate from high school into college. Some mentors who had not yet completed a degree were currently enrolled in college courses and served as role models and examples of perseverance. For example, one mentor described leading by example:

> *[The youth ask], "Why were you out yesterday?" [I would tell them], "I had class or I had finals." "You were in school?" [they would ask me]. They attest to that like, "Wow, you still going to class?" 'It doesn't stop no matter how old you are.'*

The non-college educated mentors also spoke to the importance of education. One mentor, for instance, attempted to change mentees' attitudes about school and learning by using his love of rap and poetry. He reiterated that, although they may have an interest in non-traditional careers, there is still a need to work hard in school so that they can become skilled in reading and writing.

Contributes a unique skill. A few mentor coordinators reported that they recruited a team of mentors with different expertise so that they could contribute uniquely to the learning experience of mentees. For example, one mentor coordinator reported that if he has a mentor who is good in math, he seeks to balance that by recruiting another mentor who is good in history. He said:

> *No mentors are the same but, at the same time, everybody has to bring something to the table and if we have someone strong in math, we don't want the same person strong in Latin. I try to go in a different direction, someone that's good with public speaking, this one is great with history. Because what happens when you all have different mentees who are looking for different things?*

Provide Ongoing Support for Mentors

A strength of the YMI Cornerstone Mentoring Program was the support provided to mentors to reinforce the basic knowledge and skills needed to build effective mentoring relationships. This support was primarily in the form of conversations and knowledge sharing. Mentor coordinators reported sharing

their own experiences with mentors, providing advice on an as-needed basis, and articulating their overall expectations for addressing the needs of mentees. Within programs, mentors also created a community amongst themselves to encourage and share advice with one another. In some cases, program mentors reported attending periodic formal trainings offered through the YMI Cornerstone Mentoring Program and delivered by Mentor NY, focusing on effective mentor-mentee relationships; however, some mentors expressed wanting more formal training.

Although the support provided to mentors predominantly focused on basic mentoring practices, it appeared to be adequate in enabling mentors to use their mentor-mentee relationship as a catalyst to (a) shift mentees' attitudes toward school, and then (b) encourage and reinforce the importance of performing regular positive learning behaviors. Mentors voiced that staff leadership created an open, familial, and communicative atmosphere that oriented them to their role as a mentor and to the program's mission. This alone provided them with the tools necessary to develop the positive relationship with their mentees that could ultimately transform the trajectory of their lives. As mentioned earlier in the report, in this same regard, research suggests that mentoring programs may be just as effective, if not more effective, in positively impacting school success than programs that mainly focus on targeted academic objectives (Bayer, Grossman, & Dubois, 2015). It is, therefore, not surprising to discover that formal and informal support provided to YMI mentors on navigating and building positive relationships helped mentors support mentees in school and learning.

Connect with Parents and Families

In the YMI Cornerstone Mentoring Program, connecting with and supporting parents or other caregivers can help staff and mentors respond to the educational needs of their mentees. Caregivers can provide staff and mentors with information on the social and academic challenges that mentees experience in school. The mentoring program in turn can use this information to find ways to provide additional resources and support for mentees. Caregivers also can be a vital part of the mentoring program's feedback loop. Families can inform staff and mentors about the effectiveness of the program's efforts and provide updates on mentees' progress in school, and mentors can reinforce and supplement supports at home. Foundational to these interactions is a strengths-based approach, in which mentors also demonstrate that they care about mentees and are empathetic to their needs. In some cases, the mentor relationship can highlight youth strengths for families: "They can see what amazing things their child is doing, not just coming in the house bugging mom or dad."

The YMI Cornerstone Mentoring Programs visited for this study varied in the level of engagement with caregivers. One mentor coordinator reported hosting a meet-and-greet with parents of new mentees to learn about their child's needs. The coordinator said that the information gained helped to shape the directions of their mentoring sessions. Some mentors were very hands-on, responding to calls from parents that the child refuses to go to school by going to the home and "going to get them up for school." At the other extreme, one coordinator shared that his program makes efforts to get families involved, but acknowledged that there are some mentees whose parents do not talk with program staff.

Family engagement is important for the YMI Cornerstone Mentoring Program because the program sees itself as part of a larger support network working together to help youth meet their potential. The program can be a link between school and home. However, coordinators acknowledged that they typically have limited access to teachers, which limits the ability of the program and mentors to serve as that liaison. One mentor coordinator shared his reflections on the value of the school-parent-mentoring

program relationship. This center had a working relationship with teachers at their mentees' school, but also realized the value of parent involvement in reinforcing the efforts of the school and the mentoring program. The coordinator reflected:

> *One of the hardest things that I find, if you're not on the same page as the parent and teachers, you're kind of running backwards…. We're lucky enough to have teachers who actually, when they get off, walk the kids here and they sit down and say, "Hey, this is what we need" because they know [their students] are in the YMI program [...] That's one of the biggest thing, relaying the same message.*

Benefits of the YMI Cornerstone Mentoring Program

The YMI Cornerstone Mentoring Program participants are at-risk students with low educational performance, and often low engagement in school, when they enter the mentoring program. Through the program levers and strategies described in this report, YMI Cornerstone Mentoring Programs strive to build a foundation of belonging, self-efficacy, physical and emotional safety, high expectations, and exposure to new experiences, to engage mentees in learning and to support them in overcoming challenges to engaging in and succeeding in school.

