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Bringing Together Mentoring, Technology, and Whole-School Reform:

A First Look at the iMentor College Ready Program

Lisa Merrill
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July 2015

NYU STEINHARDT

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Find this report online at http://steinhardt.nyu.edu/research_alliance/publications/imentor_first_look

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EXECUTIVE SUMMARY

Graduating college has become the new benchmark for educational success, widely viewed as a gateway to economic stability and overall well-being. Yet, relatively few students are leaving high school well prepared for college. In New York City, less than a quarter of on-time high school graduates go on to earn an Associate's or Bachelor's degree within four years.[i] Nationally, research shows that low-income students are much less likely than their higher-income counterparts to complete college: Students from families in the bottom income quartile are six times less likely to obtain a four-year degree than students whose families are in the top quartile.[ii]

In response to these low levels of college readiness, policymakers have promoted many reforms aimed at improving students' *academic* preparation, most notably the introduction of the Common Core State Standards. However, there has been much less attention paid to *non-academic* skills and knowledge that students need to be prepared for college. These include, for example, self-advocacy and the ability to persist and overcome obstacles when trying to accomplish a task. Without these skills, even students with solid academic preparation may fail to reach or succeed in college.[iii]

iMentor's College Ready Program is a unique approach that combines elements of school-based mentoring, whole school reform, and technology in an effort to help students develop the full suite of knowledge, behaviors, and skills they need to complete high school and enroll and thrive in college. iMentor partners with high schools that serve low-income students, and aims to engage every student at the school, from 9th grade through their high school graduation. Each student is matched with a college-educated mentor; students also attend weekly classes structured around iMentor's College Ready curriculum and taught by iMentor staff.

While mentoring is a well-established strategy to improve students' outcomes, iMentor's approach is distinctive for several reasons: First, few mentoring programs have embraced technology as fully as iMentor, where email is the main form of contact between students and their mentors. Second, iMentor attempts to serve *all* students at the school and provides a weekly class as a regular part of students' school schedules—few other mentoring programs are so fully integrated into the schools in which they work. Third, iMentor's focus on college readiness, including its College Ready curriculum, is unusual. In iMentor's model, mentors not only

provide students with friendship and support, but also serve as de facto college readiness coaches. The program's designers believe that the combination of a strong mentoring relationship and exposure to the iMentor curriculum will help students be better prepared to reach and succeed in college.

To learn more about the efficacy of iMentor's approach, the Research Alliance for New York City Schools is conducting a mixed-methods evaluation of the College Ready Program in eight New York City high schools. With support from the Social Innovation Fund, the Research Alliance is examining iMentor's roll-out and implementation in these schools, as well as its impact on a range of outcomes related to students' preparation for college. In each school, we are following two cohorts of entering 9th graders who have the opportunity to participate in iMentor, totaling approximately 1,600 students. This summary highlights key findings from the first year of implementation across the eight schools. For more details, see our full report, *Bringing Together Mentoring, Technology, and Whole-School Reform: A First Look at the iMentor College Ready Program*.

This work is intended to inform and strengthen iMentor's ongoing implementation and development. In the long run, we believe the evaluation will provide useful insights not only for iMentor, but also for other mentoring and college-readiness programs.

The iMentor College Ready Program

iMentor's College Ready Program uses volunteer, college-educated mentors and school-based staff to deliver an intensive four-year intervention. The program has four central elements:

1. A whole school model, which aims to engage all incoming 9th graders for their full high school careers and integrate the program fully into the life of the school;
2. A college-readiness curriculum taught in weekly classes and reinforced during monthly events;
3. A "blended" approach to developing relationships between each student and his or her mentor—involving both email and face-to-face meetings; and
4. A pair support strategy based on a case-management model for tracking mentee-mentor relationship development.

Much of the program is delivered by an iMentor Program Coordinator (PC)—a trained college counselor who is responsible for enrolling students, matching

students with mentors, teaching the weekly class, organizing events, and supporting mentoring pairs.

During each weekly class, PCs present material related to a specific skill, and students are prompted to write an email to their mentor on that topic. Mentors also respond to their mentee's emails following a structured iMentor protocol. Each unit of the iMentor curriculum culminates with an event that reinforces the theme and also allows students and mentors to spend time together in person and develop their relationship.

How was iMentor implemented during the first year?

We examined each of iMentor's four core program elements using a variety of data sources, including extensive iMentor program data (e.g., information about student/mentor matches, iMentor classes and events, and logs of student and mentor emails). We used these data to assess how intensively students may have experienced the iMentor program and to compare students' experiences with a series of implementation benchmarks that iMentor developed. We also interviewed PCs, principals, teachers, and mentors in three schools to learn about specific challenges and successes during the first year of implementation.

Overall, we found that the implementation of iMentor varied substantially across schools, as some schools implemented the major elements of the iMentor College Ready program as designed, while others did not. Table ES-1 summarizes the extent to which each school met key programmatic benchmarks established by iMentor for three of the major program elements.[iv] A check-plus (✓+) signifies that the school

Table ES-1: Implementation Varied Across Schools

Element:	Whole School Model	Curriculum	Mentee-Mentor Relationship Development	
Measure:	Student Participation	Number of Classes	Email Frequency	Event Attendance
School				
Ginkgo	✓	✓+	✓+	✓+
Fig	✓	✓+	✓+	✓
Redwood	✓	✓+	✗	✓
Maple	✓	✓+	✓	✗
Cherry Blossom	✗	✗	✗	✗
Oak	✗	✓	✓	✗
Sequoia	✓	✓	✓+	✗
Palm	✓	✓+	✓+	✓

Source: Research Alliance calculations based on iMentor programmatic data.
Note: For more information about iMentor's benchmarks and implementation see pp. 29-31 in the full report. At the time of writing, iMentor did not have a measurable benchmark for pair support. Each school is represented with a pseudonym to keep its identity confidential.

met iMentor's expectations—achieving "high fidelity to the model"—on a particular program element. A check (✓) signifies that the school did not meet the benchmark for a program element, but was approaching it, achieving "moderate fidelity" to the iMentor model. An x (✗) signifies that the school did not meet iMentor's expectations for how a particular program element should be implemented. To see the details of the fidelity measures for each element, please see pages 29-31 in the full report.

The figure shows that Gingko, Fig, and Palm implemented all measured program elements with fidelity.[v] Redwood, Maple, and Sequoia implemented all but one element with fidelity. Yet, Cherry Blossom did not meet iMentor's expectations for any of the major program elements. This school started the program late, which certainly affected its ability to meet the benchmarks for participation, number of events, and number of classes.

The figure also demonstrates that the event attendance benchmark was the most difficult for schools to meet: Only one school achieved high fidelity for this program element, and half the schools in the study did not meet iMentor's basic expectations for event attendance, meaning many mentors and mentees spent less time together than planned. Interestingly, this did not seem to dampen the development of relationships between mentees and mentors. In a survey of iMentor students conducted at the end of the first year of implementation, 85 percent reported feeling "somewhat close" or "very close" to their mentor. These measures were fairly consistent across all schools—and are similar to the average ratings seen in other mentoring programs, such as Big Brothers Big Sisters.[vi]

Across the eight evaluation schools, we found generally strong structures in place to support mentoring pairs, which may help explain students' perceptions of closeness. PCs employ a case management model, in which they assess mentors' and students' needs and then provide the appropriate support. We found that PCs used systems to keep in close contact with mentors and track how well students and mentors were interacting. These included making calls to mentors throughout the year, having "mentor huddles" at monthly events, holding office hours for students, and creating focus lists and action plans for mentoring pairs in need of extra support. In a survey, mentors reported that they were largely satisfied with this guidance and support and felt close to their mentees.[vii]

Our interviews pointed to a number of strategies that might help strengthen iMentor's implementation in coming years. iMentor could probably better prepare its staff for the realities they face in schools. For instance, while six of the eight schools reached iMentor's benchmark for student participation (i.e., matching 75 percent of 9th graders with a mentor by December), PCs reported that they were surprised by the amount of time and effort required to meet those goals. PCs may benefit from additional support around recruiting students and obtaining permission for them to participate in the program.

In addition, according to the PCs, teachers, and principals we spoke with, the quality of instruction in iMentor classes varied. Some PCs were viewed as competent and capable instructors, with strong classroom management, lesson planning, and presentation skills, while other struggled to run their classes effectively. iMentor is already working to address this issue, by hiring more PCs with classroom experience, developing a rubric to assess the quality of PC instruction, and bringing in experienced educators to visit classrooms and provide recommendations to PCs about how to improve their teaching.

Lastly, iMentor could work with PCs to increase event attendance. At many schools, iMentor events were not well attended during this first year of implementation—which may be due, at least in part, to their timing. The events typically begin three hours after the end of the school day, to accommodate mentors' schedules, but this time appears to be challenging for students. iMentor may want to convene school staff, parents and students to brainstorm solutions to this problem and/or adjust expectations for how often students and mentors will attend events.

What were the effects of iMentor after one year of implementation?

In 9th grade, iMentor aims to help students improve their relationships with adults, increase their college aspirations, and learn about the key "non-cognitive skills" targeted in the College Ready curriculum. The hope is that 9th grade will provide a foundation for the rest of high school and that cumulative gains in these areas will prepare students to graduate high school and enroll and be successful in college. While it is clearly too soon to judge whether iMentor is accomplishing all of these goals, it is possible that outcomes related to the 9th grade curriculum could show an effect after just one year. We examined the program's early impact on a range of academic and non-academic outcomes, drawing on student surveys and

administrative records to compare iMentor students with a group of similar students who did not have access to iMentor. (See the full report for information about our methods.)

We measured iMentor's effect on 12 student outcomes. After one year, we found that iMentor had a small[viii] but statistically significant positive effect on several measures related to students' relationships with adults and their aspirations for college and a career. Specifically, iMentor students scored higher than comparison students on measures of:

- *Interpersonal Support*, which assesses how well students feel they are supported by the adults in their life;[ix]
- *Future planning*, which assesses how much students talk to adults about college, their future goals, and specific activities related to those goals;[x]
- *College aspirations*, which measures how much education students want to achieve, think they will achieve, and believe they need to achieve; and
- *Career planning*, which assesses the extent to which students have thought about and explored future career options.

We also examined eight other outcomes, including five non-cognitive outcomes (perseverance, growth mindset, hope and sense of optimism, self-advocacy, and social capital), grade point average (GPA), chronic absenteeism,[xi] and the percent of students on track for graduation with a Regents diploma at the end of 9th grade.[xii] We did not find statistically significant effects in any of these areas.

It is important to keep in mind the preliminary nature of these results. Many programs encounter start-up challenges that impede their effectiveness during the first year of implementation. Moreover, the iMentor College Ready Program is a four-year intervention, and we are currently analyzing effects after just one year (i.e., students' 9th grade year). Furthermore, this report analyzes data from only the first of two cohorts of entering 9th graders from each school that will ultimately be involved in our study; data from the second cohort was not yet available at the time of writing, but will be included in future reports.

Conclusion

It is promising that, across schools, iMentor successfully recruited a large proportion of students to participate in mentoring and that students generally reported feeling close to their mentors at the end of the 9th grade year. Given these

results, it is not surprising that iMentor had a positive effect on student perceptions of adult support.

iMentor's effects on measures of students' aspirations are also well aligned with the iMentor curriculum and program, which encourages students to begin thinking about and planning for their future careers and college in 9th grade. The fact that there was some movement on these variables is an encouraging sign that the program is influencing how students think about themselves and their futures.

