MOVING DOWN THE TRACK

Changing School Practices During the Second Year of DIPLOMAS NOW



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Overview

Too many students in high-poverty, urban communities drop out of high school, and too few graduate prepared for college and careers. Three national organizations — Talent Development Secondary, City Year, and Communities In Schools — have formed Diplomas Now in an effort to transform urban secondary schools so fewer students drop out and more graduate ready for postsecondary education and work. Thanks to a validation grant from the U.S. Department of Education's 2010 Investing in Innovation (i3) competition and matching funds from private sources, teams from all three organizations are implementing the Diplomas Now data-driven, tiered intervention model in schools across the nation. The model combines a comprehensive school reform strategy aimed at transforming the academic experience of all students with early warning indicators related to attendance, behavior, and course performance. By identifying students at risk of dropping out and intervening with targeted support, Diplomas Now attempts to get failing students back on track.

MDRC and ICF International are conducting an independent, experimental evaluation of the impact and implementation of Diplomas Now. During the 2011-2012 and 2012-2013 school years, 62 secondary schools in 11 school districts agreed to participate in this study. Thirty-two of these schools were randomly assigned to implement the Diplomas Now model while the other 30 schools were assigned to a control group, continuing their existing school programs or implementing other reform strategies of the districts' or schools' choosing. This second report shares second-year implementation fidelity findings, looks at the differences in school structure and staff practice between schools implementing and not implementing the program, and presents analyses of qualitative data that delve deeper into contextual issues and the integration of the program into the schools. Findings from this report include:

- As in the first year of implementation, during the second year schools implemented a majority of program components as the model's designers intended, but still showed room for growth to meet ideal implementation.
- There are differences in organization and services between schools randomly assigned to implement the model and similar schools randomly assigned to not implement the model, suggesting that model implementation is changing schools' practices in ways that align with the goals of Diplomas Now.
- Model implementation was somewhat hindered by factors external to the program such as staff turnover and budget cuts, but Diplomas Now staff members were able to support schools despite these challenges. Program staff members were most successful when they could align the program with school goals and garner school administrator and teacher support.

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Preface

Too many young people growing up in U.S. cities are not graduating high school or are graduating unprepared for postsecondary education and the workplace. The Diplomas Now model aims to address that problem through an ambitious collaboration of three organizations — Talent Development Secondary, City Year, and Communities In Schools — offering a promising, multifaceted approach to secondary school reform and student support. The partners are implementing a complex set of reforms in middle schools and high schools in 11 of the largest school districts in the country, with the goal of keeping students from dropping out and helping more of them graduate high school prepared for college and careers. The model includes organizational, instructional, and curricular support to schools as a whole, and also aims to identify students falling off the graduation track and to intervene with additional academic and social service support.

This second report for the federal Investing in Innovation (i3) evaluation of Diplomas Now presents findings about the second year of implementation, and explores the context surrounding the implementation of the program and its integration into schools. It discusses how closely schools implementing the Diplomas Now model followed the intentions of the model's designers over the first two years, and also explores the differences in programs and services between the schools implementing the model and those not implementing it. This analysis of *service contrast* shows whether Diplomas Now is changing school structures and the services offered to students. It illustrates how schools are different from what they would have looked like without Diplomas Now. When the impact results become available, the analysis of service contrast will help reveal what parts of the Diplomas Now model are effective in creating positive change for students in the complex environments of public schools.

The next report will present results regarding the model's impact on students' attendance, behavior, and course performance, three important indicators of future school success and graduation. The more Diplomas Now changes school practices, the more likely it will be to have an impact on student success. Subsequent reports will explore longer-term outcomes, including ninth-grade completion for students who entered the study in sixth grade and high school graduation for students who entered in ninth grade.

> Gordon L. Berlin President

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This report could not have been accomplished without the efforts of a great many people. The study has benefited especially from the time, energy, and commitment put forth by the staff members in the participating school districts and schools and by the Diplomas Now staff members working within some of those schools, all of whom were vital in both supporting the data-collection efforts and providing the information detailed in this report. School administrators, teachers, and on-site Diplomas Now program staff members took time out of their busy schedules to participate in surveys. At case study schools and districts, school administrators, district leaders, teachers, on-site Diplomas Now program staff members, parents, and students took part in interviews and focus groups.

The assistance and cooperation of Diplomas Now staff members at the national level have also been invaluable to data collection and report writing. The Diplomas Now Implementation Support Team informed the implementation research design, including the survey protocols, and provided data on the fidelity of implementation. The Diplomas Now National Executive Team answered our many requests for program information and gave feedback on earlier drafts of this report.

Mike Puma provided technical assistance to the evaluation team, and ensured that the team understood and met the standards set for Investing in Innovation (i3) evaluations regarding impact and implementation research plans. Kristin Porter and Rachel Rosen at MDRC helped draft research plans and offered support and advice on analyses.

Several MDRC and ICF International staff members and consultants served as school district liaisons and supported survey data-collection efforts: Eleanor Leahy, Rachel Pedraza, Stephanie Safran, Kelly Walton, Nicole Dutch, Lisa Luo, Allison Alexander, and Jackie Rhodes. Members of this group, along with Rob Ivry and Jacklyn Willard at MDRC, worked with Diplomas Now staff members to recruit districts and schools to participate in this project.

At ICF International, Caitlin Murphy helped lead the qualitative data-collection activities with support from Katie Campbell, Sarah Johnson, Kristen Peterson, and consultant Stephanie Safran. Elyse Goldenberg and Lauren Durkee assisted with the coding and analysis of the qualitative data.

At MDRC, Leslyn Hall supported survey design, and Seth Muzzy, Eleanor Leahy, and Nicole Morris helped manage communications between MDRC and ICF International while ICF International was administering the surveys. Nicole Clabaugh and Andrea Shane provided programming and analysis support, and Nicole and Larissa Saco coordinated the stages of report writing and production. Rekha Balu, Gordon Berlin, Oscar Cerna, Fred Doolittle, Joshua Malbin, and Marie-Andrée Somers carefully reviewed earlier drafts of the report and offered helpful critiques throughout the writing process. Anne Poliakoff at ICF reviewed, provided feedback on, and edited early drafts of Chapters 2, 3, and 4. Joshua Malbin edited the full report, and Stephanie Cowell prepared the report for publication.

Executive Summary

Diplomas Now is a partnership of three national organizations — Talent Development Secondary, City Year, and Communities In Schools — to transform urban secondary schools so fewer students drop out and more graduate ready for postsecondary education and work. The Diplomas Now model is a comprehensive approach to whole-school reform that includes structural changes, instructional materials and curricula, teacher and administrator coaching and support, and an early warning system that identifies and targets students falling off the graduation track. The model brings additional people into the school to support model implementation and provide additional assistance for students. Acting as a representative for the partnership, Johns Hopkins University, home to Talent Development Secondary, was awarded a federal Investing in Innovation (i3) validation grant in 2010 to support the expansion of Diplomas Now from a few schools to more than 30 across more than 10 school districts. The grant funds also support a rigorous experimental evaluation of the Diplomas Now model, led by MDRC in partnership with ICF International, that explores Diplomas Now's implementation and impact.

This report focuses on the second year of Diplomas Now model implementation. It presents several key findings:

- As in the first year of implementation, during the second year schools implemented a majority of program components with fidelity to the model, but still had room for growth to meet ideal implementation. On average, Diplomas Now schools (DN schools) were most successful in implementing those program components that involved adding new services and technology, provided directly by Diplomas Now staff members. DN schools have been less successful thus far in implementing those program components that require schools or districts to modify their curricula or to institute or expand their instructional coaching for teachers.
- Diplomas Now has resulted in differences between the programs of DN schools and those of similar schools not assigned to implement the model (non-DN schools), suggesting that model implementation is changing school practices in ways that align with the goals of Diplomas Now. These differences grew from Year 1 to Year 2, in part because non-DN schools reduced their services. This suggests Diplomas Now stabilized schools that might otherwise have lost services.
- Although model implementation was somewhat hindered by factors external to the program (such as principal turnover and budget cuts), Diplomas Now staff members were also able to support schools through these types of tran-

sitions. School and program staff members reported that the Diplomas Now school-based teams had often been successful by the second year in becoming part of the fabric of the school. Program staff members suggested they were most successful when they could align the program with school goals and garner school administrator and teacher support.

Background

Although the national high school graduation rate has increased over the past decade, one in five students still do not complete high school in four years.¹ Among low-income students, almost 30 percent fail to graduate on time.² Compared with high school graduates, dropouts are more likely to live in poverty, earn less money, suffer from poor health, be incarcerated, or be dependent on social services.³ Students who face the most serious barriers to earning their diplomas are in the greatest need of intensive academic, social, and other interventions to make it through high school, and most dropouts are concentrated in low-income, urban high schools.

Research has shown that it is possible to predict a student's likelihood of dropping out of high school using indicators of poor attendance, poor behavior, and course failure measured as early as middle school.⁴ These findings suggest that programs may have greater success getting more students to graduation if they intervene with students who are off track as early as middle school. Moreover, ninth grade is a critical year, and researchers have shown that improving student course performance in the ninth grade can lead to substantial improvements in graduation rates.⁵

Among those students who do graduate high school, many do not graduate ready for college and need to take remedial (developmental education) courses: over 30 percent of college undergraduates and over 40 percent of community college students enroll in such cours-

¹Richard J. Murnane, "U.S. High School Graduation Rates: Patterns and Explanations," *Journal of Economic Literature* 51, 2 (2013): 370-422.

²Robert Balfanz, John M. Bridgeland, Joanna Hornig Fox, Jennifer L. DePaoli, Erin S. Ingram, and Mary Maushard, *Building a Grad Nation: Progress and Challenge in Ending the High School Dropout Epidemic* (Washington, DC: Civic Enterprises, 2014).

³Kristin Anderson Moore, *Making the Grades: Assessing the Evidence for Integrated Student Supports* (Bethesda, MD: Child Trends, 2014).

⁴Robert Balfanz, Liz Herzog, and Douglas J. Mac Iver, "Preventing Student Disengagement and Keeping Students on the Graduation Path in Urban Middle-Grades Schools: Early Identification and Effective Interventions," *Educational Psychologist* 42, 4 (2007): 223-235.
⁵Melissa Roderick, Thomas Kelley-Kemple, David W. Johnson, and Nicole O. Beechum, *Preventable*

³Melissa Roderick, Thomas Kelley-Kemple, David W. Johnson, and Nicole O. Beechum, *Preventable Failure: Improvements in Long-Term Outcomes When High Schools Focused on the Ninth Grade Year* (Chicago: University of Chicago, CCSR, 2014).

es.⁶ Beyond supporting struggling students to graduation, school improvement efforts need to ensure that all students participate and succeed in rigorous curricula that prepare them for college and careers.

The Diplomas Now Partnership

The Diplomas Now partnership works with schools to ensure that students are getting the support they need to (1) get to school and to class, (2) behave in ways that facilitate learning, and (3) keep up with the lessons being taught. In other words, the pathway to student success in DN schools is linked to <u>attendance</u>, <u>behavior</u>, and <u>course</u> performance: the "ABCs" that predict whether students graduate or drop out. Diplomas Now is a set of school reform interventions designed to be implemented in underfunded urban secondary schools with many students who are not performing well academically, in communities struggling with poverty, where many students drop out. The Diplomas Now partners collaborate to help schools provide the right services to the right students on time and at the right level of intensity. They do so by offering varying levels of support for students with different needs: whole-school restructuring and instructional reform to strengthen the educational experience of all students, individual support for students showing early signs of falling off track, and case management for students in need of deeper interventions. To determine which students need extra support, the model relies on regular monitoring of students' attendance, behavior, and course performance. See Box ES.1 for more on what each of the Diplomas Now partners contributes to the overall model.

The Diplomas Now Model

The elements of the model are classified as "inputs" that the Diplomas Now partners implement in schools. Some of these inputs represent substantial interventions on their own, such as implementing a rigorous curriculum, or setting up a tiered intervention system to identify at-risk students and tailor interventions to their specific needs. Diplomas Now integrates these component interventions into a cohesive model focused on ensuring that all students have a path to graduation. The inputs are implemented in collaboration with school staff members and align with the Four Pillars of Diplomas Now, a characterization of the model used by Diplomas Now staff members to help them organize their work.

⁶U.S. Department of Education, National Center for Education Statistics, 2011-12 National Postsecondary Study Aid Study (NPAS: 12): Profile of Undergraduate Students: 2011-12, NCES 2015-167 (Washington, DC: U.S. Department of Education, National Center for Education Statistics, 2014).

Box ES.1

The Diplomas Now Partners and Their Roles

Talent Development Secondary

Talent Development Secondary, based at Johns Hopkins University, provides organizational, instructional, curricular, and data support to schools intended to help all students achieve at high levels. This school-wide effort includes reorganizing students and teachers into small learning communities, providing professional development and coaching to strengthen teacher pedagogy, supplying college- and career-preparatory course content, and creating an early warning indicator data system to identify students falling off track. City Year and Communities In Schools play leading roles in providing additional services for these students.

City Year

City Year is an AmeriCorps program through which young adults, ages 18 to 24, participate in a year of full-time national service. These "near peers" (given their proximity in age to the students) serve as tutors, mentors, and role models, personalizing the school experience of the students. In addition, the AmeriCorps members provide after-school programs and help teachers by working with students during class time.

Communities In Schools

Through a school-based site coordinator, Communities In Schools, a national dropoutprevention organization, draws on school and community resources to move the students at highest risk of dropping out back on track to graduation. The site coordinator assesses the needs of a student, develops an individual case plan for that student that lays out a strategy to address those needs, and connects the student to services aligned with the case plan.

Pillar I: Teacher Teams and Small Learning Communities

Diplomas Now collaborates with school leaders to organize schools such that small groups of teachers work with the same population of students. These small learning communities create opportunities for personalization where teams of teachers know the same students and can work together to best teach and support them. Students also share the same classes, and become known to one another. These teacher teams and small learning communities function best when there are opportunities for teachers to collaborate within the daily schedule and when they have classes long enough to cover material in depth and keep up the pace of instruction.

Pillar II: Curriculum and Instruction with Professional Development

This pillar is focused on teaching and learning, and on giving teachers the training and resources they need to deliver strong lessons. Through professional development and instructional coaching, teachers have an opportunity to sharpen their pedagogy. Having curricular materials aligned with college- and career-ready standards and accelerated remediation courses for struggling students helps ensure all students can meet their potential.

Pillar III: Tiered Student Supports

Providing more intensive support for students with greater needs is the core idea of this pillar. The tiered intervention model involves implementing an early warning system that draws on data on the ABC indicators for individual students. It relies on staff members having regular times to meet to review those data and plan interventions for students who are off track.

Pillar IV: Can-Do Culture and Climate

School reform is difficult, and school staff members often have much to do when they are asked to effect change. Diplomas Now brings at least a dozen staff members to a school to help coordinate school transformation, introduce new practices and structures, provide training and support, provide additional services to students, and engage with families and community organizations. All of these staff members are trained by Diplomas Now before and throughout the school year. Providing and organizing resources to assist the school's staff helps foster a culture and climate where it feels possible to improve the school and support students better.

Implementing the pillars is hypothesized to affect a series of school outcomes (such as the school's climate and communication among stakeholders) and student outcomes (like study habits and engagement with school), leading to improvements in students' attendance, behavior, and course performance, which should in turn lead to increased high school graduation rates.

The National i3 Evaluation of Diplomas Now

In total, 62 schools (33 middle schools and 29 high schools) from 11 large urban school districts across the country were recruited to participate in the study starting in either the 2011-2012 or 2012-2013 school year.⁷ By design, Diplomas Now works in high-needs schools. The schools in the study come from high-poverty urban areas where students struggle academically and drop

⁷Five of the school districts are among the 20 largest in the country, and all but 1 are among the 100 largest. Chris Plotts and Jennifer Sable, *Characteristics of the 100 Largest Public Elementary and Secondary School Districts in the United States: 2007-08*, NCES 2010-349 (Washington, DC: U.S. Department of Education, National Center for Education Statistics, 2010).

out at high rates. The participating schools, all eligible for Title I funds,⁸ serve large populations of low-income and minority students (80 percent eligible for free or reduced-price lunches; 83 percent black and Hispanic). Furthermore, the high schools participating in the study have weak promoting power (56 percent), suggesting that they struggle to move students from ninth through twelfth grade on time.⁹ Thirty-two of the participating secondary schools were randomly assigned to implement the Diplomas Now model (DN schools) and 30 were assigned to continue with "business as usual" (non-DN schools), either maintaining their existing practices and structures or pursuing other types of school reform. This random assignment design, often referred to as the "gold standard" in evaluation, means that any differences between the DN and non-DN schools that emerge after random assignment can be attributed to the program; in short, Diplomas Now *caused* the observed differences.

The study's experimental design makes it possible for the evaluation to assess the *early impact* of Diplomas Now on students' ABC outcomes during the first two years of the model's implementation. For students who enter Diplomas Now in sixth or ninth grade, what difference does Diplomas Now make for three primary student outcomes: attendance rates (proportion of enrolled days in attendance), suspensions (in-school or out-of-school) and expulsions, and successful course completion? Essentially, does the implementation of Diplomas Now keep more students on track to high school graduation by the end of their middle school or high school transition years? The evaluation will also provide information about the *longer-term impact* of Diplomas Now: after four years, what is the impact of Diplomas Now on high school graduation rates and on the ninth-grade success of students from Diplomas Now middle schools?¹⁰

The first two reports from the evaluation focus on the implementation of the Diplomas Now model, documenting how this complex, multicomponent reform intended to transform secondary schools is implemented by multiple partners. The implementation research explores what it takes to implement the model, what factors facilitate or hinder implementation, and the nature of the collaboration among multiple actors from the Diplomas Now organizations and the schools. The first report from the evaluation, released in 2014, focused on program start-up and first-year implementation in the DN schools. This second report continues the implementation. It also examines school structure and staff practice at DN and non-DN schools to see whether Diplo-

⁸Title I funds from the U.S. Department of Education go to schools with high numbers or high percentages of students from low-income families.

⁹William Corrin, Susan Sepanik, Aracelis Gray, Felix Fernandez, Ashley Briggs, and Kathleen K. Wang, *Laying Tracks to Graduation: The First Year of Implementing Diplomas Now* (New York: MDRC, 2014). "Promoting power" is calculated as the ratio of twelfth-graders to ninth-graders three years earlier.

¹⁰While this report was being written, Johns Hopkins University was granted funding from the Office of Innovation and Improvement of the U.S. Department of Education to support an extension of the evaluation, which will make it possible to analyze the impact of Diplomas Now on student outcomes after four years.

mas Now is creating differences (that is, a "service contrast") between the two groups of schools. Finally, it presents analyses of qualitative data that explore the context in which implementation was occurring, the integration of the model at schools, the importance of staff stability, and program sustainability.