We conducted analyses to explore the impact of the YMI Cornerstone Mentoring Program, comparing mentees who entered the program in 2012-13 or 2013-14 to similar Cornerstone participants who did not receive mentoring.[8] We examined impact on three measures:

- Engagement in the overall Cornerstone Center programming
- School attendance
- Grade promotion

We urge the reader to remember that the YMI Cornerstone Mentoring Program only requires one and a half hours of mentoring per week during the school year, and two mentoring sessions during the summer. In addition, the YMI Cornerstone Mentoring Program is not primarily considered an academic support program, and program activities are not designed with these outcome measures as goals. Therefore, expectations for measurable program impact on engagement in learning must be tempered.

The results from additional analyses for subgroups of participants are presented in a technical appendix to this report; there were no notable differences in outcomes based on gender, special education status, eligibility for free or reduced-price lunch, chronic school absence, or performance on the state ELA and mathematics assessments.

[8] Analyses of impact focused on mentees and matched non-mentees who entered the program in 2012-13 or 2013-14, for three reasons: (1) the YMI Cornerstone Mentoring Program started partway through the 2011-12 program year, so there was not a full year of program dosage and data were less reliable; (2) we did not have information on exposure to Cornerstone services before 2011-12 to determine comparable prior exposure; and (3) we did not have baseline NYCDOE data for youth whose first year of program exposure was 2011-12.

Methodology

Matched comparison approach. Using the student-level data obtained from DYCD Online and from NYCDOE, we identified matched groups of YMI Cornerstone Mentoring Program participants and non-participants by first grouping participants by race/ethnicity, gender, grade, and performance level on the New York State ELA and mathematics performance level in the year prior to their enrollment in the mentoring program (mentees) or in Cornerstone programming (non-mentees), i.e., their baseline year. We then matched mentees and non-mentees on school attendance rate for their baseline year. More mentees had low school attendance rates in their baseline year than did non-mentees, so to ensure the best possible matches, non-mentees could be matched to more than one mentee. For example, if two mentees had a baseline school attendance rate of 75 percent and only one non-mentee had similarly low attendance, the single non-mentee was matched to both mentees, and the non-mentee case was weighted in the final dataset. This is a common approach in analyses in which the participant group's baseline measure (or measures) are lower than that of the pool of possible non-participant matches.[9] We also matched participants to non-participants using the year prior to their enrollment in order to mitigate the impact of changing state- or district-level policies during the years included in our analysis.

This matching approach resulted in a comparison sample of 380 mentees and 380 non-mentees. As summarized in Exhibits 11, 12, and 13, the two groups were closely matched in their demographic characteristics and in their school performance prior to program exposure.

Exhibit 11
Baseline demographic characteristics of matched groups

	Percent of youth							
	Male		African-American		Hispanic/Latino		Other	
Year	Mentee (n=380)	Non-Mentee (n=380)	Mentee (n=380)	Non-Mentee (n=380)	Mentee (n=380)	Non-Mentee (n=380)	Mentee (n=380)	Non-Mentee (n=380)
Baseline	71	71	60	60	37	37	3	3

Source: NYCDOE and DYCD Online

Exhibit reads: Seventy-one percent of both mentees and non-mentees in the matched comparison sample were male.

[9] We opted for this matching approach, rather than using a statistical propensity score matching procedure, because three of the four matching variables were categorical rather than continuous measures. Our attempts to use propensity scores to match participants yielded poor matches across race, gender, and baseline performance level.

Exhibit 12
Baseline school performance of matched groups

ELA								
	Percent of mentees (n=380)				Percent of non-mentees (n=380)			
Year	Level 1	Level 2	Level 3	Level 4	Level 1	Level 2	Level 3	Level 4
Baseline	41%	43	15	1	42%	42	16	0
Math								
	Percent of mentees (n=380)				Percent of non-mentees (n=380)			
Year	Level 1	Level 2	Level 3	Level 4	Level 1	Level 2	Level 3	Level 4
Baseline	32	45	19	4	32	44	18	5

Source: NYCDOE and DYCD Online

Exhibit reads: Forty-one percent of mentees performed at Level 1 on the state ELA assessment in their baseline year (year prior to program participation), as did 42 percent of non-mentees.

Exhibit 13
Baseline school attendance rate of matched groups, by baseline year

Year	School attendance rate	
	Mentee (n=380)	Non-Mentee (n=380)
2011-12	93.3%	94.0%
2012-13	93.3	93.8
2014-15	92.4	93.0

Source: NYCDOE and DYCD Online

Exhibit reads: For participants with a baseline year of 2011-12 (prior to program participation), mentees had a baseline school attendance rate of 93.3 percent, compared to 94 percent for non-mentees.