On the other hand, we found no effects on students' GPA, attendance, or on-track status, nor on the five non-cognitive skills and dispositions that we measured (e.g., perseverance, optimism, etc.). It may be that these non-cognitive outcomes relate to more deeply ingrained attitudes that are harder to affect with just one year of programming.

Our study also suggested a number of areas where the implementation of the College Ready program could be strengthened in future years. iMentor has already taken steps in this direction—for example, by focusing on the quality of instruction in the iMentor classes.

It is important to note that this report presents results for the entire cohort of 9th graders who had access to the first year of iMentor in the evaluation schools. While a vast majority of the students who had the opportunity to participate in iMentor did so, some students did not. In our analysis, we saw that some schools had greater participation rates and stronger implementation than others. Next year, when we add the second cohort of 9th graders to our study, we will also explore if iMentor's effects differ based on the level implementation seen in the schools.

Looking ahead, we will continue to follow both cohorts of students through 2019, which will enable us to gauge the effects of participating in the complete, four-year iMentor College Ready Program. This time frame will also allow us to assess impacts on outcomes that lie at the heart of iMentor's long-term goals—namely, high school graduation and college enrollment.

Executive Summary Notes

[i] Coca, 2014.

[ii] Bailey & Dynarski, 2011.

[iii] Conley, 2010; Heckman & Rubinstein, 2001.

[iv] When we collected data for this report, iMentor did not have a benchmark for pair support. Future reports will include pair support measures, such as the number of hours PCs spend supporting each pair and how many times PCs called/communicated with mentors.

[v] We use pseudonyms to protect school identities.

[vi] Bayer et al., 2013.

[vii] We do not have information about students' perceptions of PC support.

[viii] Effect sizes less than .2 are generally accepted as small (Hill et al., 2007). The largest effect size we found was .15, for the College Aspirations outcome.

[ix] Eccles et al., 1993; Erikson, 1986; Furstenberg, 1993.

[x] Surr & Tracey, 2009.

[xi] Chronic Absenteeism is defined as missing 20 or more days of school (approximately 11 percent or more). Being chronically absent has been linked with lower achievement outcomes (Balfanz & Byrnes, 2012).

[xii] A student is considered on track for graduation with a Regents diploma at the end of 9th grade if she has passed at least one Regents exam and completed at least ten course credits by the end of the year.

CHAPTER 1: INTRODUCTION

Graduating college has become the new benchmark for educational success, widely viewed as a gateway to economic stability and overall wellbeing. Studies show that people with a college diploma earn more money over their lifetime, are healthier, more politically active, and contribute more to the nation's tax base, compared with those who don't have a post-secondary degree (Abel & Deitz, 2014; Baum, Ma & Payea, 2013).

Yet, relatively few students leave high school well prepared for college. In New York City, less than a quarter of on-time high school graduates go on to earn an Associate's or Bachelor's degree within four years (Coca, 2014). Nationally, research shows that low-income students are much less likely than their higher-income counterparts to complete college: Students from families in the bottom income quartile are six times less likely to obtain a four-year degree than students from families in the top quartile (Bailey & Dynarski, 2011).

In response to these low levels of college readiness, policymakers have promoted a variety of reforms aimed at improving students' *academic* preparation, most notably, the introduction of the Common Core State Standards. However, there has been much less attention paid to *non-academic* skills and knowledge that students need to be prepared for college, such as self-advocacy and the ability to persist and overcome obstacles when trying to accomplish a task. Without these skills, even students with solid academic preparation may fail to reach or succeed in college (Conley, 2010; Heckman & Rubinstein, 2001).

iMentor's College Ready Program is a unique approach that combines elements of school-based mentoring, whole school reform, and technology to help students develop the full suite of knowledge, behaviors, and skills they need to complete high school and enroll and thrive in college. iMentor partners with high schools that serve low-income students, and aims to engage every student at the school, from 9th grade through their high school graduation. Each student is matched with a college-educated mentor; students also attend weekly classes structured around iMentor's College Ready curriculum and taught by iMentor staff.

While mentoring is a well-established strategy to improve students' outcomes (see textbox on page 5), iMentor's approach is distinctive for several reasons: First, few mentoring programs have embraced technology as fully as iMentor, which uses email as the main form of contact between students and their mentors. Second,

iMentor attempts to serve *all* students at the school and provides a weekly class as a regular part of students' school schedules—few other mentoring programs are so fully integrated into the schools in which they work. Third, iMentor's focus on college readiness, including its College Ready curriculum, is unusual. In iMentor's model, mentors not only provide students with friendship and support, but also serve as de facto college readiness coaches, regularly discussing issues related to college readiness with mentees. The program's designers believe that combining a strong mentoring relationship with exposure to the iMentor curriculum will help students be better prepared to reach and succeed in college.

To learn more about the efficacy of iMentor's approach, the Research Alliance for New York City Schools is conducting a mixed-methods evaluation of the College Ready Program in eight New York City high schools. With support from the Social Innovation Fund, the Research Alliance is examining iMentor's roll-out and implementation in these schools, as well as its impact on a range of outcomes related to students' preparation for college.

This report is the first in a series from our evaluation. It focuses on iMentor's first year of implementation, which targeted 9th graders in all eight schools. The report describes key components of the iMentor College Ready Program and assesses the implementation of these program elements against specific benchmarks established by iMentor. The report also presents a first look at iMentor's effects on 9th graders' college-related knowledge, skills, and attitudes and on markers of academic achievement, such as grade point average (GPA) and credit accumulation.

The results we report here should be viewed as preliminary, given that they are from the first year of a four-year intervention. At this stage of the evaluation, the implementation results are likely the most useful; they can inform iMentor's ongoing implementation and program development, and may surface lessons for other school-based mentoring and youth development programs. In the long run, we will learn about iMentor's effects, if any, on a range of important student outcomes. We believe these findings will provide valuable insight not only for iMentor, but also for other programs aimed at improving college readiness.

The iMentor College Ready Program

iMentor launched in 1999, matching 49 mentees with mentors in its first year. The organization has grown exponentially since then, developing multiple mentoring programs. By 2008, iMentor had expanded to 11 states, and in the 2013-2014

school year, iMentor connected roughly 3,000 students with college-educated mentors in New York City alone. Over the next five years, iMentor plans to serve 20,000 new students across the United States (iMentor, 2014).

Our evaluation focuses on iMentor's College Ready Program, which has four central elements:

(1) Whole school model: The College Ready Program is a four-year intervention that engages a school's entire cohort of incoming 9th grade students and provides services throughout their high school careers. Ideally, as schools adopt iMentor for each subsequent cohort, after four years of implementation, every student in a school would be served by iMentor. In addition to serving as many students as possible, iMentor also hopes to embed the program into the life of each school by engaging school-based staff and leadership.

To implement such an intensive intervention, iMentor provides a certified college counselor—called a Program Coordinator (PC)—at each school site. The PC spends at least half of her work week at the school building, teaching the weekly class, attending school staff and grade-level meetings, organizing iMentor events, and working to build relationships with teachers and principals. By connecting with school staff and leadership, at multiple times and levels, iMentor aims to be responsive to the individual needs of each school.

(2) College readiness curriculum: iMentor has developed a college readiness curriculum for 9th through 12th grade students focused on a specific set of "non-cognitive skills" (described on page 34) and knowledge important for college enrollment and success. The curriculum outlines activities and goals for each iMentor class, as well as monthly curricular events. Each class period focuses on a specific skill, such as task persistence, with a lesson plan that includes an introduction to the skill (sometimes a video), a prompt for students to email their mentor about the skill, and a corresponding prompt for mentors to respond to their student's email. The lessons are clustered into units; at the end of each unit, iMentor holds an event where mentees and mentors work together on a culminating activity related the unit's lessons.

(3) Blended mentee-mentor relationship development: Mentee-mentor pairs develop relationships through online and in-person communication. As mentioned above, during the weekly iMentor class, mentees email their mentor. iMentor provides email prompts that ask students to reflect on the day's lesson and

draw a personal connection to the material. Likewise, mentors are urged to reply—within one week—by sharing their own reflections about the lesson's content and how it may relate to their personal experiences.

Mentees and mentors meet in person during iMentor events, which take place about once a month in the evening. The events provide structured activities designed to reinforce the curriculum and help students and mentors build a relationship. Indeed, both the emails and the events serve a dual purpose, providing mentees and mentors a way to get to know one another while helping mentees think more deeply about the topics covered in class.

With permission from the mentee's parent or guardian, mentors and mentees are also able to contact one another outside of email and iMentor events (e.g., talking on the phone, texting, or meeting in person).

(4) Pair support: One of the PCs' main responsibilities is to support mentee-mentor pairs. They do so using a case management model. PCs check in with each mentor at least five times a year to inquire about how the mentoring relationship is going and send weekly emails to mentors with updates about school and iMentor activities. PCs monitor pair interactions using iMentor's online platform (more details about this platform can be found in the data sources textbox on page 7), and maintain a list of pairs who may need additional support. This support may include one-on-one conversations with students, text message reminders to mentors, or offering in-depth advice to mentors about nurturing the mentoring relationship.

iMentor's theory of action asserts that, if all four elements are implemented successfully, students will develop close relationships with their mentors, which will help them improve their non-cognitive skills and increase their knowledge about—and aspiration to attend—college. As a result, students are expected to have better academic outcomes in high school and then go on to enroll and succeed in college.

The Research Alliance evaluation of iMentor is examining both how this innovative program is being implemented and how access to it affects students' outcomes. Specifically, we will assess the College Ready Program's impact on students' relationships with adults, their non-cognitive skills, their ability to navigate the post-secondary process, and academic outcomes.

This report presents the first set of findings from our evaluation. Chapter 2 introduces the study design and describes the data used in this report, as well as the schools participating in our evaluation. In Chapter 3, we describe the implementation of the College Ready Program in its first year, highlighting key challenges and successes and gauging fidelity to the program model, using a series of benchmarks developed by iMentor. Chapter 4 describes the impact that the College Ready program had on students' non-academic and academic outcomes in 9th grade—that is, after one year of the program. Finally, we conclude with a discussion of the implication of these findings for iMentor and the field at large, and details about the next phase of our evaluation.

What We Know About Mentoring

A growing body of research shows that school-based mentoring programs can be a cost-effective way to meet individual students' needs and help improve their outcomes (Angrist et al., 2009). Effective mentoring programs create close bonds between students and caring adults, providing an important source of emotional support (Deutsch & Spencer, 2009; Spencer & Rhodes, 2005). Research shows that mentoring programs' effects on non-academic outcomes, like self-esteem, are typically larger than their effects on academic outcomes, such as test scores (Wood & Mayo-Wilson, 2012; Herrera et al., 2007). However, mentors can provide important motivation for students by highlighting the importance of succeeding in school and showing how academic skills can matter in the real world (Bayer et al., 2013).

Of course, mentoring programs come in many shapes and sizes. Researchers have identified three important characteristics that make some mentoring programs more successful than others. First, programs that carefully match mentees and mentors based on similar interests are more effective (Ensher & Murphy, 1997; Madia & Lutz, 2004). Second, mentors who are well trained offer better support (MENTOR, 2009). Finally, programs that monitor and nurture mentor-mentee relationships over multiple years tend to see stronger results (DuBois et al., 2002; Herrera et al., 2000; Rhodes et al., 2005).