Implementation of Diplomas Now in Year 2

This report assesses the implementation of the Diplomas Now model during the second year and compares the findings from the second year with those from the first. It first looks at the *fidelity* with which the Diplomas Now model was implemented in the second year by the 32 schools randomly assigned to do so. That is, did the model as implemented match the design? How much of the Diplomas Now school reform effort was put into place in these middle and high schools? Furthermore, it explores *service contrast*, or the extent to which the Diplomas Now intervention created differences between the practices of DN and non-DN schools.

Fidelity of Implementation

To create a measure of fidelity of implementation each of the Diplomas Now partner organizations detailed the components it felt were needed for full implementation of the model. Since this model as a whole has not yet been fully tested, it is not known which components are essential. Therefore, the fidelity of implementation score represents the model developers' vision of ideal implementation. Given the complexity of the model, 111 components were identified. Each component is measured on a 0-1 scale with 0 equaling no or low implementation and 1 equaling high fidelity to the model. The overall average fidelity score during the second year for all of the components across all of the DN schools is 0.62, suggesting that on average schools were implementing a majority of the components with high fidelity to the model, but that they still had room for growth to reach ideal implementation. This second-year implementation score is similar to the first-year score discussed in a prior evaluation report, suggesting stability in program implementation even as some program components expanded into new grade levels during the second year.

Several primary findings regarding fidelity emerged from the implementation analysis.

• DN schools were most successful in obtaining, retaining, and training the auxiliary staff members needed to implement the model effectively (Pillar IV); using data to identify at-risk students; and collaborating to plan and provide individual interventions for those students (Pillar III).

Almost all schools had all of the necessary staff members in place to implement the model during Year 2 and program staff members from each of the partner organizations reported they had good access to each other. Implementation fidelity grew from Year 1 to Year 2 in

staffing and providing training to the auxiliary Diplomas Now staff, suggesting that Diplomas Now was better able in Year 2 to implement the components it had the most control over. Also, some staff members stayed from the first to the second year, making it easier to hire and support new staff members and ensuring that staff members were trained earlier and better.

A large majority of schools were also successful during both years in establishing a data system to track students' attendance, behavior, and course performance and ensure collaboration among staff members to plan and provide interventions for students falling off track. City Year AmeriCorps members were successful in providing extra and complementary services to students across all schools, but some schools were less successful in ensuring enough City Year AmeriCorps members were available to meet the needs of all the students.

Schools were also moderately successful in establishing small learning communities of students that share the same classes and teachers (Pillar I), but many schools struggled to hold frequent meetings of these communities' interdisciplinary teams of teachers.

 DN schools were least successful at offering the peer coaching to teachers needed to strengthen practice, implementing curricular additions to ensure college and career readiness for all students (Pillar II), and involving parents and community members in school activities and decisions (Pillar IV).

In both the first and second years of implementation, it was hard for schools to meet implementation goals in some areas where it was necessary to change school policy or structure or to get the school's staff on board. Most schools struggled to achieve consistent coaching for math and English/language arts teachers at the level desired by Diplomas Now, and most schools also did not provide the prescribed academic foundations and accelerated remediation courses for struggling students. Finally, on average schools were not meeting the ideal levels of implementation for involving parents and community members.

Service Contrast

DN schools were more likely to implement the types of activities found under several of the Diplomas Now pillars than non-DN schools, suggesting that Diplomas Now is making DN schools different from non-DN schools. Unlike the fidelity of implementation score, there was quite a bit of growth from Year 1 to Year 2 in service contrast. Key findings include:

• There was service contrast between DN and non-DN schools for the pillars that also showed strong and moderate implementation, including Pillar I (Teacher Teams and Small Learning Communities), Pillar III (Tiered Student Supports), and the part of Pillar IV (Can-Do Culture and Climate) focused on hiring and retaining the staff needed to implement the model. Teachers at DN schools were more likely than teachers in non-DN schools to report teaching in extended class periods and collaborating with interdisciplinary teams that shared the same students; using data to identify at-risk students and meeting with other school staff members to plan interventions for them; and seeing students receive academic, behavioral, or emotional support.

• Even though the implementation of teacher professional development and coaching did not fully meet the model's goals, the service-contrast findings suggest that teachers at DN schools received more coaching than teachers at non-DN schools. However, teachers at DN schools reported similar levels as teachers at non-DN schools in the use of college readiness curricula.

Math and English/language arts teachers at DN schools reported receiving more coaching than teachers at non-DN schools. Both groups of teachers reported similar, relatively high levels of adoption of academic reform curricula, incorporation of transitional support classes for struggling students, and use of student-centered and college and career readiness-focused strategies in the classroom, suggesting that many schools may have been implementing curricular reforms similar to those included in the Diplomas Now model.

• The contrast between DN and non-DN schools increased from Year 1 to Year 2 in several areas, including collaboration of teachers within interdisciplinary teams (Pillar I), professional development of teachers (Pillar II), and the use of data to identify struggling students (Pillar III).

From Year 1 to Year 2 practices and structures aligned with the Diplomas Now model were maintained or slightly improved in DN schools, while similar structures and practices were less evident in non-DN schools in Year 1 and became even less evident in Year 2, suggesting that Diplomas Now helped stabilize resources and programs at the DN schools.

Continued Challenges and Emerging Successes in Year 2

Qualitative data were collected in nine DN schools to examine how schools' contexts are affecting implementation, to explore the successes and struggles of implementing this complex program, and to investigate the sustainability of the Diplomas Now model.

Factors External to the Diplomas Now Program

Various factors external to the program (such as school closures, principal turnover, and budget cuts) affected the implementation of Diplomas Now. Since DN and non-DN schools were both likely to be affected by these issues, at least in some cases Diplomas Now was able to offer schools some consistency and additional support to deal with them.

Embedding Diplomas Now in Schools

It emerged from the qualitative data that program staff members can foster stronger Diplomas Now implementation at a school in two main ways: (1) aligning program goals with school priorities and (2) securing administrator and teacher support for the Diplomas Now model. Case study data from Year 2 implementation indicated that Diplomas Now staff members better understood how to do those two things, and as a result were able to make Diplomas Now more "part of the school."

Challenges Caused by Diplomas Now Staff Turnover

Despite gains from Year 1 to Year 2 in hiring and training program staff members, in some schools program staff turnover did cause setbacks in implementation and increased the burdens on the remaining staff members. Maintaining at least some consistency in Diplomas Now leadership preserved useful institutional knowledge about the successes and challenges of the first year of Diplomas Now implementation, and the collaborative relationships among partner organizations allowed for some flexibility to support consistent implementation.

Sustainability of the Diplomas Now Model at the Schools

The Diplomas Now plan for sustainability includes promoting local investment in City Year and Communities In Schools to maintain direct services to students in the long term while building schools' ability to take charge of the school-wide reforms. Program sustainability was not yet a primary focus for school or program staff members, but some schools have made progress toward sustaining elements of the model. Sustainability efforts include: maintaining data systems and meetings that identify struggling students and interventions to support them, training school staff members to analyze data and lead these meetings, and promoting elements such as small learning communities and shared planning time to the school as a whole. Such efforts make features of the Diplomas Now model part of regular practice and school culture, and over time reduce the need for full support from Diplomas Now teams.

Next Steps

The implementation story told in this report sets the stage for the next report, which will provide evidence about the impacts of the Diplomas Now model. It will explore the impacts on school culture and climate, on student attitudes and behaviors, and on the key student outcomes of attendance, behavior, and course performance that are the precursors to high school graduation and college and career readiness.

Chapter 1

Introduction

Background

Although the national high school graduation rate has increased over the past decade, one in five students still do not complete high school in four years, and almost 30 percent of low income students fail to graduate on time.¹ Compared with high school graduates, dropouts are more likely to live in poverty, earn less money, suffer from poor health, be incarcerated, or be dependent on social services.² Students who face the most serious barriers to earning their diplomas are in the greatest need of intensive academic, social, and other interventions to make it through high school, and most dropouts are concentrated in low-income, urban high schools.

Research has shown that it is possible to predict a student's likelihood of dropping out of high school using indicators of poor attendance, poor behavior, and course failure measured as early as middle school.³ These findings suggest that programs may have greater success getting more students to graduation if they intervene with students who are off track as early as middle school. Moreover, ninth grade is a critical year, and researchers have shown that improving student course performance in the ninth grade can lead to substantial improvements in graduation rates.⁴

Among those students who do graduate high school, many do not graduate ready for college and need to take remedial (developmental education) courses: over 30 percent of college undergraduates and over 40 percent of community college students enroll in such courses.⁵ Beyond supporting struggling students to graduation, school improvement efforts need to ensure that all students participate and succeed in rigorous curricula that prepare them for college and careers.

The Diplomas Now Partnership

Three national organizations — Talent Development Secondary, City Year, and Communities In Schools — have partnered to take on this combined task of school improvement and dropout prevention, and have created *Diplomas Now*. The Diplomas Now whole-school reform model

¹Murnane (2013); Balfanz et al. (2014).

²Moore (2014).

³Balfanz, Herzog, and MacIver (2007).

⁴Roderick, Kelley-Kemple, Johnson, and Beechum (2014).

⁵U.S. Department of Education, National Center for Education Statistics (2014).

seeks to transform secondary schools in high-poverty urban communities with large populations of academically low-performing students so that fewer students drop out and more students graduate high school prepared for college and careers. The Diplomas Now model is designed to support secondary education in some of the most underfunded communities in the country where poverty, lack of academic success, and high dropout rates are pervasive problems. The Diplomas Now model is a comprehensive approach that attempts to alleviate these stresses on schools through structural reform, instructional materials and curricula, teacher and administrator coaching and support, and an early warning system that identifies and targets students falling off the graduation track. The model brings additional people into the school to both support model implementation and directly provide additional assistance for students.

The Diplomas Now partnership works with these schools to ensure that students are getting the support they need to (1) get to school and to class, (2) behave in ways that facilitate learning, and (3) keep up with the lessons being taught. In other words, the pathway to student success in Diplomas Now schools (DN schools) is linked to <u>attendance</u>, <u>behavior</u>, and <u>course</u> performance, the "ABCs" that predict whether students graduate or drop out. The Diplomas Now partners collaborate to help schools provide the right services to the right students on time and at the right level of intensity by offering varying levels of support for students with different needs: whole-school support for all students, additional services for students showing early signs of falling off track, and student case management for students in need of deeper interventions. To determine which students need extra support, the approach relies on regular monitoring of Early Warning Indicator data, which include measures of students' attendance, behavior, and course performance.

Talent Development Secondary focuses on whole-school organizational, instructional, and structural support and on facilitating the school's use of an Early Warning Indicator (and intervention tracking) data system in regular interdisciplinary teacher team meetings. A school-based school transformation facilitator and English/language arts and math instructional coaches help school administrators and teachers implement model features related to school organization, classroom instruction, and the responsive use of data. City Year offers additional student support, with a program manager overseeing a team of City Year AmeriCorps members whose responsibilities include tutoring, mentoring, and classroom aid. Student case management is the responsibility of a Communities In Schools site coordinator, who manages a caseload of higher-risk, off-track students.⁶ (See Box 1.1 for a more detailed description of the Diplomas Now partner organizations and their respective roles.)

⁶To the extent that the activities of each partner organization in Diplomas Now are similar to each of their independent models as implemented in other schools, the findings in this report specific to each organization may also inform their individual work.

Box 1.1

The Diplomas Now Partners and Their Roles

Talent Development Secondary

Talent Development Secondary, based at Johns Hopkins University, provides organizational, instructional, curricular, and data support to schools intended to help all students achieve at high levels and prevent them from falling off track. This school-wide effort includes reorganizing students and teachers into small learning communities, providing professional development and coaching to strengthen teacher pedagogy, and supplying college and career preparatory course content. Talent Development Secondary employs a school transformation facilitator who works with school leaders to develop a systematic school transformation plan, creates and manages an Early Warning Indicator data tool, organizes frequent multidisciplinary teacher-team data-response meetings that use the tool to guide a multitiered student support process, and works closely with local or regional instructional facilitators to oversee instructional and curricular reforms. School-based instructional coaches in English/language arts and math support teachers' delivery of course content. For many students, whole-school organizational and instructional reforms, referred to as Tier I interventions, are enough to keep them on track. However, for some students, the Early Warning Indicator data indicate that additional and more intensive services are necessary. City Year and Communities In Schools play leading roles in providing these additional services.

City Year

City Year is an AmeriCorps program through which young adults ages 18 to 24 participate in a year of national service. A team of 10 or more **City Year AmeriCorps members** is assigned to a school, increasing the number of adults in a building paying attention to students and working with them both in- and outside of classrooms. The team is led by a City Year **program manager** and **team leaders** (typically second-year AmeriCorps members), and its members are trained to provide a variety of academic and behavioral interventions — referred to as Tier II support — intended to help students stay on track to graduate. These "near peers" (given their proximity in age to the students) serve as tutors, mentors, and role models, personalizing the school experience of the students. In addition, the AmeriCorps members provide after-school programs and help teachers by working with students during class time.

Communities In Schools

Through a school-based **site coordinator**, Communities In Schools, a national dropoutprevention organization, draws on school and community resources to organize services referred to as Tier III support — intended to move the students at the highest risk of dropping out back on track to graduation. The site coordinator assesses the needs of a student, develops an individual case plan to address those needs, and connects the student to services aligned with the case plan. Examples include professional counseling on anger management for a student with behavioral issues or long-term tutoring with a subject-area expert for a student far behind in class. A site coordinator will also provide direct services — for example, leading student discussion groups on topics like conflict resolution or the transition to adulthood.

The Diplomas Now Model

The Diplomas Now model is a multidimensional system of organizational and instructional reforms and targeted student support services. The elements of the model are classified as nine "inputs," some of which represent substantial interventions on their own, such as implementing a rigorous curriculum or setting up a tiered intervention system to identify at-risk students and tailor interventions to their specific needs. Diplomas Now integrates these component interventions into a cohesive model focused on ensuring that all students have a path to graduation. Eight of these inputs are implemented in collaboration with school staff members and align with the Four Pillars of Diplomas Now, a characterization of the model used by Diplomas Now staff members to help them organize their work. The Four Pillars and their associated inputs are presented in Figure 1.1. The ninth input consists of professional development for the staff of the Diplomas Now organizations, intended to give these Diplomas Now staff members the knowledge and skills they need to implement the Four Pillars.

Pillar I: Teacher Teams and Small Learning Communities

This pillar is focused on school structure and organization. Diplomas Now collaborates with school leaders to organize schools such that small groups of teachers work with the same population of students. These small learning communities create opportunities for personalization where teams of teachers know the same students and can work together to best teach and support them. Students also share the same classes, and become known to one another. These teacher teams and small learning communities function best when there are opportunities for teachers to collaborate within the daily schedule and when they have classes long enough to cover material in depth and keep up the pace of instruction.

Pillar II: Curriculum and Instruction with Professional Development

This pillar is focused on teaching and learning, and on giving teachers the training and resources they need to deliver strong lessons. Through professional development activities and instructional coaching, teachers have an opportunity to sharpen their pedagogy. Having curricular materials aligned with college- and career-ready standards means that these teachers have useful content to deliver to students. This pillar also includes professional development and curricular materials for accelerated remediation courses for struggling students.

Pillar III: Tiered Student Supports

Providing more intensive support for students with greater needs is the core idea of this pillar. The tiered intervention model involves implementing an early warning system that draws on data on the ABC indicators for individual students. It relies on staff members who work with a group of students in common having regular times to meet to review those data and to plan

Diplomas Now Figure 1.1 Diplomas Now Logic Model

OUTCOMES

INPUTS



interventions for students who are off track or at risk of going off track. In the early years of implementation, the Talent Development school transformation facilitator helps organize the Early Warning Indicator data, introduces the idea of a tiered system of responses to student needs, and facilitates the meetings. Once necessary interventions have been identified for a student, City Year and Communities In Schools staff members at the school help provide and manage that extra support. Diplomas Now staff members and their school staff partners also pay attention to trends in the data that might suggest that a school needs to make classroom, gradelevel, or school-wide improvements to address issues related to student attendance, behavior, and course performance.

Pillar IV: Can-Do Culture and Climate

School reform is difficult, and school staff members often have too much to do when they are asked to effect change. This pillar is about providing a school's staff with additional resources to make change feel possible. Diplomas Now brings over a dozen staff members to a school to help coordinate school transformation, introduce new practices and structures, provide training and support to school staff members, provide additional services to students, and engage families and community organizations. All of these staff members are trained by Diplomas Now before and throughout the school year. Providing and organizing resources to assist the school's staff helps foster a culture and climate where it feels possible to improve the school and support students better.

Program Staff Training and Development

One model input, Program Staff Training and Development, involves providing the skills and knowledge to Diplomas Now staff members that they need to implement the other eight model inputs under the Four Pillars. This includes training in the summer and during the school year for school-level Talent Development Secondary, City Year, and Communities In Schools staff members. To ensure successful implementation at each school, each of the Diplomas Now partner organizations has a system of support services for school-based staff members that includes locally based and national program experts with strong relationships to school districts.⁷

⁷Additional information about Diplomas Now can be found on the Internet at http://diplomasnow.org. The Diplomas Now website includes information about the partner organizations and the model, as well as contact information for the partnership. A more detailed discussion of the model can also be found in the prior evaluation report, along with discussion of the national and local organizational structure of Diplomas Now (Corrin et al., 2014a).

Phases of Model Implementation

Many of the Diplomas Now model inputs are phased in by grade level over a couple of years. During the first year of implementation, certain Diplomas Now services were rolled out in the sixth grade in middle schools and the ninth grade in high schools. For example, the services in Pillar III (Tiered Student Supports) to identify at-risk students and offer them specialized assistance were concentrated in the sixth and ninth grades during the first year in most DN schools. In the second year of implementation, these services followed the students receiving them into the seventh and tenth grades, but were also offered to the incoming cohort of sixth-and ninth-grade students.

The program is basically identical for sixth- and seventh-grade students in the middle schools. There can be some programmatic differences between the ninth and tenth grades in the high schools. Ninth grade is a particularly tough year for many students as they adjust to a new school and new expectations. At the same time, success during this transition year can lay an important foundation for students' ability to graduate. For these reasons, the high school portion of the Diplomas Now model is at its most intensive during the ninth grade, and services are slowly reduced as the students move into upper grades. This plays out differently in different schools, but only ninth-graders participate in a student support curriculum (known as Freshman Seminar) and City Year AmeriCorps members may provide services to a smaller number of tenth-graders or offer support in fewer subjects during the tenth grade.

In some cases, limitations in program funding may have led to differences between grades at both middle schools and high schools. During the start-up year, implementation costs totaled approximately \$491,000 per school. In the second year, the average cost per school was also approximately \$491,000, but as some start-up costs diminished the program was also expanding to include the seventh and tenth grades.⁸ In schools where funding was limited during Year 2, the Diplomas Now partners focused resources on the transition years (sixth and ninth grades), and followed the seventh- and tenth-grade students to the extent possible using any resources still available.