Analysis variables. For our analyses of program outcomes, we restructured the data from its initial state, with data for each case linked to a calendar year, into data representing years of program exposure, starting with 2012-13. For instance, if two participants were enrolled in Cornerstone programming for two years, one starting in 2012-13 and the second in 2013-14, their data for 2012-13 and 2013-14 (first participant) and for 2013-14 and 2014-15 (second participant), were entered into Year 1 and Year 2 versions of the variables of interest. Structuring the data based on program exposure, rather than by calendar year, allowed us to analyze the impact of the YMI Cornerstone Mentoring Program on mentees and non-mentees, regardless of the year in which they entered the program. Our interest was in comparing the impact of the participants' enrollment in the program after their first, second, third, and/or fourth year of participation, not in comparing the effect of program participation on, for example, participants whose first year of enrollment was in 2012-13 versus those whose first year of enrollment was in 2013-14.

Impact on Cornerstone Program Engagement

Engagement in a program provides insight into its perceived value by participants, and into the program's success in fostering a welcoming community in which participants thrive and receive supports and resources. We explored the impact of the YMI Cornerstone Mentoring Program by comparing rates of retention in overall Cornerstone center programming for mentees and non-mentees. Particularly for youth who may be at risk of becoming disengaged from school, program retention can be important for receiving supports in transitions to ensure future success, prevent school drop-out, and receive necessary resources in a structured, supportive setting.

YMI Cornerstone Mentoring Program participants continued enrollment in the Cornerstone center (regardless of whether they continued mentoring) at significantly higher rates than did non-mentees: 55 percent of mentees remained enrolled in the Cornerstone center for two years, and 26 percent for three or more years. In contrast, 59 percent of non-mentees enrolled for only one year, compared to just 18 percent of mentees. This suggests that YMI Cornerstone Mentoring Program participants are effectively forging a sense of belonging in the Cornerstone center and receiving valued supports (Exhibit 14).

Exhibit 14
Retention of mentees and non-mentees in the Cornerstone program

	Percent of youth			
	Enrolled for 1 year only	Enrolled for 2 years	Enrolled for 3+ years	N
Mentee	18%	55%	26%	258
Non-mentee	59	32	9	258

Source: DYCD Online

Exhibit reads: Eighteen percent of mentees remained enrolled in the Cornerstone center for only one year, compared to 59 percent of non-mentees ($p<0.05$, effect size=0.43).
Note: Percents for mentees do not add to 100 due to rounding error.

Impact on School Attendance

Mentors encourage YMI Cornerstone Mentoring Program participants to remain engaged in school by role modeling and setting expectations, by exposing them to enriching learning experiences that highlight the connections to learning, and by providing them with developmentally appropriate tools to address social barriers to school attendance. We examined student records of school-day attendance from the NYCDOE to explore whether participation in the mentoring program had an impact on mentees' engagement in school.

We knew that the YMI Cornerstone Mentoring Program served a large proportion of youth who were chronically absent from school. We also knew that school absences often increase as students transition to middle school and later to high school, creating early warning signs for dropout (Attendance Works & Healthy Schools Campaign, 2015). Therefore, we conducted a regression analysis to examine the effect

of participation in the mentoring program, controlling for baseline school attendance, race, and gender. We hypothesized that participation in mentoring would have a negative association with the number of days absent from school.

To test our hypothesis, we used Poisson regression analyses, which allow for the analysis of a count outcome variable, such as the number of days a student was absent from school during a school year.[10] We found a significant effect of participation in mentoring on school attendance, controlling for participants' ethnicity, gender, and days absent during the previous school year. Specifically, we observed a significant effect for the number of hours of mentoring Cornerstone participants received in their first year—for every additional hour of mentoring, participants missed less time in school ($p < 0.001$); participants who received 37 hours of mentoring missed one less day of school. About half (49 percent) of mentees participated at a high enough level for this school attendance benefit in 2014-15.

The relatively small number of mentoring participants and matched non-participants who continued into the second and third years of the program limited our ability to run reliable regression analyses for the second and third years of data. Nonetheless, the results from participants' first year in the mentoring program suggest an important relationship between mentoring hours and positive outcomes; the more hours of mentoring, the greater the influence on mentees' school attendance. Encouraging participation in more hours of mentoring can increase school attendance, which in turn can increase opportunities for participants to grow academically in the long-term.

Impact on Grade Promotion

The YMI Cornerstone Mentoring Program encourages mentees to set high expectations for themselves in school, to persist through educational challenges, and to set and achieve goals for school completion. We hypothesized that the mentoring program would have an impact on the grade promotion of mentees as they progress through key educational transitions into middle and then high school. To test this hypothesis, we examined whether mentees and the matched comparison group of non-mentees were registered in the next higher grade at the start of the new school year following each year of Cornerstone participation.