Research has also begun to explore the levers by which mentoring leads to changes in student outcomes. In a study using data from the Big Brothers Big Sisters program, Bayer et al. found that the quality of a mentoring relationship was vital for producing positive effects. Students who did not have a close relationship with their mentor saw little improvement, whereas students with close relationships made significant gains (Bayer et al., 2013).

iMentor's College Ready Program was developed with this literature in mind. Its design focuses on creating high-quality matches, supporting pairs as they develop their relationships, and encouraging multi-year relationships. At the same time, the iMentor program is distinct from other mentoring programs in its curriculuar goals and structure, its reliance on email as a main driver of relationship development, and its school-wide implementation.

This is the first study to evaluate iMentor's College Ready Program. Non-experimental research on iMentor's previous programs showed modest positive effects on student attendance, English and Math grades, and English Regents test scores (Kim Sabo Consulting 2007). However, this previous program did not use a whole school model, did not last for students' entire high school experience, and did not have a curricular component.

Our study will add a new dimension to the mentoring literature by illuminating the promise and challenge of a curiculum-based, whole-school, email-centered approach to mentoring.

CHAPTER 2: STUDY METHODS, DATA SOURCES, AND DESCRIPTION OF PARTICIPATING SCHOOLS

In this chapter, we provide an overview of our entire study, describing our research questions, timeline, data, and sample. We will then outline the methods used for this report to answer questions about iMentor's first year of implementation.

Overview of the Evaluation

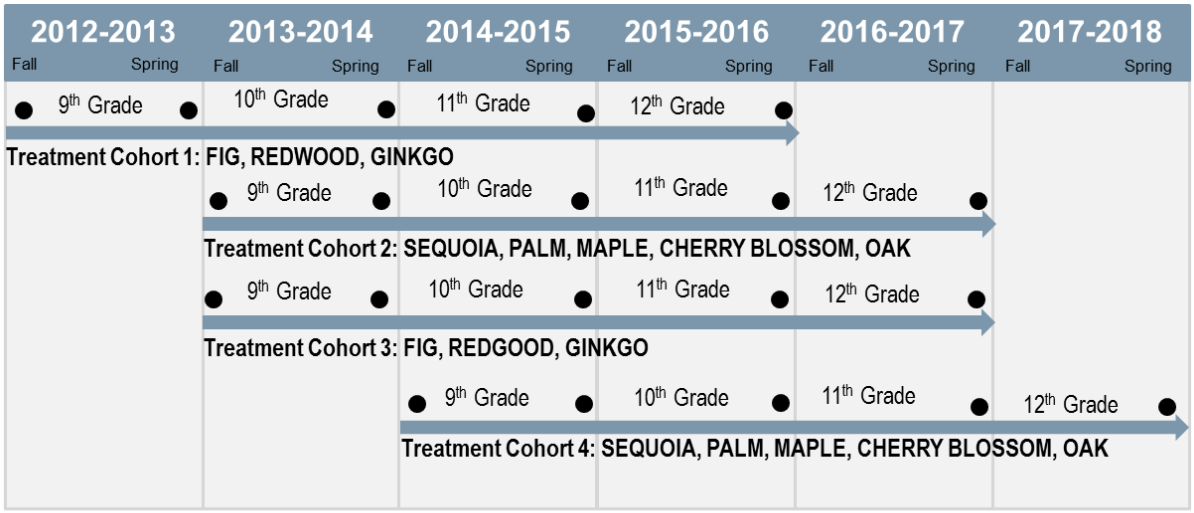
Our evaluation is designed to answer two overarching questions:

1. Was the iMentor College Ready Program implemented as designed in the eight evaluation schools?
2. What are the effects of the program on student outcomes, including relationships with supportive adults, a set of non-cognitive skills (listed on page 34), college aspirations, grades, attendance, on-time high school graduation, and college enrollment?

We are answering these questions using a combination of qualitative and quantitative research methods, including statistical techniques that allow us to accurately compare students who had the opportunity to participate in iMentor with those who did not. These analyses will draw on an array of data sources, including interviews, surveys, iMentor program data, and student records. For more information about these sources, see the textbox on page 7.

The evaluation tracks two cohorts of incoming 9th graders at each of eight participating NYC high schools. As shown in Figure 1 below, iMentor's rollout in

Figure 1: Timeline of iMentor Implementation in the Eight Evaluation Schools



● = Survey Administration

these schools was staggered. Fig, Redwood and Ginkgo began the program in the 2012-2013 school year, and Sequoia, Palm, Maple, Cherry Blossom, and Oak started in 2013-2014.[1] In each school, our evaluation will track two consecutive cohorts of students that participate in the iMentor College Ready Program for their full high school career. This report uses data from the first year of implementation (i.e., only one 9th grade cohort) in all eight schools.

We will release updated findings following each year of our evaluation. As the evaluation progresses, the emphasis of the reports will change. During the early years of the evaluation (starting with this report), we will provide rich descriptions of the College Ready Program's implementation, including challenges seen across the evaluation schools and strategies used to address these challenges, along with preliminary findings about iMentor's effects on key student outcomes. In later years, we will place a stronger emphasis on examining iMentor's effects or lack thereof. We hope that both the implementation and impact analyses yield information that is useful to iMentor as it develops and refines its programming.

Data Sources

Administrative Data: The study draws on administrative data provided by the NYC DOE to examine student demographic characteristics, 8th grade test scores, high school GPA, credits attempted and accumulated, Regents scores and passing rates, student enrollment/drop out status, and on-time graduation rates.

Survey Data (Students and Mentors): Students in iMentor schools take a baseline survey in the fall of 9th grade (before they are matched with a mentor) and complete a follow-up survey each spring for the next four years. The student survey contains over 100 items, including measures of non-academic outcomes, as well as details about their background that cannot be obtained with administrative data (e.g., parent education level). Mentors also take a baseline survey when they are matched with a mentee and then another survey every subsequent spring. The mentor survey has over 60 items, including questions about mentors' relationships with their mentee, as well as demographic information, details about their career, and their satisfaction with iMentor.

Student and mentor survey administration and initial processing are managed by an external firm, Ewald & Wasserman. Student survey response rates were above 80 percent and mentor survey response rates were above 70 percent. See Appendices C and D for the specific items, constructs, response ranges, and internal consistency of the surveys.

Programmatic Data: iMentor collects data from mentees and mentors via an online platform. Mentees, mentors, and staff, all have a password-protected account on the platform. For mentees and mentors, the iMentor platform is largely a place to send and receive emails, fill out surveys, and receive and respond to iMentor event invitations. iMentor staff use the platform to enter and access information about student participation in iMentor classes, emails sent and received as part of the program, and iMentor events. The Research Alliance uses iMentor platform data to track the number of pairs that were matched and sustained for the entire year, the number of iMentor classes held, the amount of email interaction and event attendance.

Interview Data: Each year, we interview iMentor and school staff in a subset of schools. For this report, we conducted interviews at three schools. At each school we interviewed the principal, a school iMentor point person, a teacher, the Program Coordinator, and three mentors.

Where is iMentor Being Implemented?

This section provides details on the eight schools participating in our evaluation, and compares them to the broader landscape of NYC high schools. This information provides context for interpreting our findings, including potential reasons why iMentor may have been implemented differently across the evaluation schools, and the extent to which findings may apply to other schools or districts.

The eight evaluation schools were recruited by iMentor because they serve low-income students and iMentor staff had pre-existing relationships with the school leaders. In exchange for participating in the evaluation, schools received the iMentor program at a discount. Originally, 10 schools were scheduled to take part in our evaluation, but two decided not to participate in the iMentor program before beginning implementation, and therefore, were removed from the evaluation.

The eight evaluation schools share a number of important characteristics (see Table 1 below). All are part of the same school support network, which is known for providing a high degree of support to participating schools, including leadership development and data coaching. All eight schools are relatively new, having opened between 2001 and 2009. In keeping with the City's strategy during the time they were started, they are also relatively small; in the 2011-2012 school year, they enrolled an average of just over 300 students, compared to about 550 in other NYC high schools.

The evaluation schools also embody a certain amount of diversity. The schools are spread across Manhattan, Brooklyn, and the Bronx. They have varied admission criteria, representing three of NYC's eight high school admissions methods: three screened schools, which admit students based on academic, and possibly additional,

Table 1: Schools Participating in the Evaluation

School Name	Year Opened	Borough	Admission Criteria
Cherry Blossom	2009	Manhattan	Limited Unscreened
Palm	2008	Brooklyn	Screened
Redwood	2007	Brooklyn	Limited Unscreened
Ginkgo	2003	Manhattan	Screened: Language & Academics
Sequoia	2002	Bronx	Screened
Fig	2001	Manhattan	Educational Option
Maple	2001	Bronx	Limited Unscreened
Oak	2001	Bronx	Educational Option

Source: Data provided to the Research Alliance by the NYC DOE.
Note: All school names are pseudonyms.

criteria; three limited unscreened schools, which do not look at academic criteria, but give priority to students who express interest in the school, and two educational option schools, which create an academically diverse environment by admitting 16 percent academically low-achieving students, 16 percent high-achieving, and 68 percent from the middle range (Nathanson et al., 2013).

The demographics of students in the evaluation schools differed somewhat from the rest of NYC high school students (see Table 2 below). In the 2011-2012 school year, prior to iMentor's implementation, on average, schools in our evaluation enrolled a slightly higher percentage of female students, due to the inclusion of one all-girls school in the study. Evaluation schools also enrolled a higher percentage of English Language Learners (ELLs) on average, compared with other NYC high

Table 2: Demographic Profile of iMentor Evaluation Schools and All Other NYC High Schools, 2011-2012

	Evaluation Schools	Other NYC High Schools[a]
Gender (%)		
Female	54.0	51.3
Male	46.0	48.7
Race (%)		
Latino	55.0	43.3
Black	38.4	38.4
White	2.4	7.5
Asian	2.7	9.5
Receive special education services (%)	12.8	15.0
English language learners (%)	19.7	12.7
Poverty[b] (%)	81.1	72.0
8th Grade academic performance[c]		
Math scaled score[d]	663.6	670.6
English Language Arts scaled score[e]	641.9	647.4
Chronic absentees (%)	31.0	26.4
Students per school[f]	326.5	553.7
Total number of schools	8	460
Total number of students	2,612	254,706

Source: Research Alliance calculations using data provided by the NYC DOE.

Notes: [a] Any school serving students in grades 9-12, other than District 79, District 75, and specialized high schools. [b] Includes students who turned in their free or reduced price lunch form and those who did not turn in their form but attend a school that receives universal free lunch. Many students who are eligible for free or reduced lunch do not turn in their forms, therefore including universal programs is a more accurate measure of poverty. [c] Slight discrepancy between the calculated number of students based on the listed average school size and the total number of schools is due to rounding. [d] Math scaled scores range from 430 to 790 with a standard deviation of 58. [e] ELA scaled scores range from 480 to 775 with a standard deviation of 47. [f] Based on size of 9th grade during the 2011-2012 school year. The other characteristics in the table represent school-wide measures.

schools. Again, this is because one school in our study is an inclusion ELL school, where by design over 70 percent of students are ELLs.