⁸Talent Development Secondary's costs were \$246,400, which covered curricular materials, the school transformation facilitator placed at the school, and technical assistance from mathematics and English/language arts instructional facilitators and from a school and student support services facilitator (who worked across all implementing schools in a district). City Year's costs after supplements from AmeriCorps and private funding were about \$145,700 for the City Year team of near peers and an on-site program manager. Communities In Schools' costs averaged \$99,000 for the Communities In Schools site coordinator, service provision, and infrastructure support. School-level instructional coaches were often an in-kind contribution from the school districts. In the few cases where they were not, those costs were included in Talent Development Secondary's costs (and are reflected in the Talent Development Secondary average cost figure above).

Hypothesized Outcomes

Implementation of the nine inputs (in the Four Pillars) is hypothesized to affect a series of outcomes (see Figure 1.1). Initially, model implementation is supposed to lead to early-stage changes in school outcomes such as the quality of school climate and communications among stakeholders, and in student outcomes like study habits and attitudes about and engagement with school. These changes, in turn, are expected to lead to impacts on intermediate outcomes — the ABC indicators of attendance, behavior, and course performance. Positive impacts on ABC outcomes should then lead to increased high school graduation rates.

The National i3 Evaluation of Diplomas Now

Johns Hopkins University, home to Talent Development, was awarded a federal Investing in Innovation (i3) validation grant in 2010 to support the expansion and evaluation of Diplomas Now. The five-year i3 validation grant supports the expansion of Diplomas Now from a few schools to more than 30 schools across more than 10 school districts. The grant funds also support a rigorous experimental evaluation of the Diplomas Now model, the results of which, if positive, will "validate" Diplomas Now as an effective secondary school reform model. The evaluation, being conducted by two evaluation research firms, MDRC and ICF International, explores not only the impact of Diplomas Now but also its implementation, providing lessons to the field about what it takes to implement the model and how it rolls out in different school and district contexts.

The evaluation has a school-level random assignment design. Schools were randomly assigned to implement Diplomas Now (DN schools) or to continue with business as usual (non-DN schools), either continuing existing practices and structures within their schools or pursuing other types of school reform. This random assignment design, often referred to as the "gold standard" in evaluation design, creates circumstances under which any differences between the two groups of schools (DN and non-DN) that emerge after random assignment can be attributed to the program (Diplomas Now): Diplomas Now *caused* the observed differences.

As noted earlier, the Diplomas Now model is designed to bring resources and support to urban communities struggling with high levels of poverty, low student academic performance, and a prevalence of high school dropout. Sixty-two schools (33 middle schools and 29 high schools) from 11 large urban school districts across the country were recruited to participate in the study starting in either the 2011-2012 or 2012-2013 school year. Five of the districts are among the 20 largest school districts in the country and 10 are among the 100 largest, measured

by numbers of students served.⁹ The participating schools, all eligible for Title I funds,¹⁰ serve large populations of low-income and minority students (80 percent eligible for free or reducedprice lunches; 83 percent black and Hispanic). Furthermore, the high schools participating in the study also have weak promoting power (56 percent), suggesting that they struggle to move students from ninth through twelfth grade on time.¹¹ Essentially, the schools in the study sample represent some of the most challenged urban secondary schools in the country, all operating in large, underfunded school districts.

Random assignment resulted in 32 DN schools and 30 non-DN schools.¹² Many of the measurable characteristics of the two groups of schools were compared: their sizes, staff sizes, and student populations, as well as the types of programs they had available before the start of the evaluation. These comparisons indicated that the two groups of schools were similar to each other, suggesting that the random assignment of schools was successful and the non-DN schools provide a convincing representation of what would have happened in the DN schools had they not implemented the intervention.¹³

One focus of the evaluation is the implementation of the Diplomas Now model. The implementation research describes this complex reform, explores what it takes for multiple partners to implement the model, and assesses the fidelity with which the model is implemented (that is, how close the program elements as adopted by schools came to the designers' intent). In addition, this research looks at factors that facilitate or hamper implementation, the nature of the collaboration among multiple actors from the Diplomas Now organizations and the implementing schools, and the degree to which early implementation sets up the model for longer-term sustainability. This line of research also investigates whether DN schools change in ways that make them different from non-DN schools.

As discussed earlier, the Diplomas Now model seeks to address the needs of students who exhibit indicators of falling off track (poor attendance, negative school behaviors, and course failure), particularly during transition years when students are most vulnerable to getting off track: sixth grade in middle schools and ninth grade in high schools. In the longer term, the goal of the Diplomas Now model is to prepare middle school students to have a successful

⁹Plotts and Sable (2010) report various statistics about the 100 largest school districts in the United States. ¹⁰Title I funds from the U.S. Department of Education go to schools with high numbers or high percent-

ages of students from low-income families.

¹¹Corrin et al. (2014a). "Promoting power" is calculated as the ratio of twelfth-grade students to ninthgrade students three years earlier (for example, the ratio of twelfth-graders in 2010-2011 to ninth-graders in 2007-2008).

¹²One school closed after the first year of implementation and all data from that school are missing in Year 2.

¹³The first report from this evaluation includes detailed information about the comparison of "baseline" characteristics of the DN and non-DN schools (Corrin et al., 2014a).

transition into high school and to increase the number of high school students who graduate. Therefore, the evaluation also investigates the impact of Diplomas Now on student outcomes. For students who enter Diplomas Now schools in sixth and ninth grade, what is the impact of Diplomas Now on three primary student outcomes: attendance rates (proportion of enrolled days in attendance), suspensions (in-school or out-of-school) and expulsions, and successful course completion? Essentially, does the implementation of Diplomas Now keep more students on track to high school graduation by the end of their middle school or high school transition years?

While this report was being written, Johns Hopkins University was granted funding from the Office of Innovation and Improvement of the U.S. Department of Education to support an extension of the evaluation. The MDRC and ICF research team will now be able to follow students for four years, thus tracking ninth-grade students through four-year high school graduation and sixth grade students through their next transition year — ninth grade in high school. Thus, the evaluation will also provide information about the longer-term impact of Diplomas Now on the graduation of students in Diplomas Now high schools and on the ninth-grade success of students from Diplomas Now middle schools.

Summary of Key Findings from the First Year of Implementation

The first report from the evaluation, released in 2014, focused on program start-up and first-year implementation in the DN schools. The report introduced its readers to the Diplomas Now model, described the schools and school districts participating in the evaluation, shared findings about first-year implementation fidelity in the DN schools, and discussed how program and school staff members collaborated to implement the DN model. The prior report shared the following key findings and lessons.

• During the first year of implementation, on average model implementation in the 32 DN schools had gotten under way and gained some traction. During the first year of implementation, DN schools had a fidelity of implementation score of 0.61 on a scale of 0 to 1, where 1 would represent a high level of fidelity to the model on all 111 program components across the nine inputs.

Complex, multifaceted whole-school reforms like Diplomas Now typically take a few years to reach full implementation. Getting the majority of model components implemented in the first year suggested that schools were off to a promising start with this reform.

• However, none of the DN schools were able to implement all of the 62 components of the model believed to be most critical by the Diplomas Now organizations in the first year.
The Diplomas Now Implementation Support Team identified a subset of the program components that it hypothesized were the most likely to lead to the desired changes in school and student outcomes.¹⁴ During the first year of implementation, the DN schools struggled to implement some of these "critical" components. For example, some schools did not have all their Diplomas Now program staff members in place by the start of the school year; only about half of the schools managed to hold Early Warning Indicator meetings weekly; and although instructional support for English/language arts and math teachers was provided at many schools, instructional coaches struggled to work with teachers as often as the model design expected.

 DN schools were most successful during the first year in implementing Pillar III, particularly in incorporating the tiered intervention model and additional student support services — like tutoring and after-school programs — into the existing school structure.

Across DN schools, the Tiered Intervention Model, Integrated On-Site Support, and Student Supports were among the most fully implemented program inputs during the first year of implementation. Some schools had activities associated with these inputs in place prior to Diplomas Now program implementation, such as a tiered system of support services and common planning time.

 DN schools were less successful in implementing components of Pillar II, particularly new curricula and peer coaching models, which both require gaining the trust and investment of school administrators and teachers, and may require additional time to implement as a result.

Qualitative data revealed that school staff members were not always convinced of the value of implementing new curricula, and some teachers were reluctant to be "coached." These findings speak to the importance of giving a school's staff a role in selecting some program staff members, if possible, to encourage greater rapport and trust between school and Diplomas Now staff members. This is especially the case for instructional coaches, who frequently interact with teachers on a one-on-one, peer-to-peer basis.

The evaluation team also used interview and focus group data to explore collaborations during the first year of implementation, since effective collaboration is at the heart of the complex Diplomas Now school reform.

• Two aspects of collaboration appeared to be most important across schools and various role groups: role clarity and school staff investment.

¹⁴The Diplomas Now Implementation Support Team is a group of national representatives from the three partner organizations who provide guidance about model implementation to local Diplomas Now teams.

Administrators and teachers are key stakeholders whose engagement in implementing the Diplomas Now model inputs is essential, and in order for them to become actively engaged in the model they must first understand it. They may learn about it through information sessions, by meeting school staff members at other DN schools, or in other ways. Continual communication, including regular meetings and informal check-ins, helps build the trust and acceptance necessary for the collaborative work of model implementation.

In addition, it is crucial that Diplomas Now school-based staff members establish their purpose and roles, with teachers and administrators as well as among themselves. The influx of Talent Development, City Year, and Communities In Schools staff members provided schools with the human resources necessary for the implementation of the Diplomas Now model. However, increased clarity regarding the roles and responsibilities of these Diplomas Now staff members might have further improved model implementation in the first year.

Orientation to This Report

This report continues the implementation story begun in the first report. It includes findings about implementation fidelity in the second year of model implementation. It also looks at different characteristics of school structure and practice at both DN and non-DN schools to see whether the implementation of the Diplomas Now model is creating differences (that is, a "service contrast") in how the two groups of schools are organized and how their respective staffs function.

The next chapter presents information about model implementation in Year 2, discussing both the fidelity with which the model was implemented and service contrast. The third chapter then discusses changes in implementation over time, comparing Year 1 and Year 2 findings about implementation fidelity and service contrast. These two chapters focus on the program inputs on the left-hand side of Figure 1.1 and discuss model implementation by pillar. Data regarding the fidelity with which the DN schools implemented the model come from Diplomas Now staff surveys, which were developed to measure specific components in each input. The staff members surveyed include: the Diplomas Now Implementation Support Team, Talent Development school transformation facilitators, City Year program managers, and Communities In Schools site coordinators. Data regarding the contrast in services between the DN and non-DN schools come from surveys of teachers and administrators (principals and assistant principals) at both DN and non-DN schools. All surveys were administered in the spring of each year.

The fourth chapter presents analyses that explore the context in which implementation was occurring, the integration of the model at schools, the importance of staff stability, and program sustainability. This chapter draws on qualitative data collected through interviews and focus groups at nine case study schools from four school districts. The chapter highlights common themes across participants and schools and provides illustrative examples from individuals or selected schools. The final, concluding chapter ties the various analyses together and sets up the next report.

Future Evaluation Reports

Five reports are expected from this evaluation. The next report will present the findings from analyses of the impact of Diplomas Now on (1) early school and student outcomes, such as creating a positive school climate and strengthening student confidence and persistence in school (see "early" outcomes in Figure 1.1), and (2) ABC outcomes in the second year of implementation (see "intermediate" outcomes in Figure 1.1). The fourth report will investigate variation in implementation and impacts, as well as relationships between implementation and outcomes. The fifth and final report will present the results of analyses of the impact of Diplomas Now on the longer-term outcomes of high school graduation rates for students who entered the model in ninth grade, and ninth-grade success for students who entered in sixth grade.

Chapter 2

Implementation of the Diplomas Now Model During Year 2

This chapter focuses on the implementation of the Diplomas Now model during the second year of the program, considering it in two different ways. First the chapter considers fidelity of implementation: how actual implementation matched the Diplomas Now model and varied across schools. Since this is the first time the Diplomas Now model is being rigorously tested, it is not yet known what level of model implementation leads to positive change at a school, and ultimately to positive effects on student outcomes. Second, to illuminate how Diplomas Now is changing school practices and structures, the chapter examines service contrast: the extent to which Diplomas Now is creating differences between the schools that were assigned to implement the model (DN schools) and the schools that were not (non-DN schools). Because this assignment was random, the non-DN schools offer insight into how the DN schools might have looked if they had not implemented Diplomas Now.

This chapter offers several main findings:

- The overall fidelity score of 0.62 on a scale of 0 to 1 suggests that on average schools were implementing a majority of the components with fidelity to the model, but still had room for growth to reach ideal implementation.
- During Year 2, fidelity of implementation findings suggest that DN schools were most successful in setting up the Diplomas Now support staff in the schools, ensuring that data were used to identify student needs and plan for interventions, offering specialized support both inside and outside of classrooms to students who needed it, creating small learning environments where interdisciplinary teams of teachers worked with small groups of students, and establishing extended class time for core courses.
- Across all these areas, the programs offered in DN schools were more intensive than those found in non-DN schools. That is, implementation of the model was creating a contrast between the structures and practices of the two groups of schools.
- On average DN schools were less likely to meet the goals the model set for the use of reform curricula, the availability of additional support courses for struggling students in math and English/language arts classes, the level of in-

structional coaching offered to math and English/language arts teachers, and the engagement of parents and community members.

• There was also little contrast between DN and non-DN schools in their use of college readiness curricula and their family and community involvement, although teachers in DN and non-DN schools alike reported relatively high use of college readiness curricula and accelerated remedial courses for struggling students. Even though DN schools had trouble meeting the implementation goals of the model for instructional coaching of teachers, teachers at DN schools still reported receiving more peer coaching than their non-DN counterparts.

Data Sources and Analyses

To capture yearly fidelity to the model's implementation goals, surveys were administered to Diplomas Now program staff members connected with each school. The four surveys administered in the spring of each implementation year were: (1) the Diplomas Now Implementation Support Team survey, (2) the Talent Development school transformation facilitator survey, (3) the City Year program manager survey, and (4) the Communities In Schools site coordinator survey.¹ Implementation fidelity measures were developed in collaboration with the Implementation Support Team to capture the various components of each input within each pillar listed in Figure 1.1. Across the pillars and inputs 111 components were identified, and a scale from 0 (no or low implementation) to 1 (high implementation) was established for each component. The scores for each component were averaged within each input, and the average of the nine input scores then gave the overall score for a DN school, a proportion of how much or how "fully" schools implemented the Diplomas Now model. (See Appendix A for a detailed description of how the fidelity scores were calculated.) Input-level scores were also averaged across all DN schools to obtain the average fidelity scores for each input found in Table 2.1.

The Implementation Support Team also established a fidelity score for each component that it considered "adequate" implementation (varying among components from 0.25 to 1 on the scale), and the research team calculated the percentage of schools to achieve adequate fidelity to each component. This chapter reports the number of components in each input that

¹See Appendix A for additional detail on the program staff surveys and response rates. The Diplomas Now Implementation Support Team is a group of national representatives from the three partner organizations who provide guidance about model implementation to local Diplomas Now teams. Diplomas Now staff members also collected program documents, databases, and service records to supplement program staff surveys.

Table 2.1

Fidelity of Implementation Findings, Year 2, All DN Schools, Schools in the Top Quartile, and Schools in the Bottom Quartile

Average Fidelity Sco				9
	All DN	Тор	Bottom	
Model Inputs	Schools	Quartile	Quartile	Difference
Pillar I. Teacher Teams and Small Learning Communities	0.69	0.85	0.47	0.38 ***
Strong Learning Environments ^{a,b}	0.69	0.85	0.47	0.38 ***
Pillar II. Curriculum and Instruction with Professional Development	0.37	0.67	0.15	0.52 ***
Professional Development and Peer Coaching ^{a,b}	0.42	0.84	0.05	0.79 ***
Curriculum for College Readiness ^b	0.31	0.50	0.25	0.25 **
<u>Pillar III. Tiered Student Supports</u>	0.69	0.76	0.56	0.21 ***
Tiered Intervention Model ^a	0.75	0.96	0.45	0.51 ***
Student Supports ^a	0.73	0.78	0.67	0.11 **
Student Case Management ^a	0.59	0.56	0.55	0.01
Pillar IV. Can-Do Culture and Climate	0.69	0.80	0.59	0.21 ***
Integrated On-Site Support ^a	0.87	0.90	0.82	0.07
Family and Community Involvement	0.51	0.70	0.35	0.35 ***
Program Staff Training and Development	0.71	0.80	0.59	0.20 ***
Overall	0.62	0.76	0.47	0.30 ***
Sample size	31	7	8	

(continued)

Table 2.1 (continued)

SOURCE: Diplomas Now fidelity of implementation program staff surveys, 2012, 2013, and 2014.

NOTES: Each of the nine inputs consists of a set of more specific components measured on a 0-1 scale. For each DN school, all of the component scores under an input are averaged to create the implementation score for that input. These scores are then averaged to create the pillar-level and overall implementation scores.

Using the overall implementation score for each school, the top quartile and bottom quartile of implementing schools were identified. The "top quartile" column is the average implementation scores of the seven schools that make up the top quartile and the "bottom quartile" column is the average implementation scores of the eight schools that make up the bottom quartile. The "difference" column is the difference between the average implementation scores for the top and bottom quartiles.

One DN school closed prior to the second year of implementation and is not included in this analysis. A two tailed t-test was applied to differences. Statistical significance levels are indicted as follows: *** =1 percent; ** = 5 percent; * = 10 percent.

Rounding may cause slight discrepancies in calculating sums and differences.

^aIndicates model inputs designated as critical to the Diplomas Now model.

^bStrong Learning Environments, Professional Development and Peer Coaching, and Curriculum for College Readiness include some components specific to either middle schools or high schools.

were adequately implemented by more than 80 percent of schools and the number of components in each input that were adequately implemented by fewer than 50 percent of schools. (Appendix Table A.3 shows the percentages of schools that adequately implemented each of the 111 components.)

As noted earlier, it is not yet known what level of implementation is needed to actually effect change in schools. For this reason, it is also important to understand how what is happening at DN schools differs from what would be happening in the absence of Diplomas Now. To measure the service contrast between DN and non-DN schools, teachers and administrators (principals and assistant principals) at all study schools were also surveyed each spring.² Responses of teachers and administrators at DN schools are compared with those of teachers and administrators at non-DN schools.³ These analyses use data only from middle school teachers who taught sixth or seventh grade and high school teachers who taught ninth or tenth grade, since these grades were the most fully served by Diplomas Now during the second year of implementation.⁴ All measures in these analyses were created using one or more items from the surveys.⁵ Although the service contrast measures are aligned with the Diplomas Now model,

²See Appendix B for additional detail on the teacher and administrator surveys and response rates.