We did not find any significant differences in the rates of grade promotion between mentees and non-mentees. We caution that this does not necessarily imply a lack of impact of the mentoring program on the mindsets and behaviors that may be associated with educational persistence, goal-setting, and aspirations. Rather, the data reveal a "ceiling effect" with little room to demonstrate growth and change in grade promotion rates: more than 95 percent of youth, both mentees and non-mentees, were promoted in each year.

[10] In contrast, an ordinary least squares regression model requires the assumption that the outcome variable is continuous and normally distributed. A count of the number of days absent during a school year violates both of these assumptions.

Questions Raised by Findings

Over the first four years of the YMI Cornerstone Mentoring Program, from 2012 through 2015, program leaders and mentors developed and implemented approaches to supporting youth through key transitions into middle and high school. In this report, we have summarized the programmatic levers, conditions for success, and foundational mindsets that YMI Cornerstone Mentoring Programs youth develop in order to support their engagement in learning. We found that programs prioritized their limited mentoring time to helping mentees develop the behaviors, skills, and attitudes needed to feel safe, connected, and confident about their ability to set and achieve both short- and long-term educational goals.

We also explored the characteristics of youth participating in the YMI Cornerstone Mentoring Program and the impact of mentoring on both engagement in the Cornerstone center and on school attendance and grade promotion. We found that YMI Cornerstone Mentoring Programs succeeded in recruiting youth who were at risk of educational failure and who could benefit from mentoring supports. Nearly all mentees were eligible for free or reduced-price lunch and performed below proficiency level in both ELA and mathematics on the state assessments, and mentees had high rates of eligibility for special education services and of chronic absenteeism compared to citywide averages.

Compared to similar non-mentees, however, mentees remained engaged in general Cornerstone center programming for multiple years, suggesting that the YMI Cornerstone Mentoring Program helped to forge a sense of belonging and connection to structured program resources and supports. We also found an association between mentoring dosage and number of days absent from school, suggesting that high levels of participation in mentoring can lead to increased engagement in school. We did not find an impact on learning as measured by grade promotion.

As NYC Opportunity, DYCD, and Cornerstone leaders reflect on these findings and their implications for the YMI Cornerstone Mentoring Program, we urge consideration of the following:

- **Exposure.** The YMI Cornerstone Mentoring Program currently expects approximately 1.5 hours per week of mentoring during the school year, and two mentoring sessions over the summer. Is it realistic to expect measurable educational outcomes with that level of exposure to mentoring? What is the desired outcome of the mentoring program, and what level of mentoring services would be required for that outcome to be achieved?

- **Expected impact.** The YMI Cornerstone Mentoring Program does not currently consider itself explicitly an academic support program. Center staff and mentors envision that mentoring will indirectly support learning outcomes by supporting the development of "soft skills" that promote positive changes in youth attitudes, enable youth to adjust successfully to new school environments, and cultivate leadership skills and an ethic of service in youth. With that approach to mentoring, how should the success of the mentoring program be assessed? If the goal of the program is in fact to have a measurable impact on school engagement or learning, how would the mentoring program need to be altered?

- **Targeted participants.** The YMI Cornerstone Mentoring Program is engaging a high-risk group of mentees. Are the mentees currently being served in fact the targeted youth? What are the

implications for what outcomes can be expected when serving these youth, as opposed to other youth who may be less at risk educationally but still in need of support during key transitions? What expectations for mentoring are communicated to Cornerstone centers?

- **Resource distribution.** How, if at all, should YMI Cornerstone Mentoring Program resources be redistributed to deepen the program impact, based on the responses to the questions above? How can Cornerstone centers allocate resources to ensure that mentors have training and support, are connected with the families and schools of mentees, and that mentees have access to the resources and opportunities that can engage them in learning and support them through transitions?

References

America's Promise Alliance. (2015). Don't quit on me: What young people who left school say about the power of relationships.

Attendance Works & Healthy Schools Campaign (September 2015). Mapping the early attendance gap: Charting a course for student success.

Balfanz, R., & Byrnes, V. (no date). Meeting the challenge of combating chronic absenteeism: Impact of the NYC Mayor's Interagency Task Force on Chronic Absenteeism and School Attendance and its implications for other cities. Baltimore, MD: Everyone Graduates Center, Johns Hopkins School of Education.

Bandura, A. (1997). Self-efficacy: The exercise of control. New York: Freeman.

Bayer, A., Grossman, J.B., & DuBois, D.L. (2015). Using volunteer mentors to improve the academic outcomes of underserved students: the role of relationships. Journal of Community Psychology, 43(4), 408-429.

Dibner, K.A., Woods, Y., & Russell, C.A. (2014). Evaluation of the DYCD YMI Cornerstone Mentoring Program. Washington, DC: Policy Studies Associates.

Dweck, C., Walton, G.M., & Cohen, G.L. (2011). Academic tenacity: Mindsets and skills that promote long-term learning. Seattle, WA: Bill & Melinda Gates Foundation.

Englund, M.M., Egeland, B., & Collins, W.A. (2008). Exceptions to high school dropout predictions in a low-income sample: Do adults make a difference? Journal of Social Issues, 64, 77–94.