Like most NYC high schools, the student population in evaluation schools was predominantly Black and Latino. In both sets of high schools, Asian and White students each made up less than 10 percent of the student population. Compared to all other NYC high schools, however, iMentor schools had a greater proportion of Latino students and a lower proportion of White and Asian students. The iMentor evaluation schools also had a higher proportion of students who live in poverty.

iMentor schools enrolled students who had roughly similar academic performance as other NYC students. Based on their 8th grade test scores, 9th graders who enrolled in evaluation schools had comparable, but slightly lower, academic achievement levels vis-a-vis students in other NYC high schools. They were also more likely to be chronically absent.

Our study of iMentor's implementation across these schools may reveal challenges related to each schools' specific context. As a group, though, the evaluation schools have similar characteristics to average NYC high schools. Like many of the City's schools, the iMentor evaluation schools serve a large proportion of poor students and students of color. Furthermore, students entering 9th grade at the evaluation schools have a similar academic profile to 9th graders entering other NYC high schools. While these eight schools are generally comparable to the average NYC high school, and lessons that emerge from the study may well be relevant to other City schools, it is important to recognize that this is a small, non-representative sample, which limits our ability to generalize outside these eight schools.

Methods Used for This Report

Examining Implementation

To understand how the iMentor program was implemented in evaluation schools in the first year, we collected a range of qualitative and quantitative data.

In three schools, we conducted interviews with the school's principal, a teacher who is the point-person for iMentor, a teacher whose students participate in iMentor, the PC, and three mentors. We transcribed these interviews and coded the transcripts in an iterative process to identify recurring themes. (Details on qualitative methods can be found in Appendix A.) We used these data to understand what each core component of iMentor looks like in practice, and to highlight some successes and challenges that schools encountered when implementing the program.

We also analyzed programmatic data and student and mentor surveys from all eight schools. The programmatic data provide information about how much of each core element students received, while surveys provide insight into mentors' and students' perceptions of the program and mentoring relationships. A detailed description of each implementation measure can be found in Chapter 3, and further information about programmatic data can be found in Appendix B.

Finally, in order to determine whether students experienced the program as designed, we assessed implementation fidelity to iMentor's program model by comparing actual implementation against benchmarks iMentor has developed for the core elements. For example, iMentor's goal is for students to attend six events per year. If at least 65 percent of students in a school attended six events, we consider this high fidelity. If at least 50 percent of student met the benchmark, we consider this moderate fidelity. If fewer than 50 percent of students attended at least six events, we conclude that the program is not implementing the events with fidelity to the model. While the categorical nature of the fidelity measures can be limiting, they provide a useful overview of implementation in context of programmatic goals.

Together, these data give a holistic view of how iMentor is being implemented in these eight schools, and which areas of implementation may need the most attention moving forward. The qualitative data can help explain variation in the quantitative measures of implementation, suggest new areas to gather data, and provide formative, programmatic feedback. Overall, the evidence from these sources provides deeper insight into how the program operates in different school contexts and an opportunity to learn from experiences across schools.

Examining Non-Academic Outcomes

Our study aims to measure iMentor's effects on a suite of knowledge, behaviors, and skills that students need to enroll and thrive in college. This year, our analysis of non-academic outcomes focuses on three areas, described briefly below (see Appendices C, D, and F for details):

1. *Strong Relationships*: The strength and number of relationships that students have with adults in their lives, including iMentor mentors and other supportive adults.
2. *College and Career Aspirations:* Student ambitions for college completion and future careers.

3. *Non-Cognitive Skills:* iMentor targets key "non-cognitive skills" with its College Ready curriculum. The non-cognitive skills we measured this year are Growth Mindset, Perseverance, Optimism, Self-Advocacy, and Social Capital. In future years we will add Critical Thinking, Help Seeking, and Curiosity/Love of Learning (these measures were excluded this year because we did not have a reliable, consistent measure across all eight schools).

In future years of the evaluation, we will also assess students' ability to navigate the post-secondary process. iMentor's curriculum teaches students practical skills and knowledge for navigating the road to college enrollment, such as studying for the SAT's, visiting colleges, and applying to college. These activities take place in later high school years and are therefore not included in this report.

We tested the effect of iMentor on these non-academic outcomes using student responses to a survey they took at the beginning and end of 9th grade. We compared survey results for two groups of students within the same school: those who had the opportunity to participate in iMentor ("treatment students") and those who did not ("comparison students"). Because iMentor is a school-wide intervention in which all 9th graders have the opportunity to participate, we used a lagged cohort research design. With this design, the comparison students are students who enrolled in the 9th grade one year before iMentor was introduced (meaning they did not have access to the program). By comparing students within the same school who are very close in age, we are likely comparing similar students.

Our study is designed to control for all differences between these two groups of students, except for their access to iMentor. If we can do this effectively, then we can confidently say that any differences in students' outcomes are due to iMentor and not because of other factors. Thus, we use statistical methods to control for students' background characteristics, prior academic performance and attendance, as well as their responses to the iMentor survey in taken in the fall of 9th grade.

While controlling for these background characteristics and baseline measures helps ensure that the two groups are as comparable as possible, we cannot be certain that we have controlled for all differences between treatment and comparison students. Furthermore, there may be some systematic changes that happened at the same time as the implementation of iMentor, making it difficult to discern iMentor's impact. For example, if there were a district-wide initiative focused on non-cognitive skills, we might see gains in this area that are not attributable to iMentor, but rather are the result of the system-wide initiative. To our knowledge, there were no such

system-wide initiatives during this time period that targeted the non-academic outcomes we are measuring.

A second concern is that we cannot isolate the effect of iMentor from that of other school-level initiatives that have similar goals and were introduced concurrently to iMentor. We investigated other programs at the evaluation schools, and found that while iMentor schools did offer other college readiness programs, they were constant across the treatment and comparison cohorts. See Appendix E for greater detail.

While these concerns mean that we must be cautious about drawing causal inferences from these analyses, our design does effectively control for many differences between the treatment and comparison students. As such, our study provides a good estimate of iMentor's effect on students' non-academic skills.

Examining Academic Outcomes and Attendance

This year, our examination of students' academic performance and attendance focused on three outcomes, described briefly below:

1. *On-Track for Graduation*: Indicates whether a student has earned 10 credits and passed one Regents exam with a score of 65 or higher by the end of 9th grade. The Research Alliance has found this measure to be an especially powerful predictor of students' likelihood of graduating from a NYC high school with a Regents diploma (Kemple, Segeritz, & Stephenson, 2013).
2. *GPA*: Averages the grades students received in 9th grade, weighted by academic credits. A large body of research has shown GPA to be a better predictor of college success than standardized test scores or high school coursework (Farrington et al., 2012).
3. *Chronic Absenteeism*: Indicates whether a student missed at least 11 percent of (20 or more) days of school during the 9th grade year. Research has indicated that students who are chronically absent are at greater risk of dropping out (Allensworth & Easton, 2007).

We analyzed iMentor's effect on these outcomes using Comparative Interrupted Times Series (CITS) analyses. This rigorous approach is able to control *both* for school characteristics that remain consistent over time (e.g., feeder patterns, location, and, to some extent, school culture) and for system-wide effects that could be occurring as iMentor is implemented. For example, if we find that schools' academic performance improves after iMentor is introduced, this change might be

caused by iMentor, but it also might be due to system-wide reforms such as budget increases or other external events. CITS compares schools participating in the program with others that were not exposed to the iMentor intervention during this period, but which are also part of the NYC school system, and thus would be affected by any systemic influences.

CITS analysis involves three steps. In the first step, we predict the achievement of the cohort we are studying (in this report, the first cohort eligible to participate in iMentor) for each of our chosen outcomes, by creating a "time series" using the outcomes of three prior cohorts of students at iMentor schools. We then assess the difference in achievement of students before and after the "interruption" (i.e., the introduction of iMentor). Building a trend based on historical outcomes ensures that changes in students' achievement attributed to iMentor are not simply due to steady improvements in academic outcomes at that school.

In the second step, we perform the same analysis on a group of comparison schools that did not receive iMentor. We selected comparison schools that were as similar as possible to iMentor schools in terms of demographic characteristics and prior academic performance. We selected two comparison schools for every iMentor school.

In the third step of CITS analysis, we compare the difference in achievement of students in iMentor schools before and after the introduction of iMentor with the difference in achievement of students in comparison schools over the same time period. As explained above, this allows us to isolate changes due to iMentor from other factors that could influence outcomes during the same period, such as district-wide policies, which we assume to affect similar schools similarly.

The accuracy of the CITS estimate depends on the similarity of iMentor and comparison schools. We are confident that our matching process resulted in identifying comparison schools that are similar to the iMentor evaluation schools. We document the matching process, assess match quality, and provide further details on our CITS analysis in Appendix G.

Things to Consider in Interpreting Our Findings

Given the early nature of the impact analyses in this report, the findings must be understood as preliminary. The results we report for non-academic and academic outcomes are far from the final effect of the full four-year intervention, and are not even the final 9th grade analyses (our study will investigate two cohorts of 9th graders

at each evaluation school, and this report is only based on the first of the two). Future reports will provide an updated 9th grade analysis including all groups of 9th graders.

In the next chapter, we describe how the College Ready Program was enacted in the evaluation schools during the first year. We believe these implementation findings provide the most valuable information at this point in the evaluation. Insights about how the program has been implemented to date can help us understand whether iMentor is on track to accomplish its goals and identify areas in need of mid-course correction.

CHAPTER 3: IMPLEMENTING THE IMENTOR COLLEGE READY PROGRAM

This chapter provides a detailed description of the four elements that make up the iMentor College Ready Program, as well as an overall assessment of the first year of implementation in our eight evaluation schools.

As described in the introduction to this report, the iMentor College Ready Program comprises four primary elements: Whole school model, college readiness curriculum, blended approach to developing mentoring relationships, and pair support. This chapter presents further details about how these elements function within schools by describing: 1) the goals of each element, 2) key activities involved, 3) challenges and successes associated with each element, and 4) a brief look at how much of the program activities students experienced in each school. This gives us a sense of what the program looks like on the ground, as well as variation across schools.

After describing each program element, we look at fidelity to iMentor's program model by assessing whether program implementation met specific benchmarks created by iMentor. This allows us to assess how implementation compared to iMentor's expectations across school sites and which program elements were most difficult to implement as designed. Together, these data give us a good picture of whether iMentor was implemented as intended, across the eight schools.

This chapter draws on interviews with iMentor employees and staff in three of the evaluation schools, along with surveys administered to mentors and mentees in all eight schools and data from iMentor's online platform.

Our implementation analysis serves two major purposes. First, it allows us to offer formative feedback that iMentor can use to refine future years of program implementation. Second, it provides important context for our impact study, which aims to determine whether participation in iMentor leads to better outcomes for students. Knowing whether the programs are, in fact, being implemented according to the model is crucial for interpreting our impact findings and understanding if our evaluation constitutes a "fair test" of the iMentor program.

What Does a Program Coordinator (PC) do?

In many ways, PCs are the linchpins of the iMentor College Ready Program. They are the face of iMentor to students, mentors, and school staff. As one PC described her role:

> *My job is to facilitate the relationships between the mentors [and the students]…Making sure they have all the skills and the resources and everything that they need to have as smooth a relationship as possible through that year. From the student side, that was helping them with their emails, talking with them about their interactions with their mentor, making sure that they're as bought in as possible. Then from the mentor side, it was answering programmatic questions, troubleshooting any difficult conversations that they might have or different topics that they wanted to bridge with their mentee and strategizing how they're gonna bring that up.*

PC's formal responsibilities

- Helping to recruit students;
- Matching students and mentors;
- Facilitating the relationship between students and mentors;
- Teaching the curriculum in the weekly iMentor class;
- Planning and facilitating monthly events; and
- Conducting case conferences with other PCs.