³The analytic model used in these analyses is similar to the analysis method planned for the confirmatory outcomes of student attendance, behavior, and course performance to be presented in the next report. See Appendix B for details on the analytic model.

⁴Appendix B includes analyses of teachers who taught sixth and ninth grade in the first and second year of implementation. Sixth and ninth grades were the focus of the first year of implementation, and these teachers were therefore more likely to have participated in two years of model implementation by the spring of the second year than teachers who did not teach these grades.

⁵Where more than one survey item was averaged to create a composite measure, factor analyses were used and Cronbach's alphas are all above 0.7.

the survey items from which they were calculated were phrased generally enough so that respondents at non-DN schools could still interpret them in reference to their schools.

Comparison of Fidelity of Implementation and Service Contrast

It might be expected that fidelity of implementation and service contrast would correlate with one another, since both analyses are measuring aspects of the implementation of the Diplomas Now model, albeit in different ways. Fidelity is a measure of implementation that examines how fully DN schools met a set of goals set by the model developers. Service contrast is a relative measure that evaluates how much DN schools differed from non-DN schools in the implementation of activities aligned with the Diplomas Now model. Thus, when DN schools have high fidelity of implementation, it creates more "room" for a difference in practices or structures to emerge between DN and non-DN schools. Alternatively, when DN schools have low fidelity of implementation, there is less "room" for DN schools to differentiate themselves from non-DN schools.

However, there are also circumstances under which fidelity of implementation and service contrast may not be correlated. The fidelity of implementation analysis does not take into account what types of structures and school practices are being implemented in the non-DN schools. High fidelity scores at DN schools may be the result of practices or reforms that are easier to implement and so more likely to also be well implemented in non-DN schools, thus leading to less contrast between the two groups of schools. Conversely, low fidelity scores may reflect changes that are more challenging to make. This could be true in both DN and non-DN schools. Therefore, while DN schools may not have been fully successful in implementing components, non-DN schools could have been even less successful or not have been implementing similar practices at all, which would create some service contrast.

It is also worth noting that in this case the fidelity scores are based on surveys of the Diplomas Now staff members at the schools, while the service contrast measures are based on surveys of teachers and administrators, who have a different perspective. In addition, while fidelity of implementation was scored for all 111 program components of this complex model, the measures of service contrast only include the types of programs that could be identified by teachers and administrators in both DN and non-DN schools.

Implementation of the Diplomas Now Model by Pillar

The first column of Table 2.1 provides the average fidelity score by pillar and the average fidelity score by input across the entire sample of DN schools.⁶ On average across all inputs and pillars, the second-year fidelity score (0.62) indicates that the majority of program components were implemented at a high level of fidelity to the model, a moderate level of implementation very similar to what occurred in the first year.⁷

Pillar-level Year 2 fidelity scores suggest that over two-thirds of the components were implemented at a high level of fidelity for three of the four pillars: Pillar I (Teacher Teams and Small Learning Communities, with a score of 0.69), Pillar III (Tiered Student Supports, 0.69), and Pillar IV (Can-Do Culture and Climate, 0.69). Among individual inputs, Integrated On-Site Support (0.87), Tiered Intervention Model (0.75), and Student Supports (0.73) were the most fully implemented. These are elements that represent the newest technology, using Early Warning Indicator data to identify struggling students, and came with the greatest amount of implementation support from Diplomas Now, including additional staff members brought into the schools.

In contrast, Pillar II (Curriculum and Instruction with Professional Development) was the most difficult to implement (with a score of 0.37), particularly Curriculum for College Readiness, which received the lowest implementation score (0.31) of any input. This may be in part because some schools believed they already had in place curricula mandated or supported by the district that were functionally equivalent to those implemented as part of Diplomas Now. Teacher instructional coaching was also hard to implement because it required a high level of acceptance from teachers and school administrators and because resources to support instructional coaches often came from the district, whereas funding for other Diplomas Now staff members generally came from outside sources.

The ninth input, Program Staff Training and Development, is about providing Diplomas Now staff members with the skills and knowledge they need to implement the other eight inputs, and does not fall within the pillar structure. The fidelity score for this input suggests successful implementation (0.71) on average. A majority of schools reported adequate levels of implementation of all but 1 of the 18 components in this input. It is worth noting that staff members from each of the partner groups reported high levels of access to and communication with the staff members from the other partner organizations at their schools, which should have helped the three partner organizations become integrated.

⁶See Appendix A for a full description of how fidelity scores were calculated overall and by pillar and input. ⁷There were no significant differences in overall fidelity scores between middle and high schools or between

schools that joined the study in the 2011-2012 school year and those that joined in the 2012-2013 school year.

Table 2.1 also notes which inputs were designated as critical to successful early implementation by the Diplomas Now Implementation Support Team. Two of the three inputs with the lowest implementation scores (Curriculum for College Readiness and Family and Community Involvement) were also identified as lower implementation priorities.

DN schools were ranked by their overall implementation scores. Then, for each pillar and input the schools with the greatest *overall* implementation success (those whose total average scores were in the top 25 percent, or quartile) were compared with those with the least overall implementation success (those in the bottom quartile). This comparison reveals which inputs were challenging to implement both for schools doing the best with the model and for those struggling the most. Those aspects of the model must be universally difficult to implement. Meanwhile, some inputs are commonly found implemented with high fidelity in schools in the bottom quartile. Those aspects of the model may be areas where schools could benefit from additional implementation support.

The last three columns of Table 2.1 display the average implementation score for the top quartile of schools, the average score for the bottom quartile of schools, the difference between those average scores, and whether that difference is statistically significant. Implementation scores for schools in the top quartile averaged 0.76 (approximately three-fourths of model components implemented with high fidelity) and ranged from 0.74 to 0.80; scores for schools in the bottom quartile averaged 0.47 (just under half of model components implemented with high fidelity) and ranged from 0.36 to 0.53. Professional Development and Peer Coaching, Tiered Intervention Model, and Strong Learning Environments show the largest differences between schools in the top and bottom quartiles, suggesting that these aspects of the program were harder to implement in some schools than others. These are all areas where changes to school structure or teacher practice are important to successful implementation. The smallest differences between schools in the top and bottom quartiles are found in Student Case Management and Integrated On-Site Support. For both of these inputs, successful implementation is less constrained by school structure and teacher practice and more the result of the efforts of Diplomas Now staff members.

The discussion of input-level implementation fidelity and service contrast that follows is organized according to the Four Pillars of the Diplomas Now model. Each section discusses input-level fidelity of implementation for one of the pillars.

These findings are reported by pillar in Tables 2.2, 2.4, 2.6, and 2.8. Each section identifies the individual components within each input that were consistently implemented (that is, those implemented adequately by 80 percent or more of DN schools) and those that were inconsistently implemented (that is, those implemented adequately by fewer than 50 percent of DN schools). For each input, the tables list the total number of components along with the number of components that were consistently implemented (that is, those implemented adequately by 80 percent or more of DN schools) and the number that were inconsistently implemented (that is, those implemented by fewer than 50 percent of DN schools). The tables also provide examples of components in each input that schools either implemented consistently or struggled with.⁸

The discussion of implementation fidelity for each input is followed by a discussion of pertinent service contrast findings. Tables 2.3, 2.5, 2.7, and 2.9 compare findings from surveys of teachers at DN and non-DN schools. These tables include the average score on each measure for the DN schools, the average score for the non-DN schools, and the difference between the scores. The effect size and p-value are also included. The effect size is calculated by dividing the raw difference between scores by the standard deviation of the measure. Since the survey measures use different units (some are on a 10-point scale, for example, while others are "times per month"), the effect size allows for comparisons among them. The p-value shows the probability that this difference arose by chance (the smaller the p-value, the less likely the difference arose by chance). Measures marked with asterisks are considered statistically significant, those where one may conclude with some confidence that there was a contrast in services between DN and non-DN schools. The more asterisks, the more confident one can be.

Pillar I: Teacher Teams and Small Learning Communities

The input aligned with this pillar is "Strong Learning Environments." This section discusses the following key findings.

- Schools implemented almost all the components of this input with a moderate level of success, and teachers at DN schools reported a higher frequency of participation in the types of activities found under this input than teachers at non-DN schools.
- Although not universally implemented in all DN schools, extended or longer class periods of 70 to 90 minutes were more likely to occur in DN schools than in non-DN schools.
- Although most DN schools struggled to meet the expectation of the Diplomas Now model that interdisciplinary teams of teachers would meet multiple times per week to discuss their shared group of students, teachers at DN schools did report meeting in interdisciplinary teams slightly more often than their non-DN counterparts.

⁸For information on all of the components and the percentage of schools to adequately implement each of them, see Appendix Table A.3.

Strong Learning Environments

Under the Strong Learning Environments input, each DN school implements a staffing model that facilitates both interdisciplinary teacher teams and subject-area professional learning communities with common planning time set aside during the school day. Teachers also meet at regularly scheduled times to discuss immediate student needs, plan interventions, and coordinate instructional expectations and practices. The daily school schedule is organized into extended class periods (four classes of 70 to 90 minutes each) to allow for in-depth instruction and differentiated instructional strategies that meet the needs of students with different learning styles. In a DN high school, the school building and students are organized into academies, including a ninth-grade academy and thematic or career academies for tenth- through twelfth-graders, each of which houses a moderate-sized group of students. Each academy has dedicated administrators and counselors, and an interdisciplinary team of teachers — four to six teachers covering the core subjects of math, English/language arts, science, and social studies/history — who work with the same students throughout the year.

The fidelity score for Strong Learning Environments during the second year of implementation (0.69) indicates that DN schools implemented a moderate proportion of the components. The average score for the top quartile of schools was 0.85 while the average score for the bottom quartile was 0.47, suggesting that schools that implemented more of the model overall also tended to be more successful with this input (see Table 2.1). Table 2.2 presents the components where DN schools were most successful (that is, those implemented adequately by at least 80 percent of schools) and least successful (that is, those implemented adequately by fewer than 50 percent of schools). As can be seen from the table, four out of the six components fell into the middle range, implemented adequately by between 50 and 80 percent of schools. These components include creating interdisciplinary teams of teachers working with small academies of students, and structuring the school day with extended periods for core academic courses. As Table 2.2 indicates, all DN school-based Diplomas Now teams had established norms for collaboration, communication, and decision making among themselves, an important first step in implementing other model components. Schools were least successful at scheduling interdisciplinary teacher team meetings.

Table 2.3 compares DN and non-DN schools in their implementation of programs similar to the components of the Strong Learning Environments input. During the second year of implementation, core teachers at DN schools were somewhat more likely to report that they taught in classes that lasted 70 to 90 minutes than their counterparts in non-DN schools. DN teachers also reported that they spent more time collaborating with an interdisciplinary team of

Table 2.2

Pillar I: Teacher Teams and Small Learning Communities, Components Adequately Implemented Most and Least Often, Year 2

Input and Description	
Strong Learning Environments ^a	
Number of components	6
Number of components adequately implemented by 80 percent of DN schools or more	1
Number of components adequately implemented by 50 percent of DN schools or fewer	1
Selected component descriptions: (% of schools adequately implementing) Site-based team had established standards for collaboration,	
communication, and decision making.	100.0
Meetings where interdisciplinary core teachers discuss shared students	
occurred multiple times per week.	29.0
Number of schools	31

SOURCE: Diplomas Now fidelity of implementation program staff surveys, 2012, 2013, and 2014.

NOTES: For a list of all components and the percentage of schools adequately implementing each one, see Appendix Table A.3. One DN school closed prior to the second year of implementation and is not included in this analysis.

^aStrong Learning Environments includes components specific to either middle schools or high schools.

teachers that shared the same students than teachers at non-DN schools.⁹ However, on average, the amount of time that DN teachers reported working in interdisciplinary teams was less than one hour per week, which is below the DN model goal of multiple times per week.

The fidelity of implementation and service contrast findings for the Strong Learning Environments input generally appear to align with each other, and these results suggest that DN schools were not only moderately successful in implementing the components of this input, but that this level of implementation led to differences between DN and non-DN schools.

⁹Results from surveys of administrators support these findings (see Appendix Table B.2).

Table 2.3

Pillar I: Teacher Teams and Small Learning Communities, Service Contrast, Teacher Responses, Year 2

	DN	Non-DN	Estimated 1	Effect	
Survey Item	Schools	Schools	Difference	Size	P-Value
Strong Learning Environments					
Core teachers reported how many of their classes were 70 to 90 minutes. $(0 = \text{none}, 5 = \text{few}, 10 = \text{most})$	6.4	5.2	1.2	0.24 ***	< 0.001
Core teachers reported the frequency they collaborated with an interdisciplinary team of teachers who shared the same group of students. (0 = never, 5 = less than weekly, 10 = daily)	5.7	4.4	1.3	0.40 ***	<0.001
Core teachers reported hours spent each week collaborating with an interdisciplinary team and teaching coordinated content across disciplines. (0 = none, 5 = 1 to 2, 10 = 3 or more)	3.9	3.1	0.8	0.29 ***	<0.001
Math and English/language arts teachers reported participating in a professional learning community with teachers within the same subject area. (0 = never, 5 = less than weekly, 10 = daily)	5.4	5.1	0.4	0.13	0.285
Sample size	31	30			

SOURCE: Follow-up surveys of teachers administered during the school years of 2012-2013 and 2013-2014. Respondents included middle school teachers who taught sixth or seventh grade and high school teachers who taught ninth or tenth grade.

NOTES: "Core" academic areas are identified as math, English/language arts, sciences, and social studies. Across 61 study schools, 1,269 core teachers participated in the follow-up survey, including 827 math and English/language arts teachers. One DN school closed prior to the second year of implementation and is not included in this analysis. For each of the above measures, data are missing for no more than 3.4 percent of the teachers. The difference in the percentage of missing data between DN and non-DN schools is no more than 1.2 percent for any of the above measures.

A two-tailed t-test was used for all statistical tests presented in this table. Statistical significance levels are indicated as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.

Effect sizes were computed using the standard deviations of all non-DN school teachers for the respective measures.

Rounding may cause slight discrepancies in calculating sums and differences.

Pillar II: Curriculum and Instruction with Professional Development

Two inputs are aligned with this pillar: Professional Development and Peer Coaching and Curriculum for College Readiness. Key findings from this section include:

- Curriculum for College Readiness and Professional Development and Peer Coaching had the lowest fidelity scores of any inputs during the second year of implementation (0.31 and 0.42, respectively).
- Curriculum for College Readiness was not considered critical to model implementation by the model designers, and only 4 of the 24 components included in this input were considered critical, which may have contributed to the low score. Some schools may have had similar types of curricular reforms already in place, which also may have contributed. According to the school staff survey responses used in the service contrast analysis, both DN and non-DN schools had relatively high levels of implementation in this area, which suggests that many districts were already using some sort of reform curricula and offering transitional support classes for struggling students, although the quality of these services was not measured.
- Although DN schools struggled to fully implement the teacher coaching program, math and English/language arts teachers at DN schools reported receiving instructional mentoring and support from coaches and school leaders four more times per month than teachers at non-DN schools. This is consistent with the fidelity of implementation finding that most math and English/language arts teachers received coaching during at least one period per week.

Professional Development and Peer Coaching

At every DN school, school-based instructional coaches and regional instructional facilitators work with English/language arts and math teachers. Coaches provide initial training for all transition courses, instruction in how to teach an extended class period, professional development and classroom support, and customized training and workshops. The goal is to have all math and English/language arts teachers participating in a two-week coaching cycle that consists of instructional coaches working with teachers to plan lessons, teach alongside them, model teaching techniques, and debrief instructional practices. Instructional facilitators work with schools to customize curricula and align instruction with district standards and local initiatives, support coaches and teachers, establish professional learning communities, and identify and train experienced teachers to teach alongside less experienced ones, model lessons, serve as curriculum coaches, and support the full implementation of the Diplomas Now model.

Table 2.4

Pillar II: Curriculum and Instruction with Professional Development, Components Adequately Implemented Most and Least Often, Year 2

Inputs and Descriptions	
Professional Development and Peer Coaching ^a	5
Number of components adequately implemented by 80 percent of DN schools or more Number of components adequately implemented by 50 percent of DN schools or fewer	0 2
Selected component descriptions: (% of schools adequately implementing) English/language arts instructional coaches completed an instructional coaching cycle with teachers at least every two weeks.	45.2
Mathematics instructional coaches completed an instructional coaching cycle with teachers at least every two weeks.	38.7
<u>Curriculum for College Readiness</u> ^a Number of components	24
Number of components adequately implemented by 80 percent of DN schools or more Number of components adequately implemented by 50 percent of DN schools or fewer	1 17
Selected component descriptions: (% of schools adequately implementing) Middle school met high standards of implementation of Common Core standards in mathematics.	81.3
High school implemented the Transitions to Advanced Mathematics curriculum for 9th-grade students.	46.7
High school implemented Geometry Foundations reform curriculum for 10th-grade students.	33.3
High school offered at least 6 units of the freshman seminar to 9th-grade students.	26.7
Middle school implemented the Savvy Readers' Lab reform curriculum or approved alternative.	25.0
High school implemented the Reading and Writing in Your Career reform curriculum for 10th-grade students.	20.0
Number of schools	31
	(continued)

Table 2.4 (continued)

SOURCE: Diplomas Now fidelity of implementation program staff surveys, 2012, 2013, and 2014.

NOTES: For a list of all components and the percentage of schools adequately implementing each one, see Appendix Table A.3. One DN school closed prior to the second year of implementation and is not included in this analysis.

^aProfessional Development and Peer Coaching and Curriculum for College Readiness include components specific to either middle schools or high schools.

The fidelity score for Professional Development and Peer Coaching during Year 2 was 0.42, meaning that DN schools were generally unable to meet the goals for high fidelity of implementation of this input. The average score for the top quartile of schools was 0.84, while the average score for the bottom quartile was 0.05, suggesting that some schools were able to implement these components quite successfully, but many schools struggled with implementation (see Table 2.1). Over 50 percent of schools had both math and English/language arts instructional coaches providing some coaching at least once a week, but, as seen in Table 2.4, most schools found it difficult to establish a consistent instructional coaching cycle for all mathematics and English/language arts teachers that consisted of a coach working with each teacher to plan, coteach, and debrief on at least one class every two weeks. Even though DN schools struggled to implement this input, Table 2.5 shows that English/language arts and math instructors at DN schools still reported receiving instructional coaching four times per month more than their counterparts at non-DN schools.

Curriculum for College Readiness

To prepare students for high school graduation and college, Diplomas Now provides schools with research-based curricula for all core subjects along with accelerated remediation courses to help students catch up. Talent Development Secondary's reform curricula are intended to promote active learning, close skill gaps, develop mature thinking, and improve achievement. Diplomas Now curricula for middle schools integrate high school readiness and evidence-based core academic principles in math, English/language arts, science, and social studies. DN middle schools also have access to the *Mastering the Middle Grades* curriculum, designed to facilitate the transition to middle school through instruction in life and study skills. In high schools Diplomas Now offers a freshman seminar curriculum to ease the transition into high school, and evidence-based college preparatory curricula in core subjects.