Farrington, C.A., Roderick, M., Allensworth, E., Nagaoka, J., Keyes, T.S., Johnson, D.W., & Beechum, N.O. (2012). Teaching adolescents to become learners: The role of noncognitive factors in shaping school performance--A critical literature review. Chicago, IL: Consortium on Chicago School Research.

Herrera, C., DuBois, D.L., & Grossman, J.B. (2013). The role of risk: Mentoring experiences and outcomes for youth with varying risk profiles. New York: MDRC.

Montecel, M.R., Cortez, J.D., & Cortez, A. (2004). Dropout-prevention programs: Right intent, wrong focus, and some suggestions on where to go from here. Education and Urban Society, 36, 169-188

Nagaoka, J., Farrington, C.A., Ehrlich, S.B., Heath, R.D., Johnson, D.W., Dickson, S., Turner, A., Mayo, A., & Hayes, K. (2015). Foundations for young adult success: A development framework. Chicago, IL: Consortium on Chicago School Research.

Osher, D., Sprague, J., Weissberg, R.P., Axelrod, J., Keenan, S., & Kendziora, K. (2008). A comprehensive approach to promoting social, emotional, and academic growth in contemporary schools. In A. Thomas & J. Grimes (Eds.), Best practices in school psychology (pp. 1263–1278). Bethesda, MD: National Association of School Psychologists.

Rhodes, J.E., Grossman, J.B., & Resch, N.L. (2000). Agents of change: Pathways through which mentoring relationships influence adolescents' academic adjustment. *Child Development*, 1662-1671.

Technical Appendix

Note: We do not present results of statistical significance testing in this appendix based on methodological concerns. The relatively low number of mentees within each subgroup made comparisons difficult. Attempted regression models that included subgroup variables did not yield stable results. In addition, in many cases the subgroups are unbalanced in size. As a result, we cannot reliably determine whether differences are statistical anomalies or real.

Analyses of Engagement in YMI Cornerstone Mentoring

Hours of Mentoring by Participants' Special Education Status

	Received Special Education Services				Did not receive Special Education Services			
	N	Average	Minimum	Maximum	N	Average	Minimum	Maximum
2011-12*	34	36	1	133	131	29	2	133
2012-13	68	48	1	240	180	46	1.5	214
2013-14	65	43	1	204	153	42	1	190
2014-15	90	49	1.5	219	213	46	1	294

* Note: The YMI Cornerstone Mentoring program started in the middle of 2011-12; participants received fewer hours of mentoring because they had fewer opportunities to participate before the end of the year.

Exhibit reads: Participants receiving special education services participated in an average of 36 hours of mentoring during 2011-12. The minimum number of hours of participation for a participant receiving special education services was one hour during 2011-12; the maximum number of mentoring hours received among these participants was 133.

Mentoring Intensity by Participants' Special Education Status

	Received Special Education Services		Did not Receive Special Education Services	
	High intensity 53 hours or more	Less than 53 hours	High intensity 53 hours or more	Less than 53 hours
2011-12 School Year (SES N=34; Not SES N=131)*	21%	79%	11%	89%
2012-13 School Year (SES N=68; Not SES N=180)	34	66	35	65
2013-14 School Year (SES N=65; Not SES N=153)	35	65	34	66
2014-15 School Year (SES N=94; Not SES N=232)	37	63	38	62

* Note: The YMI Cornerstone Mentoring program started in the middle of 2011-12; participants received fewer hours of mentoring because they had fewer opportunities to participate before the end of the year.

Exhibit reads: In 2011-12, 21 percent of participants eligible for special education services (SES) received 53 or more hours of mentoring services (high intensity), 79 percent of participants eligible for SES received less than 53 hours of mentoring during the school year. Eleven percent of participants not eligible for SES participated in 53 or more hours of mentoring; 89 percent participated in less than 53 hours of mentoring.

Participants' Special Education Status and Years of Mentoring Participation

	One year	Two years	Three years
Received Special Education Services (N=452)	67%	24%	8%
Did not receive Special Education Services (N=180)	66	27	7

Exhibit reads: Of mentees who qualified for special education services their first year of participation, 67 percent participated in the YMI Cornerstone Mentoring Program for one year, 24 percent participated for two years, and 8 percent participated in three years of mentoring.

Hours of Mentoring by Participants' Free or Reduced-Price Lunch Status

	Eligible for free or reduced-price lunch				Not eligible for free or reduced-price lunch			
	N	Average	Minimum	Maximum	N	Average	Minimum	Maximum
2011-12*	162	30	1	133	3	60	18	128
2012-13	214	46	1	240	34	51	3	156
2013-14	191	42	1	204	27	42	1.5	121
2014-15	261	48	1.5	219	44	41	1.5	196

* Note: The YMI Cornerstone Mentoring program started in the middle of 2011-12; participants received fewer hours of mentoring because they had fewer opportunities to participate before the end of the year.