Additional activities (as reported by PCs)

PCs described going outside their required roles to provide extra support or opportunities for pairs. Examples include:

- Coming into schools an extra day a week to provide individual support to students;
- Working with school staff to bring mentors to school career days;
- Setting up time for mentors to come to the school and eat lunch with their mentees; and
- Forming and maintaining relationships with principals and teachers in partner schools.

Whole School Model

The first core element of the College Ready Program is the whole school model, which involves (1) enrolling *all* eligible 9th graders in a school into its four-year program[2] and (2) integrating the program into the life of the school.

Enrolling all 9th graders

Responsibility for enrolling students into the College Ready Program primarily falls to PCs. During the first few weeks of the required weekly iMentor class (described further below), PCs introduce the program to 9th-grade students and urge them to sign up. Throughout September and October, PCs regularly remind students that they need to submit a consent form signed by themselves and a parent/guardian in order to be matched with a mentor. Students who do not hand in the consent form cannot be matched with a mentor, but do continue to attend the iMentor class.

PCs saw convincing students to enroll in the program as one of their main responsibilities, and invested a great deal of time and effort in doing so. PCs were surprised at the amount of reticence from some students when they began the program. While we do not know precisely how many students were reluctant to join, we heard reports of students' initial discomfort with mentoring from both school and iMentor staff, across multiple schools.[3] One PC explained that, "You get a handful of students who are really bought in right off the bat, and then you get another significant chunk of students who are like, 'Who is this stranger that I don't know, and what do they want from me?'"

PCs reported using a variety of tactics (e.g., approaching students outside of class, encouraging students to urge their friends to enroll) to convince students to join the program. PCs stated that they could benefit from additional formal training or coaching from iMentor in anticipating students' resistance and planning a response.

After consent forms are submitted, PCs match students with mentors. First, iMentor's proprietary platform uses student and mentor surveys to identify potential matches based on common interests. Then, PCs use their judgment to select the best match. Students are always matched with a mentor of the same gender. It is worth noting that male mentors have proved to be more difficult to recruit, which results in a smaller pool of male mentors and thus makes it more challenging to find a good match for male students.

Table 3 shows the percentage of eligible students who were matched with a mentor in the fall of 9th grade (i.e., by December 31st), and the percentage who were matched by the end of the school year. Overall, 81 percent of all eligible students were matched in the fall. However, this masks considerable variation across schools. While three schools matched over 90 percent of their students in the fall, three schools matched less than 75 percent of eligible students in this time frame.

Table 3: 9th Grade Match Rates, by School

	All Schools	Ginkgo	Fig	Redwood	Maple	Cherry Blossom	Oak	Sequoia	Palm
Matched in fall semester (%)	81.1	92.1	83.8	74.7	79.0	66.2	73.7	91.5	92.8
Matched in fall *or* spring semester (%)	84.8	94.5	85.3	75.8	79.8	80.0	78.9	91.5	94.2
Sample size[1]	836	127	68	91	119	130	114	118	69

Source: Research Alliance calculations based on data obtained from the iMentor Platform.

Notes: Fall semester is from the start of the school year to December 31st. [1]Sample includes all students on each school's 9th grade roster as of October 20th.

Cherry Blossom and Oak, two of the schools with low rates of fall matches, started implementing the program late. Cherry Blossom, the school with the lowest proportion of students matched in the first half of the year, not only started late but also had a high proportion of boys—who, as noted above, are more difficult to match. Notably, Cherry Blossom continued matching into the second semester. By the end of the year, 80 percent of Cherry Blossom students had been matched with a mentor, a rate more comparable to the other schools.

Integrating the program into the life of the school

Another aspect of the whole school model is integrating the program into the school community. iMentor does this by trying to obtain buy-in and adequate support for the College Ready Program from school staff members.

We found some strong examples of PCs and school staff working together to implement iMentor. At one school, when teachers found that students were struggling to understand material presented by the PC in the weekly iMentor class, they suggested modifications to the class structure that allowed students more time to collectively process new material. In a school with a high proportion of English Language Learners, school leadership and the PC worked together to develop a training for mentors about working with students who are learning English, so mentors could better understand and attend to their mentee's needs.

Yet, we also found that many teachers were hesitant to invest time and energy into iMentor. While the weekly iMentor class is led by the PC, iMentor expected a school staff member to attend the class and provide support as needed. School staff were also needed to support after-school events (described below). However, PCs and school staff reported that some teachers treated the iMentor class as time to grade papers or prepare for other classes, and many did not attend events. They cited the late start and end times as a reason for not attending events, which would have required them to stay as late as 8:00pm.

Our interview data suggest that both PCs and school staff have a desire to improve teacher buy-in and participation, which may require better communication from school leaders and iMentor. A common refrain was that school staff did not initially anticipate that they would be expected to invest time and resources into implementing iMentor. In one case, however, over the course of the year, school staff recognized that their help was needed, and by the end of the year were more willing to invest time and energy with iMentor. One teacher who became highly

involved with iMentor mid-way through the year described what she had learned about the role of teachers in implementing the program:

> *Part of it is the school really needs to think, 'How can we make this work?'…Our kids are really, really hard to work with and so [staff at our school] really can't just be like, 'Let me just implement your program.'*

More broadly, teachers and school leaders agreed it was their responsibility to cultivate school buy-in and work with iMentor to ensure successful implementation. More carefully managing school staff expectations and preparing the PC to manage those relationships might foster teacher buy-in and improve iMentor's integration into the life of the school.

College Ready Curriculum

The second core element of the College Ready Program is the College Ready curriculum, which iMentor developed. The curriculum is taught by PCs during the weekly iMentor class and supplemented through monthly after-school events with mentees and mentors.

Each grade has its own curricular focus, divided into units. In 9th grade, students learn about topics designed to help build interest in going to college, foster a strong mentoring relationship, and develop iMentor's target non-cognitive skills. The specific topics the 9th grade curriculum highlights include getting to know mentors, establishing a foundation for successful mentoring relationships, curiosity and love of learning, optimism and excitement about the future, college aspirations, growth mindset, resiliency and perseverance, help-seeking and self-advocacy, and developing social capital. The 10th grade curriculum focuses on career exploration while continuing to develop non-cognitive and social-emotional competencies, within the career focus. In 11th grade, the curriculum centers on college exploration, and in 12th grade it supports students through the college application process.

A typical 9th grade class focuses on a single non-cognitive skill. At the beginning of class, the PC introduces the skill and leads a short activity. Students generally spend the remainder of class composing an email to their mentor, based on a prompt about the day's topic. These emails are intended to reinforce what students have learned about the topic, while also fostering the mentee-mentor relationship. Each curricular unit culminates with a monthly event, which also provides an opportunity

for mentees and mentors to spend time together. We describe the emails and events in more detail in the "Blended Mentee-Mentor Relationship Development" section below.

All three of the PCs we interviewed had some flexibility to modify the College Ready curriculum to align with student and school needs, as long as they adhered to the curriculum's themes. For example, Gingko is mostly an English Language Learner school, so the PC translated all materials into Spanish. Another PC changed assignments to align with student coursework from other classes. The third PC we spoke to switched from a PC-directed instructional approach to a more student-centered approach using "circle discussions," which were already used at the school, to encourage students to talk about how specific topics play out in their own lives. In all of these examples, it appeared that the curriculum's content was still being delivered, but that PCs were adapting their lesson or approaches based on what they thought would best serve their students. PCs reported that they felt they had more freedom in adapting the curriculum toward the end of the year.

Interviews with PCs, teachers, and principals suggested that the quality of instruction varied across PCs.[4] School administrators in one school viewed their PC as a competent and capable instructor, who "didn't need a teacher to help her." Another PC initially struggled to manage student behavior and offer compelling presentations. School administrators and teachers gave this PC instructional coaching, and saw improvement in instruction. The PC in the third school where we conducted fieldwork was viewed as a poor instructor who had difficulty running the class. Interviews at this school revealed that students frequently did not take instructions from this PC, which affected classroom productivity. An administrator said that this PC, "can do a lotta other stuff that needs to happen to run iMentor, but…can't run the class." This PC's class was restructured to improve student behavior and productivity. School staff reported that, following these changes, the PC was better able to teach the curriculum.

Table 4: Average Number of Classes, by School

	All Schools	Ginkgo	Fig	Redwood	Maple	Cherry Blossom	Oak	Sequoia	Palm
Average number of classes held	20.8	24.3	27.4	22.6	21.3	14.5	18.2	19.8	22.3
Sample size	687	120	68	47	95	104	90	108	65

Source: Research Alliance calculations based on data obtained from iMentor Platform.
Note: Sample only includes students who have a profile on iMentor's online platform. Classes per school is presented as an average because students are divided into different class sections.

This year, our data did not allow us to quantify differences in PC teaching effectiveness or student learning. We did, however, create a rough measure of curriculum delivery by tracking the average number of class sessions offered to students in each school. This provides a sense of the extent to which students were exposed to the curriculum, and whether different schools offered similar or different "dosages." As with mentoring match rates, we found variation in the number of classes schools offered over the course of the year (see Table 4 on the previous page). Not surprisingly, the two schools that started late (Cherry Blossom and Oak) held fewer classes than the other schools—about 15 and 18 classes respectively. At the other end of the spectrum, Fig offered 27 classes, the most of any school.

In future reports, we will be able to better assess how much of the iMentor curriculum students receive. iMentor has begun tracking classroom attendance, which will allow us to determine not only whether students had access to classes, but how frequently they actually attended. In addition, starting in the 2014-2015 school year, iMentor is measuring PC effectiveness through a classroom observation rubric that will be completed by their supervisors and used to help PCs improve instruction. These new data will allow us to more accurately measure curriculum delivery.

Blended Mentee-Mentor Relationship Development

The third core element of the College Ready Program is the development of relationships between mentee-mentor pairs. PCs told us that this is the central focus of programming in the 9th grade, when iMentor aims to establish a strong foundation for relationships that are intended to last through students' four years of high school. Mentees and mentors are supposed to build a relationship through weekly emails along with in-person meetings at monthly events. iMentor is unusual in the mentoring community in its reliance on email as a key mechanism for relationship development, with relatively little in-person contact. iMentor's goal is to create lasting relationships that provide students with valuable interpersonal support, with mentors serving as strong models for the skills and knowledge at the heart of the iMentor curriculum.

Who Are iMentor Mentors?

Mentors are critical to the success of iMentor's school-based mentoring program. They are all college graduates, and are required to commit to a long-term mentoring relationship, to communicating with their mentee by email at least once a week, and to meeting their mentee in person about once a month during the school year. All mentor participation in the iMentor program is on a volunteer basis. iMentor checks each volunteer's background before they enter the program. Each mentor then receives a two-hour training at the beginning of the program and has at least five opportunities for one-on-one conversations with PCs throughout the year.