The input-level fidelity score for Curriculum for College Readiness during the second year of implementation was 0.31, the lowest of all inputs. Many schools reported having district-wide curricular standards already in place. They were hesitant to change to the curricula Diplomas Now specified. Schools could meet the requirements of some of these components by using alternative curricula deemed adequate by Diplomas Now, but the low implementation

Table 2.5

Pillar II: Curriculum and Instruction with Professional Development, Service Contrast, Teacher Responses, Year 2

	DN	Non-DN	Estimated	Effect	
Survey Item	Schools	Schools	Difference	Size	P-Value
Professional Development and Peer Coaching					
Average times per month math and English/language arts teachers reported working with an instructional coach. ^a	7.7	5.1	2.6	0.30 **	0.020
Average times per month math and English/language arts teachers reported receiving support from a school leader or a coach. ^a	13.6	9.6	4.0	0.28 **	0.024
Curriculum for College Readiness					
Math and English/language arts teachers reported implementing the same college preparation curriculum with all students in their classes. (high school only) (%)	62.8	63.1	-0.3	-0.01	0.957
Math and English/language arts teachers reported struggling students in their courses received additional classes to catch up with their peers. (%)	68.7	70.7	-2.0	-0.05	0.665
Math and English/language arts teachers reported the average frequency they used a variety of student-centered teaching strategies. ^b $(0 = never, 5 = less than weekly, 10 = daily)$	7.3	7.1	0.2	0.11	0.247
Math and English/language arts teachers reported the average frequency students applied classroom activities to real-life issues and used critical thinking and reasoning skills. ($0 = never$, $5 = less than weekly$, $10 = daily$)	7.1	7.1	0.0	0.00	0.974
Math and English/language arts teachers reported the average frequency academic courses included career applications and exploration. <i>(high school only)</i> $(0 = never, 5 = less than weekly, 10 = daily)$	4.9	4.8	0.1	0.04	0.795
Sample size	31	30			
				((1)

(continued)

Table 2.5 (continued)

SOURCE: Follow-up surveys of teachers administered during the school years of 2012-2013 and 2013-2014. Respondents included middle school teachers who taught sixth or seventh grade and high school teachers who taught ninth or tenth grade.

NOTES: Across 61 study schools, 827 math and English/language arts teachers participated in the follow-up survey. Across 29 study high schools, 465 high school math and English/language arts teachers participated in the follow-up survey. One DN school closed prior to the second year of implementation and is not included in this analysis. For each of the above measures, data are missing for no more than 6.2 percent of the teachers. The difference in the percentage of missing data between DN and non-DN schools is no more than 3.7 percent for any of the above measures.

A two-tailed t-test was used for all statistical tests presented in this table. Statistical significance levels are indicated as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.

Effect sizes were computed using the standard deviations of all non-DN school teachers for the respective measures.

Rounding may cause slight discrepancies in calculating sums and differences. ^aSurvey items in this input have been calculated by weighting the frequency per month and then summing the weighted survey items in order to get a total times-per-month measure. For example, 0 =never, 1 =at least once a month, 2 =more than once a month but not weekly, 5 =once a week, 12 =more than once a week but not daily, and 20 = daily.

^bStudent-centered teaching strategies include demonstrations, modeling of strategies, and minilessons.

scores across schools suggest that most schools were unsuccessful in meeting these goals as set by the model developers. Top-quartile schools had an average score of 0.50 on this input and bottom-quartile schools had an average score of 0.25, suggesting that all schools had difficulty implementing this input (see Table 2.1). This may also be in part because there are 24 components in this input and only 4 of those were considered critical by the model's designers. As seen in Table 2.4, 17 of the 24 curricular components were implemented by fewer than 50 percent of schools.

Teachers at DN and non-DN schools reported similarly high levels of implementation on measures related to Curriculum for College Readiness, leaving little difference between DN and non-DN schools in this area (see Table 2.5). About the same percentage of English/language arts and math teachers in both DN and non-DN schools — a majority in both cases — reported that the same college preparatory curriculum was offered to all students in their classes and that struggling students were offered additional courses to catch up to their peers. This suggests that in teachers' eyes, many schools were already implementing these types of practices encouraged by the Diplomas Now model.

Pillar III: Tiered Student Supports

As noted above, Pillar III was one of the most successfully implemented pillars. Three inputs align with this pillar: Tiered Intervention Model, Student Supports, and Student Case Management. Key findings from this section include:

Tiered Intervention Model was among the most fully implemented inputs. A large majority of schools reported using data to identify students who fall off track and reported that teachers and other staff members collaborated to plan

interventions for those students. Teachers at DN schools were also more likely than teachers at non-DN schools to report these types of activities were happening.

- In the input of Student Supports, most DN schools reported high levels of inclass and after-school activities. Teachers at DN schools reported much higher levels of academic support in their classes than those at non-DN schools, and sixth- and ninth-grade teachers at DN schools reported a higher frequency of academic tutoring and attendance and behavior coaching.
- Student Case Management was moderately implemented, with the majority of schools providing case-managed students with individually tailored plans, along with enrichment and motivational activities. DN schools performed activities connected to the case management of at-risk students more frequently than non-DN schools.

Tiered Intervention Model

Each DN school establishes a tiered intervention model guided by an Early Warning Indicator (EWI) system that uses data to trigger interventions targeted to student needs. EWI system data provide schools with on- and off-track indicators and early warning flags related to student <u>attendance</u>, <u>behavior</u>, and <u>course performance</u> — the ABCs, as the Diplomas Now partners refer to them. The goal of the EWI system is to ensure that the right students receive the right intervention at the right time and at the right intensity. At each school, EWI meetings — which include some combination of the Talent Development school transformation facilitator, administrators, the interdisciplinary team of teachers who work with the students, City Year AmeriCorps members, and Communities In Schools site coordinators — are regularly scheduled to review and analyze EWI data. This EWI team works together to identify students who show signs of going off track, decide on the appropriate resources or services for each student, and implement the appropriate level of intervention for that student.

The Tiered Intervention Model input was the second most fully implemented input, with a fidelity score of 0.75. Many schools were quite successful with implementation of this input and the average score for the top-quartile schools was 0.96, but a few schools were not at all successful, bringing down the average score for the bottom quartile to 0.45 (see Table 2.1). As shown in Table 2.6, over 80 percent of schools were able to implement all the components in this input. These components include successfully integrating a tiered intervention model into the school day, having an EWI system in place, and holding EWI meetings at least every two

Table 2.6

Pillar III: Tiered Student Supports, Components Adequately Implemented Most and Least Often, Year 2

Inputs and Descriptions	
<u>Tiered Intervention Model</u> Number of components Number of components adequately implemented by 80 percent of DN schools or more Number of components adequately implemented by 50 percent of DN schools or fewer	3 3 0
Selected component descriptions: (% of DN schools adequately implementing) Coordinated Early Warning Indicator system alerts teachers as students begin to demonstrate off-track indicators.	90.3
Tiered intervention model was integrated into the school day.	83.9
Interdisciplinary Early Warning Indicator team meetings occurred at least biweekly.	80.6
<u>Student Supports</u> Number of components Number of components adequately implemented by 80 percent of DN schools or more Number of components adequately implemented by 50 percent of DN schools or fewer	24 8 5
Selected component descriptions: (% of DN schools adequately implementing) Additional in-class support was offered in math/English language arts year-round.	100.0
City Year AmeriCorps members were in math/English language arts classrooms at least three times per week.	100.0
At least four whole-school activities were conducted throughout the year.	100.0
Students received math tutoring from City Year AmeriCorps members at a ratio equal to or greater than 7 to 1.	48.4
At least 75% of math and English/language arts classrooms had City Year AmeriCorps members embedded.	41.9
	(continued)

weeks. As seen in Table 2.7, teachers at DN schools also reported doing these types of activities slightly more often than non-DN teachers. Overall, Tiered Intervention Model was among the inputs that showed the most measures with statistically significant service contrast between DN and non-DN schools.

Table 2.6 (continued)

<u>Student Case Management</u> Number of components Number of components adequately implemented by 80 percent of DN schools or more Number of components adequately implemented by 50 percent of DN schools or fewer	14 2 3
Selected component descriptions: (% of DN schools adequately implementing) At least 75% of case-managed students were provided with individual student plans.	96.8
Communities In Schools site coordinators provided whole-school enrichment/motivation services.	96.8
Communities In Schools site coordinators provided whole-school professional physical health services.	38.7
Communities In Schools site coordinators provided whole-school community-service opportunities.	25.8
Communities In Schools site coordinators provided whole-school professional mental health services.	9.7
Number of schools	31

SOURCE: Diplomas Now fidelity of implementation program staff surveys, 2012, 2013, and 2014.

NOTES: For a list of all components and the percentage of schools adequately implementing each one, see Appendix Table A.3. One DN school closed prior to the second year of implementation and is not included in this analysis.

Student Supports

Inputs and Descriptions

Students identified by at least one Early Warning Indicator as beginning to fall off track are offered Tier II support. These students receive additional services from City Year Ameri-Corps members, which can include behavior and attendance coaching or management, afterschool programs, academic tutoring (both individual and group), one-on-one mentoring, and near-peer role modeling. Students also receive in-class support services, such as one-on-one or small-group tutoring, from City Year AmeriCorps members usually embedded in their English/language arts and math classes.

Student Supports was among the most fully implemented inputs, with a fidelity score of 0.73. Moreover, top-quartile schools had an average score of 0.78 and bottom-quartile schools had an average score of 0.67, suggesting successful implementation of this input across schools regardless of their overall implementation level (see Table 2.1). In most schools, City Year AmeriCorps members provided in-class support for math and English/language arts classrooms

Table 2.7

Pillar III: Tiered Student Supports, Service Contrast, Teacher Responses, Year 2

	DN	Non-DN	Estimated 1	Effect		
Survey Item	Schools	Schools	Difference	Size		P-Value
Tiered Intervention Model						
Core teachers reported the average frequency they used attendance, behavior, and course performance data to target at-risk students. (0 = never, 5 = less than weekly, 10 = daily)	5.4	4.9	0.5	0.17	**	0.046
Core teachers reported hours spent each week reviewing student data with an interdisciplinary team of teachers to identify student needs. ($0 = never$, 5 = 1 to 2, $10 = 3$ or more)	4.1	3.3	0.8	0.28	***	0.003
Core teachers reported the average frequency they participated in meetings with administrators or counselors to identify at-risk students and plan interventions. ($0 = never$, $5 = less$ than weekly, 10 = daily)	4.9	3.3	1.6	0.57	***	<0.001
Core teachers reported the average frequency they invited parents of at-risk students to participate in discussions about interventions to support their children. ($0 = never$, $5 = less$ than weekly, $10 = daily$)	4.3	4.1	0.2	0.06		0.378
<u>Student Supports</u>						
Math and English/language arts teachers reported students who were often disruptive were offered behavior coaching. ($0 = never$, $5 = sometimes$, 10 = always, as needed)	5.5	5.2	0.3	0.09		0.273
Math and English/language arts teachers reported the frequency students were provided additional support related to attendance. (0 = never, 5 = less than weekly, 10 = daily)	6.6	6.2	0.5	0.16		0.102
Math and English/language arts teachers reported the frequency students were offered individual or small-group tutoring during their classes. (0 = never, 5 = less than weekly, 10 = daily)	7.1	6.9	0.3	0.09		0.326
the frequency students were offered individual or small-group tutoring during their classes. (0 = never, 5 = less than weekly, 10 = daily)	7.1	6.9	0.3	0.09		0.3

(continued)

	DN	Non-DN	Estimated	Effect		
Survey Item	Schools	Schools	Difference	Size	P-Va	alue
Average times per month math and English/ language arts teachers reported students received whole-class behavioral support from volunteers. ^a	7.8	4.2	3.6	0.52	*** <0.	001
Average times per month math and English/ language arts teachers reported students received academic help in class from volunteers. ^a	43.8	21.2	22.7	0.73	*** <0.	001
Student Case Management						
Core teachers reported the frequency they arranged intensive support and interventions for students by making appropriate referrals. ($0 = never$, 5 = sometimes, $10 = always$, as needed)	7.1	6.6	0.5	0.19	** 0.	020
Core teachers reported the frequency needs assessments were conducted to quickly identify students' needs and address them effectively. (0 = never, 5 = sometimes, 10 = always, as needed)	6.0	5.6	0.5	0.16	** 0.	033
Core teachers reported the frequency academic and nonacademic services were coordinated for students at risk of dropping out of school. (0 = never, 5 = sometimes, 10 = always, as needed)	6.3	5.3	1.0	0.34	*** <0.	001
Sample size	31	30				

Table 2.7 (continued)

SOURCE: Follow-up surveys of teachers administered during the school years of 2012-2013 and 2013-2014. Respondents included middle school teachers who taught sixth or seventh grade and high school teachers who taught ninth or tenth grade.

NOTES: "Core" academic areas are identified as math, English/language arts, sciences, and social studies. Across 61 study schools, 1,269 core teachers participated in the follow-up survey, including 827 math and English/language arts teachers. One DN school closed prior to the second year of implementation and is not included in this analysis. For each of the above measures, data are missing for no more than 6.9 percent of the teachers. The difference in the percentage of missing data between DN and non-DN schools is no more than 5.3 percent for any of the above measures.

A two-tailed t-test is used for all statistical tests presented in this table. Statistical significance levels are indicated as follows: *** = 1 percent; ** = 5 percent; * = 10 percent. Effect sizes were computed using the standard deviations of all non-DN school teachers for the

Effect sizes were computed using the standard deviations of all non-DN school teachers for the respective measures.

Rounding may cause slight discrepancies in calculating sums and differences.

^aSurvey items in this input have been calculated by weighting the frequency per month and then summing the weighted survey items in order to get a total times-per-month measure. For example, 0 = never, 1 = at least once a month, 2 = more than once a month but not weekly, 5 = once a week, 12 = more than once a week but not daily, and 20 = daily.

at least three times per week, attendance and behavior coaching for students, at least four wholeschool activities to encourage and promote positive school climate and culture, and after-school programs or extended learning time opportunities for students. But, as shown in Table 2.6, DN schools did have difficulty ensuring City Year AmeriCorps members were embedded in 75 percent of English/language arts classrooms and maintaining a student-to-tutor ratio of 7:1 or less.

As shown in Table 2.7, math and English/language arts teachers at DN schools reported that volunteers provided support in their classes approximately twice as often as teachers at non-DN schools. Although as a whole teachers reported that students received behavior and attendance coaching and individual and small group tutoring at about the same rates at DN and non-DN schools, sixth- and ninth-grade teachers at DN schools did report higher frequencies of these activities than sixth- and ninth-grade teachers at non-DN schools (see Appendix Table B.12). This disparity may in part be due to Diplomas Now's conscious decision to concentrate on the sixth and ninth grades and to ensure that students in these transitional grades receive services in cases where there are limited resources.

In general, the fidelity and service contrast findings for the Student Supports input seem to correspond with each other. Although the model led schools to offer considerably more student support services than would have otherwise been possible, limited resources may have curtailed the services available to students not in transition years (sixth and ninth grades), where City Year AmeriCorps members were concentrated.

Student Case Management

Students in need of intensive interventions receive individual case management from the Communities In Schools site coordinator. The site coordinator conducts a needs assessment to determine the range, scale, and scope of the specialized support these students need. Next, the site coordinator develops an individual plan for each student, provides referrals for social services, coordinates individual or group counseling, completes home visits, and develops peer support groups. Working daily or weekly with at-risk students, the site coordinator serves as a resource for these students and monitors their progress.

The fidelity score for the Student Case Management input averaged 0.59. Scores for the top and bottom quartile of schools were quite similar (0.56 and 0.55 respectively) suggesting that success in student case management was not much affected by success in the other inputs (see Table 2.1). As shown in Table 2.6, the majority of DN schools provided case-managed students with individual plans, enrichment activities, and motivational services. DN schools struggled most with providing professional physical health services, community-oriented services, and professional mental health services during Year 2. In general, schools were quite successful in implementing the components identified as critical to the model; those critical components focus on offering case-managed students attendance, behavior, and academic support services.

Program components not considered critical to the Diplomas Now model — those focused on providing physical and mental health services and community services to the whole school — were less likely to be implemented fully (see Appendix Table A.3). This suggests that case managers may have focused on implementing the components identified as most critical to the model.

As seen in Table 2.7, DN schools were slightly more likely than non-DN schools to offer the following services related to the case management of at-risk students: teachers arranging for intensive support and interventions for students by making appropriate referrals, needs assessments being conducted quickly to identify students' needs and address them effectively, and coordination and monitoring occurring of academic and nonacademic services for students at risk of dropping out of school. Administrators at DN schools also reported a higher frequency than non-DN administrators of student participation in individual, group, or family counseling.

Pillar IV: Can-Do Culture and Climate

School reform is difficult, and school staff members often have too much to do when they are asked to effect change. The inputs of Integrated On-Site Support and Family and Community Involvement are about providing additional support to schools to facilitate the hard work of school change. This section includes the following key findings:

- Integrated On-Site Support had the highest fidelity score of any input, suggesting that the staff members needed to implement the Diplomas Now model were in place. The service contrast findings suggest that this influx of staff members to DN schools differed from what happened in non-DN schools.
- The Family and Community Involvement aspects of the DN model have not yet been fully implemented at most DN schools, and there was little difference between DN and non-DN schools in this area.

Integrated On-Site Support

To carry out all the programmatic, structural, and curricular components of the Diplomas Now model, numerous support staff members are needed.

- The Talent Development **school transformation facilitator**, who works with the school's leadership team to organize Diplomas Now's efforts and to launch a tiered intervention model guided by early warning data
- The City Year **program manager**, who manages a team of 8 to 20 City Year AmeriCorps members to provide academic assistance, run after-school pro-

grams, and operate other programs intended to improve school climate, attendance, and student behavior

- The Communities In Schools **site coordinator**, who organizes whole-school activities and provides individual student case management
- The instructional coaches, who provide instructional and curricular support to math and English/language arts teachers
- The **instructional facilitators**, who provide technical assistance to instructional coaches and school administrators

These staff members make it possible for schools to plan and implement the Diplomas Now model.

Integrated On-Site Support was the most fully implemented input, with a fidelity score of 0.87. Additionally, there was no significant difference between the fidelity scores of top- and bottom-quartile schools, suggesting uniform and consistent implementation across schools regardless of their overall implementation level (see Table 2.1). Moreover, as shown in Table 2.8, 10 out of 11 program components were adequately implemented by 80 percent or more of the DN schools. These components include having in place math and English/language arts instructional facilitators, Communities In Schools site coordinators, a Talent Development school transformation facilitator, and at least one AmeriCorps member for every 49 students who need Tier II support. It is also worth noting that technical assistance was provided by Talent Development Secondary to 100 percent of DN schools to support Diplomas Now implementation (see Appendix Table A.3).