Exhibit reads: Participants receiving free or reduced-price lunch participated in an average of 30 hours of mentoring during 2011-12. The minimum number of hours of participation by mentees receiving free or reduced-price lunch was one hour during 2011-12; the maximum number of mentoring hours received among these participants was 133.

Mentoring Intensity by Participants' Free or Reduced-Price Lunch Status

	Received free or reduced-price lunch		Did not receive free or reduced-price lunch	
	High intensity 53 hours or more	Less than 53 hours	High intensity 53 hours or more	Less than 53 hours
2011-12 School Year (FRPL N=162; Not FRPL N=3)*	13%	79%	33%	67%
2012-13 School Year (FRPL N=214; Not FRPL N=34)	33	67	44	56
2013-14 School Year (FRPL N=191; Not FRPL N=10)	34	66	37	63
2014-15 School Year (FRPL N=279; Not FRPL N=16)	39	61	34	66

* Note: The YMI Cornerstone Mentoring program started in the middle of 2011-12; participants received fewer hours of mentoring because they had fewer opportunities to participate before the end of the year.

Exhibit reads: In 2011-12, 13 percent of YMI Cornerstone Mentoring participants eligible for free or reduced-price lunch (FRPL) received 53 or more hours of mentoring services (high intensity), 79 percent of YMI participants eligible for FRPL received less than 53 hours of mentoring during the school year. Thirty-three percent of participants not eligible for FRPL participated in 53 or more hours of mentoring during 2011-12; 67 percent participated in less than 53 hours of mentoring.

Participants' Free or Reduced-Price Lunch Status and Years of Participation

	One year	Two years	Three years
Eligible for Free or Reduced-Price Lunch (N=556)	67%	26%	7%
Not-Eligible for Free or Reduced-Price Lunch (N=113)	61	30	9

Exhibit reads: Of mentees who qualified for free or reduced-price lunch their first year of participation, 67 percent participated in the YMI Cornerstone Mentoring Program for one year, 26 percent participated for two years, and 7 percent participated in three years.

Hours of Mentoring for Chronically and Non-Chronically Absent Participants

	Chronically absent				Not Chronically absent			
	N	Average	Minimum	Maximum	N	Average	Minimum	Maximum
2011-12*	162	38	1	133	122	29	1	133
2012-13	214	48	1	240	185	46	1	240
2013-14	191	37	1	204	158	45	1	190
2014-15	261	46	1.5	219	219	45	1	219

* Note: The YMI Cornerstone Mentoring program started in the middle of 2011-12; participants received fewer hours of mentoring because they had fewer opportunities to participate before the end of the year.

Exhibit reads: Participants identified as chronically absent (i.e., participants who missed more than 20 days of school during the year) participated in an average of 38 hours of mentoring during the 2011-12 school year. The minimum number of hours of participation by mentees identified as chronically absent was one hour during the 2011-12 school year; the maximum number of mentoring hours received among these participants was 133.

Mentoring Intensity for Chronically and Non- Chronically Absent Participants

	Chronically absent		Not Chronically Absent	
	High intensity 53 hours or more	Less than 53 hours	High intensity 53 hours or more	Less than 53 hours
2011-12 School Year (Chronically absent N=43; Not chronically absent N=122)*	21%	79%	11%	79%
2012-13 School Year (Chronically absent N=63; Not chronically absent N=185)	30	70	36	64
2013-14 School Year (Chronically absent N=60; Not chronically absent N=158)	23	77	39	61
2014-15 School Year (Chronically absent N=67; Not chronically absent N=233)	39	61	36	64

* Note: The YMI Cornerstone Mentoring program started in the middle of 2011-12; participants received fewer hours of mentoring because they had fewer opportunities to participate before the end of the year.

Exhibit reads: In the 2011-12 school year, 21 percent of chronically absent participants (i.e., participants who missed more than 20 days of school during the year) participated for 53 or more hours of mentoring during the school year. Seventy-nine percent of chronically absent participants participated for less than 53 hours. Among students not classified as chronically absent, 11 percent received 53 or more hours of mentoring, while 79 percent of non-chronically absent students participated in less than 53 hours of mentoring.

Chronic Absenteeism and Years of Participation

	One year	Two years	Three years
Chronically absent (N=159)	68%	26%	6%
Not chronically absent (N=456)	66	27	7

Exhibit reads: Of the 159 participants identified as chronically absent (i.e., missed more than 20 days during the school year), 68 percent participated in mentoring for one year, 26 percent for two years, and 6 percent participated in for three years.

Hours of Mentoring for Male and Female Participants

	Male				Female			
	N	Average	Minimum	Maximum	N	Average	Minimum	Maximum
2011-12*	136	33	1	133	29	18	1	44
2012-13	199	47	1	240	49	44	1.5	202
2013-14	165	41	1	204	53	46	1.5	190
2014-15	214	49	1	202	91	42	1	294

* Note: The YMI Cornerstone Mentoring program started in the middle of 2011-12; participants received fewer hours of mentoring because they had fewer opportunities to participate before the end of the year.