Table 5: Mentor Background Characteristics

Characteristic	Average Mentor
Female (%)	51.4
Race/ethnicity (%)	
Asian	13.6
Black	16.6
Latino	9.3
White	54.0
Other	5.9
Marital status (%)[a]	
Divorced	1.5
Has domestic partner	1.1
Has significant other/engaged	6.6
Married	12.8
Single	78.0
Parent (%)	2.3
Number of children (among parents)	1.8
Age	28.7
Number of mentors	527

Source: Research Alliance calculations based on data obtained from survey administered to iMentor mentors.

Notes: Distributions may not sum to 100 percent due to rounding. Averages only include mentors who responded to that survey item. [a] 11 percent of respondents were missing data for these items.

Mentee-Mentor Communication

As mentioned above, during the iMentor class each week, students are given time to email their mentors. The emails are intended to allow students to simultaneously learn the curriculum and build a relationship with their mentor. Students log into iMentor's online platform, where they find a prompt or series of prompts to discuss in their email. Prompts may be video clips or sentence starters such as, "My number one dream for my future is…" In interviews, mentors and PCs stated that some students ignored the prompts, and instead wrote about their daily lives.

Table 6: Email and Event Frequency, by School

	All Schools	Ginkgo	Fig	Redwood	Maple	Cherry Blossom	Oak	Sequoia	Palm
Frequently emailing pairs[1] (%)	58.4	78.5	61.5	34.8	48.3	45.9	56.6	68.9	75.7
Number of events attended	4.6	6.9	5.6	4.8	2.8	3.8	3.1	5.0	5.3
Sample size	836	127	68	91	119	130	114	118	69

Source: Research Alliance calculations based on data obtained from iMentor programmatic data.

Notes: [1] A frequently emailing pair is one where mentees and mentors email each another following 65 percent of iMentor classes. For example, if 20 classes were offered, a frequently emailing pair would send each other emails after at least 13 classes. Other iMentor literature has referred to this as a pair with "65 percent perfect sessions."

Mentors are asked to respond within one week (i.e., before the next iMentor class). When mentors are ready to reply, they receive a prompt and can also view the prompts that students were given. Prompts for mentors usually ask them to share their own experiences and to encourage their mentee to explore her feelings about that week's curricular topic.

iMentor also supports mentee-mentor relationships through events, held approximately once a month, on weekdays, starting around 6:00 p.m.[5] As with the emails, events are designed to both reinforce the curriculum and also to nurture the mentoring relationship. Events consist of planned activities (e.g., a college visit, ice skating), along with discussion prompts and worksheets for pairs to complete together. PCs and mentors reported that some pairs followed the imposed event structure, while others preferred informal conversations.

Table 6 shows how often mentors and mentees interacted through iMentor's emails and events. Again, we found considerable variation across schools in terms of both email frequency and the number of events held.

The table shows the percent of "frequently emailing pairs" at each school, a term iMentor uses to identify mentee-mentor pairs who email each other at least once during 65 percent of weeks in the school year. At Redwood, only 35 percent of students were in frequently emailing pairs, while 79 percent of students at Gingko were. We found that the schools with the lowest proportion of frequently emailing pairs also had the lowest student attendance. This is not surprising, given that students who are absent from class are less likely email their mentor. Struggles with behavior and managing class time, described in the curriculum section above, may also have contributed to less frequent emailing in some schools. Mentees sent emails after the PC introduced the day's topic, so classes that struggled with behavior and time management may have offered fewer chances to send emails.

Table 6 also shows that the number of events that students attended varied widely across schools. In some schools, the average number of events that students attended over the year was less than three, while in one school the average number of events students attended was almost seven. This finding aligns with PC and school staff reports that student attendance at events was often low. Timing was a barrier for some students. The school day ends at 3:00pm, and many did not want to wait until 6:00 for the events to start. Some students had after-school responsibilities that made it impossible to stay. PCs reported to us that, in a few cases, parents expressed concern about the late end time and about students traveling home at night. PCs often planned activities like movies or open gym time to encourage students to stay after school for events, with mixed success.

Both PCs and mentors described face-to-face meetings as the most effective way for pairs to build a relationship, regardless of whether they completed the structured event activity. Therefore, PCs sometimes created additional opportunities for pairs to meet in person. One school started a "Power Lunch," where mentors brought their mentee food, and they ate together in the school's library during the mentee's lunch period. This school was located in midtown Manhattan, which made the mid-day meetings feasible for the many mentors who worked nearby.

As the year progressed, mentees and mentors often exchanged telephone numbers. The mentor survey also included a question about communication with mentees. Table 7 shows that almost half of mentors said that they texted with their mentee at least once a month.

Table 7: Mentor-Reported Communication with Mentee, by School

	All Mentors	Ginkgo	Fig	Redwood	Maple	Cherry Blossom	Oak	Sequoia	Palm
Phone									
Less than once a month	87.6	83.3	71.8	88.0	93.1	87.0	94.2	84.0	100.0
Once a month	8.3	13.1	20.5	6.0	6.9	5.6	1.9	10.6	0.0
More than once a month	4.1	3.6	7.7	6.0	0.0	7.4	3.8	5.3	0.0
Text									
Less than once a month	55.5	46.4	30.8	48.0	67.1	57.4	67.3	58.9	60.0
Once a month	14.7	17.9	5.1	18.0	15.1	11.1	19.2	13.7	14.0
More than once a month	29.8	35.7	64.1	34.0	17.8	31.5	13.5	27.4	26.0
Sample size	527	88	41	50	78	56	60	99	55

Source: Research Alliance calculations based on data obtained from iMentor survey administered to students after one year. Responses to the question, "How often did you communicate via…" (%).

Match Longevity

As mentioned above, iMentor aspires to have matches last through all four years of high school. Table 8 shows that many, but not all, students were still matched with their initial mentor at the end of 9th grade. Overall, about 85 percent of eligible students had a mentor at any point during their 9th grade year, and 73 percent of students maintained the same mentor for the entire year. Again, these numbers vary by school. At Redwood, only 53 percent of students had the same mentor all year, but at Palm the percentage was 87 percent.

Table 8: Match Rates and Longevity, by School

	All Schools	Ginkgo	Fig	Redwood	Maple	Cherry Blossom	Oak	Sequoia	Palm
Matched with a mentor in 9th grade (%)	84.8	94.5	85.3	75.8	79.8	80.0	78.9	91.5	94.2
Same mentor throughout 9th grade (%)	73.4	84.3	76.5	52.7	71.4	75.4	60.5	80.5	87.0
Sample size	836	127	68	91	119	130	114	118	69

Source: Research Alliance calculations based on data obtained from iMentor programmatic data.

Reports of Mentee-Mentor Closeness

The spring survey given to mentees included a question that asked, "How close do you feel to your mentor?" Eighty-five percent of students reported that they felt "Somewhat Close" or "Very Close" to their mentor. These results, seen in Table 9, were fairly consistent across all schools and are generally in line with ratings of closeness seen in other mentoring evaluations (Bayer et al., 2013).

It is worth noting the discrepancy between the low quantity of relationship-building activities and relatively positive reports of relationship quality. At this stage of the evaluation, it is impossible to empirically explain this gap, but there are a few potential explanations. Students may be responding to surveys with what they believe iMentor wants to hear about their relationships, rather than with accurate information. Alternatively, closeness might be based on general personality compatibility, rather than quantity of interaction. At this stage, we do not know how much in person or email contact it takes to create a strong relationship for most pairs.

Looking ahead, we will aim to better understand the connection between our implementation and relationship quality measures. For example, we can investigate

Table 9: How Close Students Feel with Their Mentor, by School (%)

	All Schools	Ginkgo	Fig	Redwood	Maple	Cherry Blossom	Oak	Sequoia	Palm
Not at all close	4.3	0.0	4.8	4.8	6.4	3.8	5.1	7.5	1.8
Not very close	9.8	4.4	16.7	14.3	7.7	12.7	15.2	4.3	10.7
Somewhat close	49.6	51.6	52.4	42.9	52.6	48.1	54.4	46.2	46.4
Very close	36.3	44.0	26.2	38.1	33.3	35.4	25.3	41.9	41.1
Sample size	836	127	68	91	119	130	114	118	69

Source: Research Alliance calculations based on data obtained from iMentor survey administered to students after one year.

whether students who feel close to their mentor are more likely to maintain their relationship over time, or if changes in event attendance and emailing patterns relate to changes in how close students feel to their mentor.

Pair Support

The final core element of the College Ready Program is the pair support provided by PCs. PCs support mentees and mentors using a case management model, which is a process often used in social work or health care to measure and track client needs and support. It consists of a needs assessment, monitoring, service planning, case conferencing, and reassessment (HRSA, 2001). PCs also provide informal coaching to both mentees and mentors.

PCs are required to check in with each mentor five times throughout the school year. At the start of the program, PCs call each mentor. PCs generally use this call, which lasts 20-30 minutes, to explain what mentors should expect during the first year. The other check-ins take place by phone, email, or in person, and are an opportunity for the mentor to share questions, concerns, or thoughts about the program with the PC.

PCs continuously monitor the quantity of pair interactions using iMentor's online platform. PCs are required to maintain "focus lists" to make sure they provide meaningful support where needed. One PC, for example, created a list to target pairs who were writing emails less than 40 percent of the time they were expected to. PCs often held "case conferences" with other iMentor staff to brainstorm ways to help struggling pairs.

PCs also act as mentor coaches. For example, they hold "mentor huddles" at iMentor events, after the mentees leave.[6] The huddles, which typically last 20

minutes or less, provide an opportunity for mentors to ask PCs questions, and in some cases, share successes and challenges with each other.

PCs also kept mentors apprised of important issues in their mentee's life. PCs sent weekly newsletters to mentors with general school information, such as upcoming exams. PCs would also contact individual mentors with information specific to their mentee, such as a particularly difficult day at school, or to remind them to email their mentee.

On the mentor survey, we asked about the frequency of guidance and support mentors received from PCs (see Table 10). Across all schools, mentors reported being largely satisfied with this support, with 95 percent of mentors saying that they were "Somewhat Satisfied" or "Very Satisfied."

PCs also provided extra support to participating students. PCs and school staff in several schools told us that PCs often went beyond their responsibilities to spend extra time with their mentees. As the Cherry Blossom PC described,

> *Sometimes, I would just go during my lunch break and hang out with them at recess and play basketball with them. The boys love it. You really, really get to develop a great relationship with them just hanging out with them on the basketball court or in the cafeteria.*

Another PC visited the school an extra day a week to hold optional "office hours" for students. PCs felt that gaining students' trust allowed them to better support pairs.

Next year, we will expand our investigation of pair support. We do not currently have information from students about their perceptions of PC support; future student surveys will include questions about this. Finally, iMentor recently began

Table 10: Mentor Satisfaction with PC Support, by School (%)

	All Mentors	Ginkgo	Fig	Redwood	Maple	Cherry Blossom	Oak	Sequoia	Palm
Very dissatisfied	1.2	1.2	2.5	0.0	1.4	0.0	1.8	1.0	1.9
Somewhat dissatisfied	3.4	1.2	2.5	0.0	8.3	3.8	7.0	3.1	0.0
Somewhat satisfied	18.5	8.3	12.5	12.8	20.8	22.6	38.6	18.8	14.8
Very satisfied	76.9	89.3	82.5	87.2	69.4	73.6	52.6	77.1	83.3
Sample size	527	88	41	50	78	56	60	99	55

Source: Research Alliance calculations based on data obtained from iMentor survey administered to mentors at end of first year.

tracking the quality of PCs' pair support through a rubric, which we will include in next year's implementation study.