As seen in Table 2.9, DN schools were much more likely to have volunteers in English/language arts and math classes than non-DN schools, likely due to the influx of City Year AmeriCorps members at the DN schools.¹⁰ As shown in Appendix Table B.5, administrators at DN schools also were more likely than administrators at non-DN schools to report that their schools had a designated adult — other than the principal or assistant principal — coordinating interventions and resources and overseeing math and English/language arts coaches.

Family and Community Involvement

The Diplomas Now model encourages schools to make a concerted effort to engage in family and community partnerships that promote student success. As schools develop career

¹⁰City Year worked in five non-DN schools due to relationships with those schools established prior to Diplomas Now implementation.

Table 2.8

Pillar IV: Can-Do Culture and Climate, Components Adequately Implemented Most and Least Often, Year 2

Inputs and Descriptions	
Integrated On-site Support Number of components Number of components adequately implemented by 80 percent of DN schools or more Number of components adequately implemented by 50 percent of DN schools or fewer	11 10 0
Selected component descriptions: (% of DN schools adequately implementing) Math and English/language arts instructional facilitators provided technical assistance.	100.0
Communities In Schools site coordinator was at school.	100.0
At least 75% of City Year AmeriCorps members were retained throughout the school year.	93.5
School transformation facilitator began serving school prior to the first day of school.	87.1
<u>Family and Community Involvement</u> Number of components Number of components adequately implemented by 80 percent of DN schools or more Number of components adequately implemented by 50 percent of DN schools or fewer	6 2 1
Selected component descriptions: (% of DN schools adequately implementing) School offered workshop to parents at least once during school year.	90.3
Teachers sent information to parents on how to help their children at least once during school year.	83.9
School formally recruited parents and trained them to work as school volunteers.	41.9
Number of schools	31

SOURCE: Diplomas Now fidelity of implementation program staff surveys, 2012, 2013, and 2014.

NOTES: For a list of all components and the percentage of schools adequately implementing each one, see Appendix Table A.3. One DN school closed prior to the second year of implementation and is not included in this analysis.

academies, they involve local businesses, professionals, and government agencies in planning and implementing activities and work experiences for students, such as job shadowing and internships. City Year AmeriCorps members lead community service opportunities for students and conduct outreach to parents. In cooperation with the school's staff, the Communities In Schools site coordinator and City Year AmeriCorps members also organize and participate in school events such as health fairs for family and community members.

Table 2.9

Pillar IV: Can-Do Culture and Climate, Service Contrast, Teacher Responses, Year 2

	DN	Non-DN	Estimated	Effect	
Survey Item	Schools	Schools	Difference	Size	P-Value
Integrated On-Site Support					
Average times per month math and English/language arts teachers reported City Year AmeriCorps members worked with students. ^a	14.4	1.7	12.7	2.15 ***	* <0.001
Average times per month math and English/language arts teachers reported City Year AmeriCorps members, college students, or volunteers from organized programs worked with students. ^a	18.2	3.4	14.8	1.70 ***	* <0.001
Average times per month math and English/language arts teachers reported any volunteer worked with students. ^{a,b}	23.7	6.9	16.8	1.03 ***	* <0.001
Family and Community Involvement					
Teachers reported the frequency parents and community members were offered opportunities to participate in school initiatives. ($0 = never$, $5 = less$ than weekly, $10 = daily$)	4.3	4.3	0.1	0.03	0.708
Teachers reported the school had a plan for parent and community engagement linked to specific goals for improving student learning and healthy development. (%)	54.2	53.3	0.9	0.02	0.769
Teachers reported the school helped all parents understand what they could do at home to support a student's success in school.	()		0.1	0.04	0.5(1
(0 – strongry disagree, 10 – strongry agree)	0.3	0.2	0.1	0.04	0.301
Sample size	31	30			

(continued)

The fidelity score for the Family and Community Involvement input averaged 0.50. The average score for top-quartile schools was 0.70 and average score for bottom-quartile schools was 0.35, suggesting that schools struggling with implementation in general were also less successful with this input (see Table 2.1). Still, as shown in Table 2.8, over 80 percent of schools met adequacy requirements for two of the six components by sponsoring at least one workshop for parents and sending home information to parents about how to help their children with

Table 2.9 (continued)

SOURCE: Follow-up surveys of teachers administered during the school years of 2012-2013 and 2013-2014. Respondents included middle school teachers who taught sixth or seventh grade and high school teachers who taught ninth or tenth grade.

NOTES: Across 61 study schools, 1,818 teachers participated in the follow-up survey, including 827 math and English/language arts teachers. One DN school closed prior to the second year of implementation and is not included in this analysis. For each of the above measures, data are missing for no more than 7.8 percent of the teachers. The difference in the percentage of missing data between DN and non-DN schools is no more than 3 percent for any of the above measures.

A two-tailed t-test was used for all statistical tests presented in this table. Statistical significance levels are indicated as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.

Effect sizes were computed using the standard deviations of all non-DN school teachers for the respective measures.

Rounding may cause slight discrepancies in calculating sums and differences.

^aSurvey items in this input have been calculated by weighting the frequency per month and then summing the weighted survey items in order to get a total times-per-month measure. For example, 0 = never, 1 = at least once a month, 2 = more than once a month but not weekly, 5 = once a week, 12 = more than once a week but not daily, and 20 = daily.

^bVolunteers include: City Year AmeriCorps members, students from local college or teacher-preparation programs, members of organized volunteer groups, peer tutors, and community members.

schoolwork at least once during the year. Still, most schools were unable to formally recruit and train parents to act as school volunteers. It is worth noting that this input is not considered critical to Diplomas Now model implementation and only one of the six components was considered critical.

Teachers in DN and non-DN schools were asked whether their school had a plan for parent and community engagement, the frequency with which parents were offered opportunities to participate in school initiatives, and the degree to which the school helped parents understand how to support students' academic success. As shown in Table 2.9, teachers reported some communication and engagement with parents and community members, and there were only negligible differences between DN and non-DN schools for any of these measures.

The somewhat low fidelity score and lack of service contrast on this input is not altogether surprising. Increasing the engagement of families is a particularly difficult challenge for middle and high schools, since parents tend to lessen their involvement in their children's schooling as children grow older.¹¹

¹¹Mulhall, Mertens, and Flowers (2001); Juvonen et al. (2004).

Summary

In all, DN schools were moderately successful in meeting the Diplomas Now model's implementation goals, and service contrast findings suggest that Diplomas Now-type activities were more prevalent in DN schools than in non-DN schools. DN schools implemented the majority of the program components in Teacher Teams and Small Learning Communities, Tiered Student Supports, and Can-Do Culture and Climate (Pillars I, III, and IV, respectively), and findings from the service contrast analysis suggest that the Diplomas Now model was improving programs in these areas relative to non-DN schools. The model's goals for involving parents and community members in school activities and decision making were not fully realized in Year 2, but a large majority of schools did meet an adequate level of implementation for some of the components. Development and training of the school-level staff members from each of the three partner organizations was implemented with fidelity to the model and these staff members reported high levels of access to each other.

Fidelity scores were lowest for Curriculum and Instruction with Professional Development (Pillar II). Service contrast findings reveal, however, that teachers at both DN and non-DN schools reported using the types of curricula and related teaching strategies specified by the Diplomas Now model, which suggests that similar reforms may have already been taking place at the schools (although it cannot be measured how closely aligned these alternative curricula were with those of the Diplomas Now model). Although DN schools were unable to reach the implementation goals for peer coaching and professional development set by the Diplomas Now model, instructional coaching for teachers was happening at DN schools at higher levels than at non-DN schools.

The inputs of Professional Development and Peer Coaching, Tiered Intervention Model, and Strong Learning Environments saw the biggest differences in fidelity between top- and bottom-quartile schools, suggesting that what set those top-quartile schools apart was their greater ability to implement school-wide reforms that required changes in district or school policies and structures.

Given the complexity and volume of activities they had to undertake, the level of implementation achieved by DN schools seems reasonable for their second year with the model, though there is still room for them to grow and improve in subsequent years. While the model's designers expected that DN schools would adequately implement the majority of inputs and components, this study represents the first time the Diplomas Now model has been measured in this way, and therefore it remains uncertain what minimum thresholds of implementation fidelity are needed to make a difference to schools and students. Still, these implementation fidelity and service contrast findings may have implications for the Diplomas Now impact analysis, which will be discussed in the next report. A program is more likely to have an impact on outcomes if it provides services that differ (for example, in quality, nature, or frequency) from the services students would have otherwise received.

The next chapter provides a deeper look into the fidelity and service contrast findings to provide insights into the variation in implementation from Year 1 to Year 2.

Chapter 3

Consistency and Change in Implementation Between Year 1 and Year 2

As discussed in the previous chapter, Year 2 fidelity of implementation data suggest that DN schools implemented the majority of program components, and that doing so led to notable differences from non-DN schools. Still, there was room for improvement: The overall average implementation score was 0.62 for the second year (on a scale of 0 to 1), quite similar to the first-year score.¹ Given the complexity of the Diplomas Now model, it is not surprising that DN schools could not fully implement all components of the model in the first year, and it might be expected that implementation would intensify over the first several years. On the other hand, the Diplomas Now model is an accelerated system of reform, bringing many resources to a school including a large number of auxiliary staff members. It might be expected that the most change would happen in the first year of implementation, while work in subsequent years would focus on maintaining and deepening strategies already implemented.

It is also worth noting that many of the Diplomas Now model inputs expand into schools a grade level at a time. During the first year of implementation, Diplomas Now emphasized services to the sixth grade in middle schools and ninth grade in high schools. In Year 2, Diplomas Now continued to offer support to this group of students as they transitioned into the seventh and tenth grades, but also made it available to the incoming cohort of sixth- and ninth-grade students. In other words, even though little change is seen in the implementation score from Year 1 to Year 2, the Year 2 score represents services provided to many more students.

This chapter compares Year 1 and Year 2 implementation in more depth, looking at both the fidelity of implementation and service contrast measures to illuminate whether implementation changed in specific areas over the two years, and if so, in what ways. The main findings discussed in this chapter include:

- The overall fidelity score remained consistent from Year 1 to Year 2, but scores improved in Integrated On-Site Support and Program Staff Training and Development, reflecting improvements in the appointment and training of Diplomas Now staff members.
- Although fidelity of implementation changed little from Year 1 to Year 2, the contrast between DN schools and non-DN schools increased in several areas,

¹The overall average fidelity of implementation score in Year 1 was 0.61.

including the collaboration of teachers in interdisciplinary teams, the professional development of teachers through peer coaching, and the use of data to identify struggling students. This contrast suggests that Diplomas Now brought more consistency and stability to the DN schools than they would have experienced otherwise.

The following sections explore how the fidelity scores and the differences in services provided by DN and non-DN schools (or "service contrast") changed from the first to the second year of implementation.

Comparison of Year 1 and Year 2 Fidelity Scores

Fidelity scores generally remained consistent from the first to the second year. Although DN schools implemented most components in both years, on average little additional growth occurred in the second year.

Table 3.1 provides average fidelity scores for each year overall, and by pillar and input. Although small fluctuations occurred across pillar and input fidelity scores, only Integrated On-Site Support and Program Staff Training and Development demonstrated statistically significant increases in fidelity to the model from the first to the second year. Further analysis of fidelity scores revealed that DN schools demonstrated several statistically significant improvements at the level of the components in these inputs: (1) Both the Talent Development school transformation facilitator and Communities In Schools site coordinator were hired and on site before the school year began, (2) the school-based team attended the three-day Diplomas Now summer institute, (3) the school transformation facilitator completed the five-day summer training session, and (4) a joint planning meeting took place prior to the start of the school year.²

Although implementation scores for the Student Supports input stayed consistent over the two years, the addition of the seventh and tenth grades meant that the number of students supported under this input grew quite a bit in most schools during the second year. The lower score in the second year for the Student Case Management input may be due in part to that same expansion, which caused larger caseloads for Communities In Schools case managers. While the percentage of schools meeting the model's goals for case management and academic support went up in Year 2, other support services seemed to have suffered to ensure those goals were met (for example, life skills/social development services and mental health services at

²See Appendix Table A.3 for detailed information on the percentage of DN schools adequately implementing each component.
Diplomas Now

Table 3.1

Fidelity of Implementation Findings, All DN Schools, Comparison of Year 1 and Year 2

	Average Fidelity Score			
Model Inputs	Year 1	Year 2	Difference	
Pillar I. Teacher Teams and Small Learning Communities	0.67	0.69	0.02	
Strong Learning Environments ^{a,b}	0.67	0.69	0.02	
Pillar II. Curriculum and Instruction with Professional Development	0.37	0.36	-0.01	
Professional Development and Peer Coaching ^{a,b}	0.44	0.42	-0.02	
Curriculum for College Readiness ^b	0.30	0.31	0.01	
<u>Pillar III. Tiered Student Supports</u>	0.72	0.69	-0.03	
Tiered Intervention Model ^a	0.76	0.75	0.00	
Student Supports ^a	0.72	0.73	0.00	
Student Case Management ^a	0.69	0.59	-0.10 ***	
Pillar IV. Can-Do Culture and Climate	0.65	0.69	0.04	
Integrated On-Site Support ^a	0.82	0.87	0.05 **	
Family and Community Involvement	0.48	0.51	0.03	
Program Staff Training and Development	0.61	0.71	0.10 ***	
<u>Overall</u>	0.61	0.62	0.01	
Sample size	32	31		
			(continued)	

(continued)

Table 3.1 (continued)

SOURCE: Diplomas Now fidelity of implementation program staff surveys, 2012, 2013, and 2014.

NOTES: Each of the nine inputs consists of a set of more specific components measured on a 0-1 scale. For each DN school, all of the component scores under an input are averaged to create the implementation score for that input. These scores are then averaged to create the pillar-level and overall implementation scores.

One DN school closed prior to the second year of implementation and is not included in the Year 2 analysis.

A two tailed t-test was applied to differences. Statistical significance levels are indicted as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.

^aIndicates model inputs designated as critical to the Diplomas Now model.

^bStrong Learning Environments, Professional Development and Peer Coaching, and Curriculum for College Readiness include some components specific to either middle schools or high schools.

some schools). The level of implementation for three of the five components in this input identified as critical increased from Year 1 to Year 2, while the level of implementation for all but one of the components not identified as critical decreased, suggesting that schools focused on those components deemed to be critical (see Appendix Table A.3). It is also possible the case managers at the schools made decisions about what was most important to implement that were slightly different from the originally specified program goals, adapting to the needs of specific schools and students. For example, the percentage of schools meeting the goals for behavior and attendance support services declined in the second year, but Communities In Schools case managers may have decided to focus on these services less since City Year AmeriCorps members were also supposed to concentrate on them (under the Student Supports input).

Figure 3.1 provides a visual comparison of school-level fidelity scores by pillar for Year 1 and Year 2. For each pillar, each DN school's Year 1 fidelity score was plotted against its Year 2 score, providing a snapshot of the overall trend in performance. Schools plotted above the diagonal experienced an increase in implementation during Year 2, while those schools below the line experienced a decline. For all pillars, the overall trend suggests consistent implementation, on average, from the first to the second year. Moreover, the figure supports the implementation findings discussed in Chapter 2 that schools had greater success in implementing Teacher Teams and Small Learning Communities, Tiered Student Supports, and Can-Do Culture and Climate (Pillars I, III, and IV) than Curriculum and Instruction with Professional Development (Pillar II). These findings are consistent across the two years.

Comparison of Year 1 and Year 2 Service Contrast

This section investigates whether differences between DN and non-DN schools in the implementation of Diplomas Now-like practices grew or shrank in the second year of implementation. In other words, the section investigates whether the *service contrast* between DN and non-DN schools changed over time. This comparison is based on surveys of teachers who taught

Diplomas Now

Figure 3.1

Comparison of Year 1 and Year 2 Fidelity Scores for Each DN School, by Pillar



Figure 3.1 (continued)

SOURCE: Diplomas Now fidelity of implementation program staff surveys, 2012, 2013, and 2014.

NOTE: Each data point represents the Year 1 and Year 2 pillar-level fidelity score for an individual DN school. One DN school closed prior to the second year of implementation and is not included in the Year 2 analysis.

sixth- and ninth-grade students during Year 1 and sixth-, seventh-, ninth-, and tenth-grade students during Year 2. The surveys cover different grades in Year 1 and Year 2 so as to capture the teachers most likely to participate in program implementation during each year. It should be noted that because these service contrast findings are based on only two years of data, there is a fairly significant degree of uncertainty involved in drawing conclusions about trends. Still, exploring the differences and similarities between Year 1 and Year 2 service contrasts offers a sense of how Diplomas Now implementation has changed the trajectory of DN schools.

Figure 3.2 presents a graphical comparison of the contrast between DN and non-DN schools across the first two years of implementation. Each data point in these scatter plots represents teachers' average Year 1 response to a specific survey question under each pillar plotted against the average Year 2 response. The fact that most of the data points are above the line suggests that the contrast in school practices between DN and non-DN schools was consistently greater in Year 2 than Year 1.³ Twenty-seven of the 29 school practices measured in the teacher survey had a greater service contrast in Year 2 than in Year 1. The shaded data points represent survey items that did not show a statistically significant difference between DN and non-DN schools in Year 1, but did show a statistically significant difference by Year 2. Although some of the measures only show a minimal increase across implementation years, 9 of the survey items across the first three pillars show statistically significant differences between DN and non-DN schools in Year 2 but not in Year 1.⁴

For example, within Pillar I, there was a statistically significant difference between DN and non-DN schools in the frequency with which teachers collaborated in interdisciplinary

³For these graphical comparisons, the teacher survey measure results are drawn from Appendix Tables B.6-B.9 for Year 1 and Tables 2.3, 2.5, 2.7, and 2.9 for Year 2.

⁴Regardless of statistical significance during a particular year, 12 of the measures indicate significant growth in service contrast between implementation years. A variation of the impact model presented in Appendix B was used to test whether there were statistically significant differences between the service contrast estimates in Year 1 and those in Year 2. Data from both implementation years were included in the impact model. For each survey measure, the p-value of the difference between the Year 1 and Year 2 service contrast estimates was obtained by interacting the implementation-year variable with each parameter and running a three-level model (that is, teachers within school-year clusters, and school year within school).

Diplomas Now

Figure 3.2

Comparison of Year 1 and Year 2 Service Contrast Teacher Measures, by Pillar



(continued)

Figure 3.2 (continued)

SOURCE: Follow-up surveys of teachers administered during the school years of 2011-2012, 2012-2013, and 2013-2014.