Exhibit reads: Male participants in the YMI Cornerstone Mentoring Program participated in an average of 33 hours of mentoring during 2011-12. The minimum number of hours of participation by male mentees was one hour during the 2011-12 school year; the maximum number of mentoring hours received among these participants was 133.

Mentoring Intensity for Male and Female Participants

	Male		Female	
	High intensity 53 hours or more	Less than 53 hours	High intensity 53 hours or more	Less than 53 hours
2011-12 School Year (Male N=136; Female N=29)*	16%	84%	0%	100%
2012-13 School Year (Male N=199; Female N=49)	35	65	33	67
2013-14 School Year (Male N=165; Female N=53)	34	66	36	64
2014-15 School Year (Male N=233; Female N=103)	38	62	38	62

* Note: The YMI Cornerstone Mentoring program started in the middle of 2011-12; participants received fewer hours of mentoring because they had fewer opportunities to participate before the end of the year.

Exhibit reads: In the 2011-12 school year, 16 percent of male participants received 53 or more hours of mentoring services (high intensity), 84 percent of male participants received less than 53 hours of mentoring during the school year. None of the female participants participated in 53 or more hours of mentoring.

Male and Female Participants and Years of Participation

	One year	Two years	Three years
Male (N=461)	62%	30%	8%
Female (N=171)	79	16	5

Exhibit reads: Of the 461 male mentoring participants, 62 percent participated for one year, 30 percent participated for two years, and 8 percent participated in mentoring for three years.

Hours of Mentoring by Participants' ELA Performance Level

	ELA Level 1 or 2				ELA Level 3 or 4			
	N	Average	Minimum	Maximum	N	Average	Minimum	Maximum
2011-12*	118	33	1	133	19	25	7.5	60
2012-13	179	45	1	214	19	47	1.5	202
2013-14	174	42	1	204	18	63	3	190
2014-15	245	45	1	219	24	66	1.5	294

* Note: The YMI Cornerstone Mentoring program started in the middle of 2011-12; participants received fewer hours of mentoring because they had fewer opportunities to participate before the end of the year.

Exhibit reads: Participants who scored at levels 1 or 2 on the state's ELA assessment participated in an average of 33 hours of mentoring during the 2011-12 school year. The minimum number of hours of participation by mentees scoring levels 1 or 2 on the ELA assessment was one hour during the 2011-12 school year; the maximum number of mentoring hours received among these participants was 133.

Hours of Mentoring by Participants' Math Performance Level

	Math Level 1 or 2				Math Level 3 or 4			
	N	Average	Minimum	Maximum	N	Average	Minimum	Maximum
2011-12*	109	32	1	133	28	30	6	90
2012-13	173	45	1	214	25	47	1.5	133
2013-14	167	43	1.5	204	23	49	1	121
2014-15	228	48	1	294	37	42	1.5	202

* Note: The YMI Cornerstone Mentoring program started in the middle of 2011-12; participants received fewer hours of mentoring because they had fewer opportunities to participate before the end of the year.

Exhibit reads: Participants who scored at levels 1 or 2 on the state's math assessment participated in an average of 32 hours of mentoring during the 2011-12 school year. The minimum number of hours of participation by mentees scoring levels 1 or 2 on the math assessment was one hour during the 2011-12 school year; the maximum number of mentoring hours received among these participants was 133.

Mentoring Intensity by Participants' ELA Performance Level

	ELA Level 1 or 2		ELA Level 3 or 4	
	High intensity 53 hours or more	Less than 53 hours	High intensity 53 hours or more	Less than 53 hours
2011-12 School Year (1 or 2 N=118; 3 or 4 N=19)*	14%	86%	16%	84%
2012-13 School Year (1 or 2 N=179; 3 or 4 N=19)	35	65	32	68
2013-14 School Year (1 or 2 N=174; 3 or 4 N=18)	34	66	61	39
2014-15 School Year (1 or 2 N=264; 3 or 4 N=26)	39	61	46	54

* Note: The YMI Cornerstone Mentoring program started in the middle of 2011-12; participants received fewer hours of mentoring because they had fewer opportunities to participate before the end of the year.

Exhibit reads: In the 2011-12 school year, 14 percent of participants scoring at Level 1 or 2 on the state ELA assessment received 53 or more hours of mentoring services (high intensity), 86 percent of participants scoring at Level 1 or 2 received less than 53 hours of mentoring during the school year. Sixteen percent of YMI participants scoring at Level 3 or 4 received more than 53 hours of mentoring during the 2011-12 school year, while 84 percent received less than 53 hours.

Mentoring Intensity by Participants' Math Performance Level

	Math Level 1 or 2		Math Level 3 or 4	
	High intensity 53 hours or more	Less than 53 hours	High intensity 53 hours or more	Less than 53 hours
2011-12 School Year (1 or 2 N=118; 3 or 4 N=19)*	16%	84%	11%	89%
2012-13 School Year (1 or 2 N=179; 3 or 4 N=19)	34	66	36	64
2013-14 School Year (1 or 2 N=174; 3 or 4 N=18)	36	64	43	57
2014-15 School Year (1 or 2 N=264; 3 or 4 N=26)	41	59	33	67

* Note: The YMI Cornerstone Mentoring program started in the middle of 2011-12; participants received fewer hours of mentoring because they had fewer opportunities to participate before the end of the year.