Implementation Fidelity

The section above provided a sense of what the iMentor College Ready Program looked like in the eight evaluation schools. It is important to understand how this reality compares with iMentor's expectations for the program. To this end, we use a series of benchmarks developed by iMentor to assess the implementation of the program's core elements. This allows us to determine whether each school individually, and the eight schools overall, implemented iMentor as it was designed.

Table 11 outlines iMentor's benchmarks. Based on these standards, we created categories called "high fidelity," "moderate fidelity," and "no fidelity." Implementing a program element with high fidelity indicates that the school met iMentor's expectations for that element. Moderate fidelity indicates that a school did not meet the benchmark for a program element, but was approaching iMentor's expectations. No fidelity indicates that a school did not implement that element as designed.

Table 11: iMentor College Readiness Program Implementation Benchmarks

Program Element	Whole School	Curriculum	Mentor-Mentee Relationship Development		Pair Support[4]
Key Activities	Enroll eligible[1] 9th graders in iMentor	Students attend iMentor class run by the iMentor PC	Students and mentors send weekly[2] emails	Students and mentors attend events	Students and mentors receive support from their PC
Benchmark Name	Participation (%)	Number of Classes Held	Frequently Email (%)	Attend At Least Six Events (%)	N/A
High Fidelity (Green)	Enroll at least 95 percent of eligible 9th grade students in iMentor	School holds at least 20 iMentor classes	At least 65 percent of students and mentors are frequently emailing pairs[3]	At least 65 percent of students and mentors attend at least 6 events	N/A
Moderate Fidelity (Yellow)	Enroll at least 75 percent of eligible 9th grade students in iMentor	School holds at least 15 iMentor classes	At least 50 percent of students and mentors are frequently emailing pairs	At least 50 percent of students and mentors attend at least 6 events	N/A
No Fidelity (Red)	Enroll less than 75 percent of eligible 9th grade students in iMentor	School holds less than 15 iMentor classes	Less than 50 percent of students and mentors are frequently emailing pairs	Less than 50 percent of students and mentors attend at least 6 events	N/A

Notes: [1] Eligibility is defined as being a first-time 9th grader enrolled in the school as of October 20th. [2] Emails are usually sent weekly, but there may be an exception if the iMentor class does not meet for more than a week. For example, if the students have vacation one week, then they can send emails with their mentor over two weeks. [3] A frequently emailing pair is one where mentees and mentors emails each another following 65 percent of the classes. For example, if 20 classes were offered, a frequently emailing pair would send each other emails after at least 13 classes. [4] We plan to incorporate a benchmark for pair support in future reports.

Table 12 shows the level of implementation each school achieved for three of the four elements.[7] The green numbers indicate that a school met the high-fidelity target, yellow numbers indicates that a school met the moderate fidelity target, and red indicates that a school did not implement a given program element with fidelity. This figure provides a valuable picture of iMentor implementation in each school and across schools, highlighting which program elements schools were able to implement successfully, and which schools gave students the fullest version of the College Ready Program. The figure shows that Gingko, Fig, and Palm implemented all measured elements of the program with fidelity (these schools do not have any red numbers). Three other schools implemented all but one element with fidelity, and Cherry Blossom did not implement any of the elements with fidelity. As mentioned above, Cherry Blossom started the program late, which certainly affected its ability to meet the benchmarks for participation, number of events, and number of classes.

The figure also demonstrates that the event attendance benchmark was the most difficult for schools to meet: Only one school achieved high fidelity for this program element, and four of the eight schools had no fidelity for event attendance. Six schools achieved either high or low fidelity for emailing, and seven had either high or moderate fidelity for the number of classes held and the proportion of student participation.

In the future, as iMentor collects additional data, we will add a benchmark for pair support, such as the number of hours PCs spend coaching pairs, or the number of times a PC contacts mentors and mentees about their relationship. We would also

Table 12: Fidelity to iMentor's Program Benchmarks, by School

	Whole School Model	Curriculum	Mentee-Mentor Relationship Development	
	Participation (%)	Number of Classes Held	Email Frequently (%)	Attend At Least Six Events (%)
Ginkgo	92.1	24.3	85.0	75.6
Fig	83.8	27.4	57.4	57.4
Redwood	74.7	22.6	35.2	50.5
Maple	79.0	21.3	40.3	16.0
Cherry Blossom	66.2	14.5	33.1	33.8
Oak	73.7	18.2	55.3	22.8
Sequoia	91.5	19.8	72.9	44.9
Palm	92.8	22.3	79.7	53.6

Source: Research Alliance calculations based on data obtained from iMentor programmatic data.

like to supplement our assessment of the whole school model by tracking the number of school staff at each event and adding a measure of PC's collaboration with school staff, such as how many grade-level meetings they attend. Finally, we hope to add better measures of curricular implementation, such as curricular coverage and the quality of teaching during the iMentor class.

Summary of Implementation Findings

This chapter provided a close look at the four core elements of the iMentor College Ready Program. We observed a great deal of variation in how the program was implemented across the eight schools. Three schools implemented the iMentor program with fidelity across all three elements with a benchmark. They matched almost all of their students early in the year, offered more than 20 classes, and their students emailed and attended events often. Four schools struggled in one or two areas of the program, while Cherry Blossom struggled across all areas.[8]

The adequate level of implementation at most schools suggests that, although it is still early, we may see small effects from the iMentor program. This investigation of effects is the focus of the next chapter.

Our implementation study revealed some areas where iMentor is succeeding and others that could be strengthened. Overall, more than 80 percent of all students were matched with a mentor by December 31st. A further success is that, at the end of the year, mentors felt supported by the program and happy with their mentees. Mentees also reported feeling close to their mentors.

One of iMentor's greatest challenges appears to be getting students to attend events. To achieve high event attendance, schools must get students to stay after school for up to three hours until the event starts. Some schools overcame these barriers, and had students attending substantially more events, on average, than at other schools. In future years of the evaluation, we will continue to investigate schools' challenges and successes implementing iMentor events.

Moving forward, we will also continue to refine our implementation measures. We are particularly interested in understanding more about the iMentor class. We plan to gather more data, including information about student attendance, curriculum coverage, and rubrics evaluating PC effectiveness as teachers. We expect these measures will help better understand the curricular element and how it relates to the other elements of the program.

CHAPTER 4: iMENTOR'S EFFECTS ON STUDENT OUTCOMES

This chapter examines the effects of the iMentor College Ready Program on student outcomes after one year of implementation. As described in the previous chapter, iMentor's 9th-grade programming focuses on improving students' relationships with adults, raising their college and career aspirations, and helping them develop several key non-cognitive skills. The program explicitly targets these outcomes in the 9th-grade College Ready curriculum and aims to reinforce them during iMentor events and via emails between mentors and mentees. According to iMentor's theory of action, improving students' outcomes in these areas helps set the stage for later college access and success.

At this point in the evaluation, just one year into students' four years of participation, we expect to see stronger effects for some outcomes than others. For example, the primary goal for the 9th grade is to establish strong relationships between mentees and mentors. This outcome is directly tied to iMentor's programming, and so we might expect growth in this area after one year. In contrast, the non-cognitive skills that iMentor seeks to impact may be more deeply ingrained in students—fundamental to how they view and interact with the world—and thus more difficult to influence with a single year of programming.

This chapter will also examine whether one year of iMentor has had any measurable effect on students' grades, on-track rates, or attendance. However, academic achievement and attendance are even less directly connected to iMentor's program than non-cognitive outcomes. Still, they are important precursors to college enrollment and success, and iMentor's theory of action assumes that improvements in other areas (e.g., the key non-cognitive skills) will ultimately lead to improvements in academics and attendance. It is worth noting that other school-based mentoring programs have had mixed success with boosting academic performance through the provision of socio-emotional supports (Wheeler, Keller, & DuBois 2010).

Because iMentor's whole school model aims to reach *every* student, we investigate the effect of iMentor on all students who had the opportunity to enroll in the program. We compare these students to others who did not have the opportunity to enroll in the program. As described in Chapter 2, we used two types of statistical models to estimate the effects of iMentor. We use a lagged cohort model to analyze

the outcomes measured by the student survey (i.e., measures of strong adult relationships, non-cognitive skills, and college aspirations), and we used a Comparative Interrupted Time Series model to analyze attendance and academic outcomes. See Chapter 2 for more information about these methods.

Defining Outcomes Measured by the Student Survey

Strong Relationships

Interpersonal Support: A 10-item construct with items such as, "When I need suggestions on how to deal with a personal problem, I know a non-relative adult I can turn to."

Key Non-Cognitive Skills (Presented in this Report)

Growth Mindset: The belief that intelligence is changeable and that performance increases with effort (Dweck, 2006). The survey specifically measured *Internal Growth Mindset*, a three-item construct that assesses the extent to which students tend to ascribe responsibility for their actions and success to themselves, as opposed to external factors, with items like, "My own efforts and actions are what will determine my future" (Richards et al., 2002).

Perseverance: A measure of maintaining effort, even in the face of discomfort or a lack of immediate success (Walker & Arbreton, 2004) made up of eight items like, "If I can't do a job the first time, I keep trying until I can."

Hope and Sense of Optimism: A 12-item construct that measures excitement about the future with items like, "I can see possibilities in the midst of difficulties."

Self-Advocacy: The extent to which students engage in self-promotion by pointing out their abilities and competencies to others (Bolino & Turnley, 1999); made up of four items like, "I talk proudly about my experiences."

Social Capital: Refers to having relationships and connections with people who have knowledge, connections, and access to traditional sources of power such as employment opportunities and college knowledge (Lin, 1999); measured by *Adult Social Support:* A 10-item construct that measures perceived support for college and future goals from non-relative adults, and the presence of adults that serve as positive role models (Gambone & Arbreton, 1997).

Career Planning and College Aspirations

Career Importance and Planning: Asks students about the extent to which they have thought about and explored future career options, with items like "I know what kind of job or career I want as an adult" (Skorikov, 2007).

College Aspirations: Measures students' education aspirations, specifically, how much education students want to achieve, think they will achieve, and believe they need to achieve.

Future Planning: An eight-item construct that measures how much students talk to an adult about college, their future goals, and specific activities related to these goals (Surr & Tracey, 2009).

What Was iMentor's Effect on Non-Academic Outcomes (i.e., Strong Adult Relationships, Non-Cognitive Skills, and College Aspirations)?

To discern iMentor's effect on these outcomes, we compared two cohorts of 9th grade students within each evaluation school—those who entered the school the year that iMentor was launched (the treatment group) and those who entered the school the previous year (the comparison group). The two groups of students were similar across demographic characteristics, prior achievement, and baseline outcome measures (see Appendix G for details). We used statistical techniques to control for the small differences that did exist between the two groups.

Table 13 shows that iMentor had a statistically significant positive effect on several outcomes related to students' relationships with adults and their aspirations for college and a career. Specifically, iMentor students scored higher than comparison students on measures of Interpersonal Support, Future Planning, Career Importance and Planning, and College Aspirations.