NOTES: Each data point represents the difference (in effect size) between DN and non-DN teachers' responses to each survey item for Year 1 and Year 2. Data points that are shaded represent survey items that were not statistically significant at the 10 percent level in Year 1 but became statistically significant in Year 2. Unshaded data points represent survey items that were either statistically significant in both years or not statistically significant in either year. A two-tailed t-test was used for all statistical tests.

Effect sizes were computed using the standard deviations of all non-DN school teachers for the respective measures.

teacher teams in Year 2, but not in Year 1.⁵ In Pillar II, math and English/language arts teachers at DN schools did not report receiving professional development and peer coaching significantly more often than non-DN teachers during Year 1, but did report receiving it significantly more often during Year 2.⁶ While there had been statistically significant contrast between DN and non-DN schools for only 3 of the 12 measures in Pillar III during Year 1, 5 additional practices associated with Tiered Student Supports showed statistically significant differences during Year 2, including teachers' use of data to target struggling students and all 3 of the practices related to the case management of students most at risk of dropping out.⁷ In Pillar IV, all of the Integrated On-Site Support measures show contrast in both years while none of the Family and Community Involvement measures show much contrast in either year.⁸

Since service contrast is a relative measure of implementation, changes in its magnitude can be driven by fluctuations in the services available at non-DN schools as well as DN schools. For example, as noted above, there is a statistically significant difference between DN and non-DN schools in the frequency with which teachers collaborated in interdisciplinary teacher teams in Year 2, but not in Year 1. This could be because teachers at DN schools collaborated with interdisciplinary teams more frequently in Year 2, or because teachers at non-DN schools collaborated with interdisciplinary teams less frequently.

Figure 3.3 demonstrates visually whether the increases in service contrast from Year 1 to Year 2 were because DN schools improved, non-DN schools declined, or a combination of both. These graphs suggest that it was mostly a combination of both. DN schools generally improved their implementation from the first to the second year. However, this improvement in

⁵See Appendix Table B.6 for Year 1 teacher survey results for Pillar I and Table 2.3 for Year 2.

⁶See Appendix Table B.7 for Year 1 teacher survey results for Pillar II and Table 2.5 for Year 2.

⁷See Appendix Table B.8 for Year 1 teacher survey results for Pillar III and Table 2.7 for Year 2.

⁸See Appendix Table B.9 for Year 1 teacher survey results for Pillar IV and Table 2.9 for Year 2.

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Figure 3.3

Differences Between DN and Non-DN Schools in Changes in School Structures and Practices from Year 1 to Year 2, by Pillar

Pillar I: Teacher Teams and Small Learning Environments

Pillar II: Curriculum and Instruction with Professional Development





Change in average teacher survey measures (in standard deviations) at DN schools

----- Change in average teacher survey measures (in standard deviations) at non-DN schools
(continued)

Figure 3.3 (continued)

SOURCE: Follow-up surveys of teachers administered during the school years of 2011-2012, 2012-2013, and 2013-2014.

NOTE: All values are expressed in terms of standard deviations (SD). Standard deviations have been estimated using the sample of non-DN teachers in Year 1 for sixth and ninth grades.

DN schools was not as great as the amount that non-DN schools declined in their implementation of similar activities.

For example, school practices such as block schedules and teachers collaborating in interdisciplinary teams (Pillar I) and a tiered system of interventions (Pillar III) showed increased implementation at DN schools from Year 1 to Year 2, but an increase smaller than the corresponding decline in implementation at non-DN schools. In Pillar II, teachers at DN schools actually reported their schools were slightly less successful in implementing elements of teacher professional development and college readiness curricula in Year 2 than they were in Year 1. Nevertheless, the contrast in services between DN and non-DN schools still grew because teachers at non-DN schools reported stronger decreases associated with these inputs. Across the two years of implementation, the increase at DN schools in additional on-site staff members and engagement of families and communities (Pillar IV) was approximately equivalent to the drop in these areas at non-DN schools.

Overall, two key findings emerge from the comparison of service contrasts between Year 1 and Year 2. First, the differences between DN and non-DN schools became greater in Year 2 than they were in Year 1. Second, these increases in service contrast appear to be due to a combination of DN schools improving their implementation over time and non-DN schools reducing their implementation of similar practices. Thus, not only does the service contrast suggest that Diplomas Now improves the implementation of key practices at DN schools, it also suggests that Diplomas Now may be preventing these schools from suffering a decrease in the implementation of key practices that they would have experienced otherwise.

Comparison of Fidelity of Implementation and Service Contrast

Both fidelity of implementation and service contrast showed gains in measures associated with Integrated On-Site Support between Year 1 and Year 2. But in general, fidelity showed little growth between Year 1 and Year 2 for most pillars, while there was some growth in service contrast across all pillars. There are at least two main factors that could explain these differences between the service contrast and fidelity findings.

First, the two analyses use different data sources. Surveys of Diplomas Now staff members supplied most of the data for the fidelity analysis while surveys of teachers and administrators supplied the data for the service contrast analysis. It may have taken teachers at DN schools more time to fully engage with and understand the components of the Diplomas Now model. As a result, from the perspective of teachers Diplomas Now may have intensified between the first and second year of implementation even though Diplomas Now staff members did not see much difference. This theory is supported by the fact that sixth- and ninth-grade teachers who were more likely to have participated in the program for two years — reported even stronger service contrast during the second year than the full sample of sixth-, seventh-, ninth-, and tenth-grade teachers. Sixth- and ninth-grade teachers may have had a deeper understanding of the program in Year 2 than seventh- and tenth-grade teachers, who may have been encountering it for the first time.⁹

Second, the service contrast accounts for structures and school practices implemented in both DN and non-DN schools, whereas the fidelity analysis only examines DN schools' programs. Consequently, the decline at non-DN schools from Year 1 to Year 2 in Diplomas Nowlike practices contributed significantly to the increase in service contrast, but did not affect the fidelity results.

Summary

Comparisons of the first and second year demonstrate clear improvements in DN schools' implementation of the Integrated On-Site Support and Program Staff Training and Development inputs, suggesting that Diplomas Now was better equipped by the second year to hire and adequately train staff members in a timely fashion. Still, between Year 1 and Year 2, there is little overall difference in the fidelity of implementation across the rest of the inputs. As noted in the last chapter, it is not yet known what level of implementation is needed to effect change at schools so it is hard to judge whether this lack of growth in implementation from Year 1 to Year 2 is a problem. Given that implementation of the Diplomas Now model is accelerated by design — with all components rolled out in the first year and an influx of additional staff members deployed to move reforms forward quickly and offer extra support to students — it may not be surprising that little change occurs in Year 2. It could be that the majority of the change Diplomas Now effects in a school occurs by the end of Year 1. It is also possible that the lack of change in the fidelity score can be attributed to the additional grade levels being supported in Year 2. Schools may have been extending additional effort, but spreading that effort over larger numbers of students. Finally, it is also worth noting that the fidelity score generally measures whether pro-

⁹See Appendix Tables B.10-B.13 for service contrast findings during Year 2 for sixth- and ninth-grade teachers only.

gram components are being implemented at all, and if they are, at what frequency. It does not measure the quality of implementation. If program components were implemented *better* in Year 2 - as opposed to simply *more* — that would not be captured by the fidelity score.

In contrast to the fidelity score, service contrast measures showed quite a bit of growth from Year 1 to Year 2. This disparity may reflect the difference in the perspectives and experiences of the survey respondents who provided the data for the two analyses, Diplomas Now staff members for the fidelity score and teachers and administrators for the service contrast measures. The consistency in program implementation over the two years at DN schools also seems to contrast with a lack of consistency at non-DN schools, suggesting that Diplomas Now may have brought stability to DN schools.

Drawing on qualitative data from selected DN schools, Chapter 4 expands on the continued challenges and successes of Year 2 implementation. It explores how DN staff members deal with external factors, such as principal turnover, that may impede successful implementation, and also touches on effective practices for embedding Diplomas Now in schools and sustaining it in the long term.

Chapter 4

Emerging Successes and Continued Challenges in Year 2 Implementation

This chapter examines Year 2 qualitative data collected at a set of case study Diplomas Now schools (DN schools) in several districts. It expands on themes identified in the previous report on first-year implementation, which concluded with a discussion of continued challenges and examples of ways to address implementation barriers. Grounding these findings in the existing research literature on school reform serves as a way to make these data more meaningful and build upon the current understanding of the complexities of improving schools. The findings in this chapter supplement the fidelity of implementation and service contrast findings discussed in the previous two chapters by exploring the interview and focus group data collected in the case study schools. It offers a more in-depth look at the accomplishments of Diplomas Now staff members and the challenges they faced in implementing the model. Given that these data are drawn from a subset of the Diplomas Now sample, caution is advised in generalizing findings to all DN schools.

Previous research into comprehensive school reform efforts has identified factors that contribute to sustained school change. One such factor is the ability to find and maintain an appropriate balance between fidelity to the reform model and adaptation to the local context. The research literature also notes the importance of aligning the planned school reform activities with existing school practices and requirements. Additionally, successful implementation hinges on teacher, administrator, and district support for and ownership of the reform. The extent to which teachers, principals, and policies remain constant (that is, the extent to which the reform environment remains stable) is also an important influence on implementation.¹ Similarly, schools that sustain reforms often demonstrate continuity of leadership, commitment among stakeholders, and integration of practices into the school structure and culture. Turbulent district conditions, on the other hand, can make it difficult for reforms to endure.² Taken together, these concepts inform the interpretation of four central themes from the second year of Diplomas Now implementation:

• Various factors external to the program (such as school closures, principal turnover, and budget cuts) affected the implementation of Diplomas Now. The findings offer examples of how to adapt to changing school contexts.

¹Desimone (2002).

²Datnow (2005).

- Data from Year 2 implementation pointed to progress in Diplomas Now becoming "part of the school." In many cases, Diplomas Now staff members better understood how to align the program with school goals and garner support from school staff members.
- Diplomas Now staff turnover presents both challenges and opportunities in continuing the momentum of program implementation.
- Sustaining program components at the end of the Investing in Innovation (i3) grant period is not yet a primary concern for many school or program staff members who participated in case studies; however, participants shared some early thinking about this issue. Participants recognized the need to maintain the services offered by additional Diplomas Now personnel and the importance of gaining support from administrators to make a priority of elements of Diplomas Now (such as arranging schedules to include common planning time).

This chapter presents findings derived primarily from the analysis of qualitative data collected through interviews and focus groups at nine Diplomas Now case study schools in four school districts.³ Year 2 fidelity scores at case study schools were similar to the scores of the overall sample (0.63 and 0.62, respectively; detailed case study implementation scores by year, pillar, and input can be found in Appendix Table C.2). Individuals from the case study schools shared their perceptions of the second year of Diplomas Now implementation in response to questions about the following topics: (1) collaboration, (2) factors that facilitated and hindered implementation, (3) sustainability, and (4) lessons and recommendations. Data analysis included systematic coding of interview and focus group transcripts and followed best practices in qualitative research (see the discussion of methodology in Appendix C).

The sections that follow present (1) contextual factors external to Diplomas Now, (2) the integration of the Diplomas Now model into the fabric of the school, (3) the implications of turnover within the Diplomas Now team, and (4) early lessons about program sustainability. Each section includes a description of implementation challenges in Year 2 with references to how these barriers were similar or different to those schools faced in Year 1. Each section also includes a discussion of successes and the factors that facilitated them as well as recommendations for implementing Diplomas Now and other whole-school reforms. The chapter includes

³The analysis is based on all data collected from case study schools in Year 2 of Diplomas Now implementation. It includes data collected in spring 2013 from one school that closed after Year 2 as well as data collected in spring 2014 from a replacement case study school from the same district, also in its second year of Diplomas Now implementation.

examples to illustrate common themes that emerged across participants and schools and concludes with an interpretation of key findings.

The Influence of Factors External to Diplomas Now

"In education, the only thing consistent is change." This field manager's insight echoes early findings from Year 1 presented in the first Diplomas Now report, which described how changes in the school that are external to Diplomas Now could impede the implementation of the program. Analysis of the qualitative data indicates that external challenges related to school staff turnover and reduced school resources persisted during the second year of implementation at some case study schools. Added challenges in Year 2 related to district decisions to close or reconstitute schools, replace administrators, and lay off school staff members. Such factors were beyond the control of the Diplomas Now partners and presented great challenges to implementation, and school support for program activities often waxed or waned because of them. Some case study schools maintained momentum while others no longer had the support to continue certain Diplomas Now activities. This dynamic mirrors the pattern seen among DN schools as a whole, as illustrated in Figure 3.1, which depicts the variation in school fidelity scores across years.

The Diplomas Now model intentionally targets at-risk schools, typically those eligible for Title I funds,⁴ primarily in urban school districts with large populations of low-income and minority students. Its designers anticipated that contextual factors like limited resources, variable and inconsistent staffing, and contentious school climates would affect both DN and non-DN schools. Although contextual factors like these posed challenges to the implementation of the Diplomas Now model, the consistency and stability provided by Diplomas Now probably mitigated their effect. As discussed in Chapter 3, the implementation of Diplomas Now-like practices in non-DN schools declined from the first year to the second year of implementation, which may reflect the adverse effect of these contextual factors.

The sections that follow illustrate various scenarios at case study schools facing closure, principal turnover, and budget cuts. The examples also showcase the ways that Diplomas Now's presence mitigated the effects of these difficult transitions.

⁴Title I funds from the U.S. Department of Education go to schools with high numbers or high percentages of students from low-income families.

School Closures and Transitions

Four out of nine case study schools from three districts were slated to close (two), nearly closed (one),⁵ or were reconstituted to serve additional grades (one) during the second year of implementation. The four schools included two middle schools and two high schools. Among the 31 DN schools in the study in Year 2, 5 were slated to close by Year 3.⁶ The experiences at case study schools differed. Schools that overcame these problems tended to cite administrator or district support for the Diplomas Now model and the flexibility of Diplomas Now staff members in adapting their roles or practices.

At one of these schools that was slated to close, the administrator, the district, and a cohesive Diplomas Now leadership team (Talent Development school transformation facilitator, Communities In Schools site coordinator, and City Year program manager) strongly supported the Diplomas Now model and reportedly worked well together. All these factors helped sustain strong implementation through the second year even while teachers and students were acclimating to the many changes taking place at their school, and dealing with new uncertainties stemming from its pending closure. The district also required common planning time, which facilitated the implementation of other Diplomas Now activities like Early Warning Indicator (EWI) meetings. Although implementation negatively affected school climate and student morale. However, one teacher observed that the school climate had actually improved, and attributed that to the presence of Diplomas Now in the building. Reportedly, Diplomas Now staff members offered support that counteracted some aspects of the negative school climate related to the transition.

In contrast, another school facing a major transition lacked district support for Diplomas Now, particularly during the second year of implementation, when the district leader who had championed Diplomas Now left the district. According to the field manager for this district, "Nobody really wanted to take responsibility on the district's end to be the guardian of Diplomas Now.... The person who actually signed the letter of intent is no longer here." As a result, the school transformation facilitator no longer had access to the district-level data necessary for EWI meetings, despite having had access in Year 1.

One case study school offered an example of Diplomas Now staff members supporting the school through an otherwise rough transition. An administrator described how Diplomas

⁵The district decided to close the school, then reversed that decision a few weeks before the school year began (the summer before Year 2 of Diplomas Now implementation) and rehired school staff members and administrators.

⁶There were originally 32 DN schools in the study, but one school did close after the first year of implementation. Of the 30 non-DN schools in the study, 2 were slated to close during Year 2.

Now "was a very great partner during that time.... [It] really helped support the teachers through these critical times." Program staff members described how they shifted their stance from trying to prevent school closure (by showing data to the district that demonstrated their successes) to supporting students and school staff members during the difficult transition. The role that Diplomas Now staff members played in supporting academy structures (including a ninth-grade academy) appeared to preserve a sense of community and a focus on the current needs of students.

Another Diplomas Now team faced many challenges trying to establish relationships with the school's staff and garner support for activities such as EWI meetings in the midst of the school's transition. According to the school transformation facilitator, "It's not like [teachers] will let you have their full attention to give them information on what EWI meetings should look like, if they are not even seeing the same students consistently, and they're still trying to get that squared away.... It just didn't feel like there was a good, trusting environment." The program manager at this school also reported that the Diplomas Now leadership team spent a lot of time at the beginning of the school year trying to rebuild relationships with school staff members and administrators. As one focus group participant noted, "Diplomas Now really needs to figure out a way to change the way we go about managing our relationships. And that also means that, when a school partner gets phased out or when a school is going to close, that we don't just shut the door on the people that we've worked with for an entire year."

Principal Turnover

Principal turnover at several case study schools affected implementation in Year 2.⁷ A third of the case study schools began the second year of Diplomas Now implementation with new principals. One of those schools received a second new principal at the beginning of Year 3. Principal transitions were not specific to case study schools alone and appear to affect other DN and non-DN schools as well. Across all 31 DN schools in the study, approximately a third faced principal turnover during the second year of Diplomas Now implementation.⁸ The effect of principal turnover at case study schools varied, either bolstering or constraining implementation, depending on the new principal's awareness of and support for Diplomas Now. To overcome potential challenges to implementation introduced by a change in leadership, Diplomas Now staff members sought to establish relationships with incoming principals early on and demonstrated flexibility in their roles to accommodate those new principals' needs.

⁷Although schools also experienced other administrative changes, a school's principal serves as its primary administrator, so transition in that role is likely to have the most drastic effect on Diplomas Now implementation.

⁸The same was true across the 30 non-DN schools in the study: Approximately a third faced principal transitions during the second year of Diplomas Now implementation.

Program staff members from two case study schools that had new principals expressed frustration at having devoted extensive effort to building relationships and securing support for Diplomas Now, and then having to "start all over again." A Diplomas Now regional staff member described it this way: "A lot of it is about making sure that the leadership knows exactly what we're doing and building that trusting relationship.... We're a partner for the school, so just having to reset that every time is a little frustrating." School and program staff members from one school noted that the loss of the principal had a negative effect on students and the school's climate because many students viewed the former principal as a "father figure." Case study participants reported an increase in fights, a decrease in student motivation, and considerable student frustration about having a new principal. However, school staff members also noted that the presence and consistency of Diplomas Now leaders had a strong and positive influence at the school. For example, a school counselor stated, "I see a really cohesive team that works well together to keep the flow going by trying to keep students on task.... The administrative changes have been extremely difficult for the staff, morale-wise, but I think for the students, they've got their Diplomas Now family."

Adversarial relationships between administrators and Diplomas Now staff members can cripple implementation. Case study participants spoke about many challenges at one school, stemming from a new principal who actively opposed Diplomas Now at the beginning of the school year. Nearly all participants at this school attributed the waning implementation of Diplomas Now to a lack of administrator support. The principal's negative sentiments and frequent references to Diplomas Now as an "outside agency" starkly contrasted to Year 1 implementation at the school. One teacher described how the Diplomas Now team and the school staff were "like family last year.... It was a whole different feeling of the school." The principal subsequently participated in additional Diplomas Now training and said that it had led to a better understanding of the program's value and sparked a new commitment to ensure it succeeded.