Exhibit reads: In the 2011-12 school year, 16 percent of participants scoring at Level 1 or 2 on the state math assessment received 53 or more hours of mentoring services (high intensity), 84 percent of participants scoring at Level 1 or 2 received less than 53 hours of mentoring during the school year. Eleven percent of YMI participants scoring at Level 3 or 4 on the math assessment received more than 53 hours of mentoring during the 2011-12 school year, while 89 percent received less than 53 hours.

Participants' ELA and Math Performance Level and Years of Participation

	One year	Two years	Three years
ELA Level 1 or 2 (N=481)	65%	27%	8%
ELA Level 3 or 4 (N=58)	67	24	9
Math Level 1 or 2 (N=456)	65	27	8
Math Level 3 or 4 (N=79)	68	23	9

Exhibit reads: Of mentees who scored at Level 1 or 2 on the state ELA assessment during their first year of participation, 65 percent participated for one year, 27 percent participated for two years, and 8 percent participated in three years of mentoring.

Analyses of School Attendance

School Days Absent for Chronically Absent and Non-Chronically Absent Participants, by Years of Participation in Mentoring

	Chronically absent				Not chronically absent			
	N	Average	Minimum	Maximum	N	Average	Minimum	Maximum
First year	384	36	20	94	384	9	0	19
Second year	214	35	20	128	130	8	0	19
Third year	191	34	20	70	37	9	0	19

Exhibit reads: YMI Cornerstone Mentoring participants identified as chronically absent missed an average of 36 days of school in their first year of participation. These participants missed a minimum of 20 days of school during their first year in YMI mentoring, while one participant missed 94 days of school. YMI participants who were not chronically absent missed an average of nine days of school during their first year of participation in mentoring, with some participants missing no days of school and some missing 19 days of school.

School Days Absent for Male and Female Participants, by Years of Participation in Mentoring

	Male				Female			
	N	Average	Minimum	Maximum	N	Average	Minimum	Maximum
First year	368	16	0	94	147	13	0	82
Second year	144	16	0	128	33	14	0	45
Third year	36	15	0	70	10	10	0	32

Exhibit reads: Male YMI Cornerstone Mentoring participants missed an average of 16 days of school in their first year of participation. Some male participants missed no days of school, while one participant missed 94 days of school the first year of participation in mentoring. Female participants missed an average of 13 days of school during their first year of mentoring. Some female participants missed no days of school during their first year of participation, while one female participant missed 82 days of school during that first year.

School Days Absent by Special Education Status, by Years of Participation in Mentoring

	Receives special education services				Does not receive special education services			
	N	Average	Minimum	Maximum	N	Average	Minimum	Maximum
First year	148	18	0	94	367	15	0	94
Second year	50	20	0	128	127	14	0	86
Third year	15	19	0	70	31	12	0	32

Exhibit reads: YMI Cornerstone Mentoring Program participants receiving special education services missed an average of 18 days of school in their first year of participation. Some participants receiving special education services missed no days of school during their first year in mentoring, while one participant missed 94 days of school. YMI Cornerstone Mentoring Program participants who did not receive special education services missed an average of 15 days of school during their first year of participation in mentoring, with some participants missing no days of school and one missing 94 days of school.

Analyses of Grade Promotion

End-of-year Grade Promotion for Chronically Absent and Not Chronically Absent Participants, by Years of Participation in Mentoring

	Chronically absent		Not chronically absent	
	N	Percent not promoted	N	Percent not promoted
After first year	99	11%	280	3%
After second year	38	10	160	3
After third year	9	0	43	5

Exhibit reads: After their first year of participation in YMI Cornerstone Mentoring, 11 percent of participants identified as chronically absent were not promoted to the next grade. Three percent of participants who were not chronically absent were not promoted at the end of their first year of mentoring.

End-of-year Grade Promotion for Male and Female Participants, by Years of Participation in Mentoring

	Male		Female	
	N	Percent not promoted	N	Percent not promoted
After first year	291	6%	88	1%
After second year	135	6	29	0
After third year	45	4	7	0

Exhibit reads: After their first year of participation in YMI Cornerstone Mentoring, 6 percent of male participants were not promoted to the next grade. One percent of female participants were not promoted at the end of their first year of mentoring.

End-of-year promotion by Special Education Status, by Years of Participation in YMI Mentoring

	Receives special education services		Does not receive special education services	
	N	Percent not promoted	N	Percent not promoted
After first year	107	6%	272	5%
After second year	37	5	127	5
After third year	15	0	37	5

Exhibit reads: After their first year of participation in YMI Cornerstone Mentoring, 6 percent of participants receiving special education services were not promoted to the next grade. Five percent of YMI participants who did not receive special education services were not promoted at the end of their first year of mentoring.