Table 13: iMentor's Effects on Non-Academic Outcomes After One Year

Outcome (Scale)	Average Treatment Student	Average Comparison Student	Effect	Standard Error	
Strong Relationships					
Interpersonal Support (1-4)	2.88	2.82	0.06	0.03	*
Non-Cognitive Skills					
Growth Mindset (1-4)	3.25	3.21	0.04	0.02	
Perseverance (1-4)	3.16	3.12	0.03	0.02	
Hope and Sense of Optimism (1-4)	3.30	3.28	0.02	0.02	
Self-Advocacy (1-5)	3.62	3.57	0.06	0.05	
Social Capital (0-5 adults)	2.85	2.84	0.01	0.06	
College and Career Aspirations					
College Aspirations (1-6)	4.78	4.63	0.15	0.05	*
Career Importance and Planning (1-7)	5.69	5.55	0.14	0.07	*
Future Planning (1-3)	2.45	2.40	0.05	0.02	*
Number of students	**847**	**836**			
Number of schools	**8**	**8**			

Source: Research Alliance calculations based on data obtained from the NYC Department of Education and the iMentor student survey.

Notes: Sample includes only students in the 9th grade for the first time. * Denotes statistical significance at the 5 percent level.

In general, these effects were small. For example, after one year, students who had the opportunity to participate in iMentor had an average response that was .06 higher (on a four-point scale) than that of students who did not have the opportunity to participate.

We translated our results into effect sizes, a standard scale that allows effects to be compared across different outcomes. The general rule of thumb is that an effect size below .20 is considered small (Cohen, 1988; Hill et al., 2007). According to this standard, all of the effects were small. Interpersonal Support had an effect size of .10. The largest difference between the treatment and comparison students was on the College Aspirations outcome, which had an effect size of .15.

We observed positive effects on Strong Relationships. Students with access to iMentor report feeling more supported by the adults in their lives than those without iMentor. This makes sense considering the high levels of participation and match rates across the evaluation schools, and the centrality of helping students get to know and develop a strong relationship with their mentor in iMentor programming for 9th graders. Furthermore, our implementation data suggest that iMentor's PCs are also developing solid relationships with students.

iMentor's effects on College and Career Aspirations are also well aligned with the iMentor curriculum and program, which encourages students to begin thinking about and planning for their future careers and college in the 9th grade. The fact that there was some movement on these variables is a promising sign that the program is affecting how students think about themselves and their futures.

On the other hand, we found no effects on the five non-cognitive skills and dispositions that we measured. As noted above, these outcomes may relate to more deeply ingrained attitudes that are hard to affect with just one year of programming. We will continue to assess iMentor's effects on these outcomes, as the study progresses.

What Was iMentor's Effect on Academic Outcomes and Attendance?

We investigated this question using Comparative Interrupted Time Series (CITS) analyses. The benefit of CITS, compared to the lagged cohort design we used for non-academic impacts, is that it can isolate the effect of iMentor from other system-wide events.

Defining Academic Outcomes

On-Track: We examined iMentor's impact on students' on-track status, which indicates whether a student has earned 10 credits and passed one Regents exam with a score of 65 or higher by the end of 9th grade. We use this combined measure because our research has shown it to be an especially powerful predictor of students' probability of graduating from a NYC high school with a Regents diploma (Kemple, Segeritz, & Stephenson, 2013). Given that iMentor aims to prepare students to graduate from high school and succeed in college, this on-track measure allows us to assess iMentor's progress toward reaching the first of these goals after one year of implementation.

GPA: We also looked at GPA (weighted by academic credits). A large body of research has shown GPA to be a better predictor of college success than standardized test scores or high school coursework (Allensworth & Easton, 2005, 2007; Farrington et al., 2012).Recent work by the UChicago Consortium on Chicago School Research has demonstrated that academic performance, as measured by GPA, is strongly associated with academic behaviors, academic mindsets, and other non-cognitive skills. Because iMentor aims to prepare students for college by supporting non-cognitive skills, this is an especially useful measure for assessing iMentor's academic impact.

Chronic Absenteeism: Research indicates that students who are chronicly absent are at greater risk of dropping out (Allensworth & Easton, 2007). Additionally, for the past several years, NYC's government has focused on decreasing chronic absenteeism. In New York City, chronic absenteeism is defined as being absent for 20 or more days of schools (at least 11 percent of school days). While this is not explicitly an "academic outcome," due to the nature of our data collection, we include it in our rigorous CITS analysis.

For this analysis, we compared 9th-grade students in iMentor schools to 9th graders who attend non-iMentor schools in the same year that iMentor implementation began. For each iMentor school, we performed a matching analysis to find two similar non-iMentor schools to serve as comparisons. Details on the matching techniques and results are in Appendix G.

Table 14 shows that iMentor did not have a statistically significant impact on students' GPA, on-track rates, or chronic absenteeism. This finding is not unexpected given that iMentor does not directly target academic outcomes in their programming.

Table 14: iMentor's Impact on Academic Outcomes and Attendance After One Year

	iMentor – Projected	iMentor – Change	Comparison – Change	Impact
On Track for Regents (%)	**61.1**	**1.4**	**0.2**	**1.2**
Standard Error		(6.0)	(4.2)	(7.4)
Academic GPA[a]	**74.7**	**-0.3**	**1.8**	**-2.1**
Standard Error		(1.6)	(1.1)	(1.9)
Chronically absent (%)	**33.5**	**-5.4**	**-0.5**	**-4.9**
Standard Error		(4.1)	(2.9)	(5.1)
Number of students		**836**	**1,700**	
Number of schools		**8**	**16**	

Source: Research Alliance calculations based on data obtained from the NYC Department of Education.

Note: Sample includes only students in the 9th grade for the first time. * Denotes statistical significance at the p<.05 level. [a] Weighted by credits.

Summary

Overall, we observed small, positive effects on the student outcomes most closely tied to iMentor's 9th-grade programming. PCs repeatedly told us that the most important outcome for 9th grade is to help students develop a strong relationship with their mentor. The 9th grade iMentor curriculum included lessons on developing that relationship, and week after week, students and mentors wrote to one another, sharing thoughts about their future and what was going on in their lives. PCs spent a good deal of time monitoring and nurturing these relationships. It is encouraging that these efforts seem to have translated into measurable improvements in students' sense of adult support.

Similarly, developing students' expectations for college going and future planning is a focus of iMentor's 9th grade year. They are directly taught as part of the College Ready curriculum and subtly reinforced throughout the year. Aligned with this programmatic focus, we saw gains in iMentor students' aspirations for college and career.

On the other hand, iMentor does not appear to have had an impact on the five non-cognitive skills we measured, nor on students' academic performance or school attendance. The non-cognitive skills may be less malleable than students' sense of adult support or their aspirations for the future. Changing these non-cognitive skills may take more than one school year of programing.

We hypothesized that iMentor's effect on academics and attendance would only occur indirectly, as a result of gains in other areas. In order to have a chance of observing effects on academics and attendance, we would need to see large effects on the outcomes most closely related to iMentor's programming. Given the lack of effects on non-cognitive outcomes, and the relatively small size of the effects we did see around relationships and aspirations, it is not surprising that iMentor didn't boost students' academic achievement or attendance.

It is important to note that this chapter reported results for the entire cohort of 9th graders who had access to the first year of iMentor in the evaluation schools. While some students who had access to the program chose not to participate, a vast majority of students who had the opportunity did participate in iMentor. In addition, as we saw in the previous chapter, some schools had greater participation rates and stronger implementation than others. Next year, when we add the second cohort of 9th graders to our study, we will explore if iMentor's effects differ by school implementation level.

CHAPTER 5: DISCUSSION

The iMentor College Ready Program is a unique, long-term intervention that seeks to improve students' college readiness and success by combining elements of school-based mentoring, whole school reform, and technology. The intensive program aspires to serve every student in a school, from 9th grade through their senior year, matching them with a mentor, supporting the development of a close relationship with that mentor (primarily via email), and providing a weekly College Ready class run by an iMentor PC.

This report described iMentor's first year of implementation in eight NYC high schools. It also provided an early look at iMentor's impact. These results should be viewed as preliminary for at least two reasons. First, we are analyzing the effects of a four-year intervention after just one year. Second, this report only analyzes data from the first cohort of 9th graders—students who had access to iMentor as it was being rolled out in the evaluation schools. Our next report will include data about a second cohort of 9th graders, which is not yet available.

Our study of iMentor's first year of implementation revealed substantial variation across the eight sites. Three schools implemented the College Ready Program with a high degree of fidelity to the program model. Four others struggled in one or two areas, but otherwise implemented the program as designed. One school, however, did not meet any of the fidelity benchmarks established by iMentor (at least in part because this school began the program later in the year than the rest of the schools). Across schools, event attendance proved to be most difficult program element to implement according to iMentor's design.

Our qualitative investigation suggests that implementation could be strengthened by better preparing iMentor staff for the realities they face in schools. For example, PCs reported that they were surprised by the amount of time and effort required to recruit students and obtain permission for them to participate in the program. PCs may benefit from more support and training in this area. Second, some PCs struggled with classroom management and clearly presenting content. iMentor is already working to help PCs improve their teaching by having experienced educators visit their classrooms and provide recommendations, based on a new iMentor teaching rubric. Lastly, there is the issue of low event attendance, which seems to be largely a logistical problem. iMentor may want to convene school staff,

parents and students to brainstorm solutions to this problem and/or adjust expectations for how often students and mentors will attend events.

Despite the challenges, a large majority of students reported that they felt close to their mentor after one year. Our analysis of non-academic outcomes shows that, after just one year, iMentor has produced small, but statistically significant improvements in students' sense of adult support and their college and career aspirations. However, the program has not yet had an effect on the five non-cognitive outcomes we measured (all of which are targeted in iMentor's College Ready curriculum) or on students' academic performance or attendance. The lack of impact on academics is not surprising given that this is the first year of implementation and that the theory of action shows a focus on non-academic skills. Any gains in academics or attendance would likely be an indirect outcome of improvements in other areas—for example, changes in Growth Mindset, Perseverance, or Self-Advocacy might give students motivation and tools to improve their performance in their classes.

Future reports will examine whether these kinds of changes do in fact occur. As our evaluation progresses, we will continue to investigate iMentor's implementation across schools, as well as its impact on students' non-academic and academic outcomes. Our next report will present preliminary findings for 10th graders and an updated 9th grade impact analysis with data from all 9th grade cohorts. By 2019, we will be able to present the effects of participating in iMentor for the full four years, including the program's impact on two central outcomes of interest: high school graduation and college enrollment.

Endnotes

[1] We use pseudonyms to protect school identities.

[2] Eligible students are those who were on a school's 9th grade roster as of October 20th. Some students who are on rosters rarely attend school. Thus, our participation rates likely underestimate the proportion of the active student body who participate in iMentor. iMentor assumes a four-year high school experience, and will adapt the program on a case-by-case basis for students who do not graduate in four years.

[3] We did not interview students, so this is the perception of student discomfort among iMentor and school staff.

[4] Quality of instruction here refers to classroom management, planning, and presentation skills. In upcoming years, iMentor will collect more systematic data about classroom instruction.

[5] This timing is intended to accommodate mentors with full-time jobs.

[6] These huddles were an informal strategy initially used by a few PCs, but became a required part of iMentor events starting in the 2013-2014 school year.

[7] When we collected data for this report, iMentor did not have a benchmark for pair support. Future reports will include pair support measures, such as the number of hours PCs spend supporting each pair and how many times PCs called/communicated with mentors.

[8] As mentioned above, this can be explained, at least in part, by the fact that Cherry Blossom began the program late in the school year.TK – use endnotes below for now.

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