Budget Cuts and Workforce Reductions

Diplomas Now is operating in a time when school budget cuts have become commonplace, affecting school districts across the country. Based on the most recent data available, the national median expenditures per pupil for regular school districts decreased 1.5 percentage points between 2010 and 2011; it is expected this trend has continued since these data were last reported.⁹ Case study participants from four case study schools in two districts cited budget cuts that led to subsequent teaching staff reductions as challenges to Year 2 implementation of Diplomas Now. Schools from one district were unable to pay for instructional coaches and did not

⁹Cornman, Keaton, and Glander (2013).

have sufficient staff time for common planning sessions or EWI meetings in Year 2, practices that had been in place during Year 1. A program manager said:

It's been a huge challenge with the climate of the school district and the lack of resources and the lack of money, not having common planning time with teachers. We're not implementing what needs to be implemented.... We don't have anybody to staff an in-school suspension, so we're just suspending students out of school.... Our suspensions have been through the roof. So our [progress to-ward the] goal of getting students to have less suspensions is mediocre.

However, one administrator committed to reestablishing common planning in Year 3, after noticing students slipping in Year 2 because the school was no longer looking at student data through the EWI lens.

One unintended consequence of budget cuts and layoffs was increased support for Diplomas Now. School staff members from two case study schools in different districts reported that they welcomed the additional staff and resources the program provided to schools. For example, veteran teachers at one school reportedly did not understand the benefits of Diplomas Now and held negative attitudes toward it in Year 1. After approximately a third of teachers were laid off, leading to larger classroom sizes with more than 40 students per class, teachers began to express gratitude for Diplomas Now's contributions of added support inside and outside of the classroom.

Embedding Diplomas Now in Schools

Case study data illuminate effective practices that can help embed Diplomas Now staff members and structures into school culture and fabric: (1) aligning program goals with school priorities and (2) securing administrator and teacher support for the Diplomas Now model. Tying these two notions together, one case study participant noted that support is a "two-way street" (that is, not only does the school have to support the model, but the Diplomas Now staff has to support the school's goals). However, as discussed later in this chapter, in some cases program staff turnover can make it harder for school administrators to sustain support for the Diplomas Now model or integrate it into their schools.

Aligning Goals

As discussed in Chapter 3, DN schools as a whole demonstrated an improved ability in Year 2 to successfully implement Integrated On-Site Support, the Diplomas Now model input concerned with providing staff members to a school to help coordinate school transformation, staff support, and additional services. Similarly, in Year 2 school and program staff members at the case study schools more often perceived Diplomas Now as "part of the school" than they did in Year 1, when greater tensions were reported between program and school staff members. In some cases, however, aligning program goals with school priorities remained difficult. Embedding an external program into a school's culture seems to require both connecting Diplomas Now to the school vision and coordinating among the Diplomas Now partners.

Diplomas Now staff members and school administrators need to work closely in order to align their goals and create shared expectations. Some administrators used the resources that came with Diplomas Now — such as additional staff members and EWI data — to pursue their own school priorities alongside those of Diplomas Now. Administrators offered the following recommendations for other DN schools (also important considerations for any school reform initiative): (1) Identify how the program's staff can help address your school's unique needs, (2) develop the roles of program staff members to fit your approach, and (3) establish procedures that keep all stakeholders accountable for their commitments. Case study participants described two practices as particularly useful: needs assessments conducted by the Communities In Schools site coordinator (in an effort to understand the school context) and City Year Ameri-Corps members' ability to fulfill coordinator roles (such as attendance coordinator).

Securing Support from School Staff Members

Another important aspect of embedding Diplomas Now in schools is garnering support from administrators and teachers. Much as they did after the first year of implementation, a majority of case study participants identified administrator and teacher support as a driving force for successful program implementation. Although it remained a challenge to ensure that teachers and administrators knew about and supported Diplomas Now, there was evidence of improvement along those lines in Year 2, suggesting that school staff members were becoming more familiar with the Diplomas Now model.

At some case study schools a lack of administrator support presented continuing challenges to implementation in Year 2, while at other case study schools administrators became more enthusiastic in Year 2 because they better understood the mission and staff roles of Diplomas Now. Similarly, case study respondents observed that teachers became more accepting of Diplomas Now in Year 2, although securing their active support often remained a challenge. Some teachers were reportedly not "fully bought into the program," resisting activities such as instructional coaching, but willing to engage in other elements of Diplomas Now, such as EWI meetings. Among other lingering concerns, teachers and administrators said they hesitated about Diplomas Now activities like instructional coaching due to reluctance to give up current practices, worries that Diplomas Now staff members were evaluating them, and lack of knowledge about Diplomas Now. Identifying ways to encourage teacher acceptance of the model is particularly important given that Curriculum and Instruction with Professional Development (Pillar II) had the lowest average fidelity score in Year 2 across all schools (as described in Chapter 2).

Diplomas Now staff members identified various approaches they used in Year 2 to increase teacher and administrator understanding of the program, such as developing resource maps to clarify roles and services (including both Diplomas Now and other school personnel and programs), demonstrating EWI meetings, and conducting skits to portray a coaching cycle. These approaches may have helped more schools implement all the critical components of the Strong Learning Environments input. Participants also spoke about the importance of backing from the district, both in providing sufficient training opportunities to acquaint school staff members with the program and in setting a tone of support for Diplomas Now that leaders at the school could emulate.

Case study participants also spoke extensively about the interaction between teachers and City Year AmeriCorps members, commenting on teachers' increased willingness to call upon this resource in their classrooms. As was the case in the first year of implementation, Year 2 case study data reveal mixed findings about teachers setting clear expectations for City Year AmeriCorps members. At one school, City Year AmeriCorps team leaders reported that Ameri-Corps member and teacher interactions were much smoother in Year 2, especially with teachers already familiar with Diplomas Now from the first year of implementation. Teachers at another school reported that they continued to grapple with how to work with City Year AmeriCorps members "the way we are supposed to." As one instructional facilitator said: "What needs to be stepped up is the messaging from administration and from us, the model providers, that ... teachers need to set aside time purposefully at least once a week to sit down with your assigned [Ameri]Corps member to review what the content is and specifically what you need their role to be in the classroom in supporting you." Other case study participants offered suggestions for clearly defining AmeriCorps member roles that echoed this sentiment.

Implications of Turnover Within the Diplomas Now Team

As discussed in previous chapters, the most fully implemented model input was Integrated On-Site Support, which covers the on-site support and staffing Diplomas Now provides. That finding is supported by the service contrast analysis, which shows that DN schools were more likely to have volunteers in English/language arts and math classes than non-DN schools. Moreover Integrated On-Site Support and Program Staff Training and Development demonstrated statistically significant increases in implementation from the first to the second year. Some schools continued to face challenges in these areas, however, and the case study data illuminate some of the nuances of their experiences. During the first two years of implementation, all nine case study schools experienced turnover in the Diplomas Now leadership team, as one or more of its members left. This turnover came in addition to the expected turnover of City Year AmeriCorps members, who typically serve one-year terms. The timing of these transitions (whether they occurred between Year 1 and Year 2 or during the school year) and the specific positions that became vacant varied across schools. Such changes may be inevitable, and some case study schools handled them better than others.

Many case study participants reported that this staff turnover increased the workload of returning team members, as they took on responsibilities not part of their original job descriptions. For example, one Communities In Schools site coordinator reported working with EWI data instead of student case management. Similarly, another school relied heavily on the City Year program manager after the school transformation facilitator from Talent Development Secondary departed.

In some cases, the departure of a key Diplomas Now team member also slowed program momentum. For example, the site coordinator at one school started to establish relationships with students, but then departed in the middle of Year 2. Other Diplomas Now staff members at the school could not deliver the same intensive Tier III services (such as counseling or home visits) because, as they noted in focus groups, they had neither the qualifications nor the experience necessary. In lieu of hiring a new site coordinator, a staff member from Communities In Schools came to the school once a week to help students adjust. However, "kids have problems five days a week, not just [on] Thursday," as a City Year AmeriCorps team leader said, and many students reportedly felt slighted and abandoned. At another school, two staff members from the Diplomas Now leadership team and a school administrator all departed after the first year of Diplomas Now implementation. A City Year AmeriCorps member at this school spoke about how these changes made it difficult to sustain the work they had accomplished in Year 1: "I don't think we [the Diplomas Now team] all sat down and talked about how to reconnect the dots to provide the full range of services."

There were also instances, however, in which incoming and existing staff members worked together effectively to make transitions seamless and sustain Diplomas Now implementation. It helped when schools were able to maintain at least some consistency in the Diplomas Now leadership team: It preserved useful institutional knowledge about the successes and challenges of the first year of Diplomas Now implementation that could be shared with new program staff members. For example, returning Diplomas Now staff members at many schools helped to orient new team members and used the lessons they'd learned from Year 1 to "start Year 2 off right." In other cases, City Year AmeriCorps members who became team leaders in Year 2 spoke positively about having increased responsibilities after gaining their initial experience in Year 1.

Finally, on occasion staffing changes even brought new opportunities. For example, at one school, participants credited a new school transformation facilitator — described as very engaged and organized — as the reason that teachers became more receptive to Diplomas Now in Year 2.

Early Lessons to Sustain Diplomas Now

After the i3 grant currently supporting Diplomas Now ends, the model's designers envision the program sustaining itself in schools in two ways: (1) Communities In Schools site coordinators and City Year AmeriCorps members must demonstrate their efficacy well enough that school districts, local philanthropies, or other entities are willing to invest in their services; and (2) Diplomas Now must build schools' institutional capabilities so that they can take on the responsibilities of school transformation facilitators.¹⁰ Although interview protocols included specific questions about sustainability, case study participants offered limited insights about plans for continuing elements of the program at the conclusion of the i3 grant period. For the most part, Diplomas Now and school staff members were primarily focused on the current and upcoming school years. However, many — including both Diplomas Now and school staff members — described their concern about what would happen when the entire array of Diplomas Now support services were no longer available (at least not in their current form). Talking with participants about sustainability often caused them to feel overwhelmed, since most had not begun to think about or plan for sustaining program activities beyond the current funding period.

A few issues seemed to make planning for sustainability particularly challenging. Many case study participants observed that the design of the model encourages the school to rely on the program. A City Year program manager discussed the thin line between encouraging self-sufficiency and helping students and teachers too much: "I feel like we need to be in a position where we're weaning off our support." City Year AmeriCorps members at another school expressed concern about how well the school would function without Diplomas Now.

The other major barrier to sustainability that case study participants identified was turnover among both school and the Diplomas Now staff members. These transitions often result in "reinventing the wheel every time [a new staff person comes on board]," as one program manager commented. In other words, if the way to make the program sustainable is by building schools' own capabilities, then constant change in key roles makes that much more complex.

¹⁰Once DN schools move to "sustaining status," principals continue to have access to forms of support such as summer training, virtual platforms for peer sharing, data reports, and some technical assistance through the Diplomas Now Principals Network.

In some cases, Diplomas Now and school staff members did make progress towards sustainability. Two school transformation facilitators in different districts talked about how they trained teachers to take over the facilitation of EWI meetings. Some school administrators reported taking other steps towards sustainability by making it a priority to put certain elements of Diplomas Now in place. Because some aspects of Diplomas Now, like common planning time, are not resource-intensive, once administrators see their value they are likely to be motivated to incorporate them into existing practices, a step critical to sustainability. This theme is reinforced by the service contrast data described in Chapter 2, which indicate that teachers at DN schools were more likely than their counterparts at non-DN schools to report collaborating in interdisciplinary teams.

When case study participants were invited to recommend how their school and other schools might sustain the successes achieved by Diplomas Now, common responses included additional funding, additional staff members, and support from school staff members for the Diplomas Now model. Most participants pointed to funding as the most important factor in continuing at least some components of Diplomas Now. As a school transformation facilitator said, "Time and money seem to be the biggest things for sustainability." Aside from funding, other important factors for sustaining the program included the contribution of "people power." Administrators often said that if they had a limited budget and could continue only a few aspects of Diplomas Now, they would make a priority of funding for City Year AmeriCorps members. Participants also said it would be important to maintain support from school staff members — the leaders who champion elements of the program. One City Year program manager commented it was important for Diplomas Now staff members to foster the notion that the school owned the work: "I think sustainability, number one, stems from everyone knowing what their role is and knowing how to best engage each partner to leverage the program."

Summary

The findings presented throughout this chapter illustrate how contextual issues, support from school staff members, and staff turnover within the program can influence the implementation and sustainability of Diplomas Now. The chapter has offered examples of the ways Diplomas Now and school staff members achieved successes in the midst of circumstances often out of their control. One theme that arose in many of the conversations was the importance of garnering support from administrators. None of these case study schools yet epitomizes ideal model implementation, in which the Diplomas Now staff found the right balance of flexibility and adherence to the model's prescriptions while cultivating ample support from administrators. However, taken together, the findings suggest that the mix of those three elements — flexibility, fidelity, and administrative support — may be the key to achieving the goals of Diplomas Now.

nimble in response to emerging school needs in a way that stays true to Diplomas Now principles. Statistically significant increases from Year 1 to Year 2 in the implementation of Integrated On-Site Support and Program Staff Training and Development provide evidence that DN schools have made strides in this direction, as do the corresponding findings of increased service contrast in Year 2. It is likely that these improvements will help Diplomas Now teams become more cohesive and responsive, and encourage administrators to redouble their efforts with greater enthusiasm.

Chapter 5

Conclusion

Diplomas Now is a school reform model combining the efforts of three national organizations — Talent Development Secondary, City Year, and Communities In Schools — to work with urban schools in low-income communities. It seeks to refine schools' structures to provide more personalized experiences for students, promotes curricula focused on college readiness, sets up an Early Warning Indicator data system to identify struggling students, and brings in additional staff members and resources to ensure those students receive the extra academic or social support they need to be successful. It is a complex, multidimensional program of 111 separate program components categorized into nine inputs, being implemented in urban public schools that are by nature already complex and constantly changing, each with its own systems and needs. The Diplomas Now team at a school works to mold the model's programs to fit those specific needs.

In the first year, schools implementing Diplomas Now (DN schools) put in place a substantial amount of the program model. This level of implementation was sustained during Year 2, leading to a clear contrast in services between DN and non-DN schools in many areas. The contrast in services grew from the first to the second year, suggesting that while implementation fidelity (as described in surveys by Diplomas Now staff members at the DN schools) remained steady during the first two years, the differences in services between DN and non-DN schools (as described in surveys by teachers and administrators) grew. This may suggest that school staff members in DN schools came to understand and participate in the program components more, and possibly that they became more committed to these reforms. But a decline in similar programs and services at non-DN schools also suggests that in an environment of continual change and in many cases financial stress, Diplomas Now may have offered stability and consistent support to DN schools. The following sections highlight some key findings of this report.

Implementation Fidelity

During Year 2, DN schools were moderately successful in implementing the model as designed, with a fidelity score of 0.62 across all DN schools on a scale from 0 to 1 (where 1 would indicate ideal implementation). This level of implementation was similar to that of the first year, even as the program expanded into the seventh and tenth grades. The fidelity score compares actual implementation with the ideal version laid out by the model's developers. The level of implementation needed to elicit positive change has yet to be empirically tested, so it is not yet possible to assess whether this level of implementation is enough to have an impact on students' outcomes. It is possible that the lack of growth in the fidelity score from Year 1 to Year 2 reflects stagnant

implementation that could be detrimental to the goals of the program. It is also possible that the level of implementation brought on by the influx of staff members and resources into the DN schools in Year 1 represents the momentum needed to produce the desired reforms, and that maintaining this level of implementation in Year 2 is enough to allow the program to progress and deepen its effect on schools, teachers and administrators, and ultimately, students.

Schools were best at employing and training the proper staff, implementing the tiered intervention model, and identifying and supporting students who were falling off track to graduation. All were areas where the considerable support of Diplomas Now staff members and their additional resources likely helped facilitate implementation. Improved fidelity from Year 1 to Year 2 for the model inputs of Integrated On-Site Support and Program Staff Training and Development suggests an improvement in the appointment and training of Diplomas Now staff members in the second year. This shows how the Diplomas Now partners responded to problems from the first year that were clearly under their control and ensured that these components were better implemented in the second.

DN schools were least successful in meeting the model's goals in the Curriculum for College Readiness input, which included implementing the Talent Development reform curricula in English/language arts and mathematics courses, offering Talent Development's accelerated remediation courses for students struggling in those subjects, and implementing curricula to support students' transition into middle or high school. In many cases, participating districts had some curricular reforms already in place, and DN schools may have been reticent to change from district-supported or -mandated curricula to the curricula promoted by Diplomas Now.

DN schools also struggled to meet the model's goals in the Professional Development and Peer Coaching input. Most schools were not able to maintain a consistent coaching cycle for all mathematics and English/language arts teachers throughout the year. It was probably difficult in some cases for districts to provide the necessary instructional coaches in a time of shrinking school budgets. It may also be that this level of interaction represents too great a change in practice for teachers.

In general, the findings suggest that program implementation was weakest in areas where schools felt they did not need the additional support Diplomas Now offered (curricular components), or where teachers needed to change their practices and where additional resources were needed to support the change (peer coaching).

Meanwhile, the biggest differences between schools that implemented the most of the model overall and those that implemented the least could be seen in the inputs Professional Development and Peer Coaching, Tiered Intervention Model, and Strong Learning Environments. These were all areas that required changes in district or school policies and structures, suggest-

ing that what separated higher- from lower-implementing schools were these factors not fully under the control of the Diplomas Now staff.

Service Contrast

As noted earlier, it is unknown what level of model implementation is necessary to elicit positive change in schools. One way to better understand what change is happening at the schools is by measuring service contrast, which compares the programs and services at DN schools with those at similar non-DN schools. Given that schools were randomly assigned to either implement the Diplomas Now model or not, the non-DN schools are the strongest representation of what would have happened at the DN schools had they not implemented Diplomas Now. Although differences between DN and non-DN schools were not always large (except in a couple of areas), they were present in many areas, suggesting that Diplomas Now is making a difference in DN schools. This difference in implementation between DN and non-DN schools is a promising finding: It means that the Diplomas Now model could have an impact on the student outcomes of attendance, behavior, and course performance that will be addressed in a future report.

Meanwhile, although DN schools' overall average fidelity score did not change from Year 1 to Year 2, the service contrast between DN and non-DN schools widened in several areas: the frequency with which teachers collaborated in interdisciplinary teams, the professional development of teachers through peer coaching, and the use of data to identify struggling students. This growth in service contrast is at least partly attributable to a decline in the Diplomas Now-like services available at non-DN schools, which suggests that Diplomas Now brought more stability to the DN schools than they would have had otherwise.

Since service contrast was measured using teacher and administrator surveys while fidelity of implementation was measured using Diplomas Now staff surveys, it may also be that teachers and administrators grew more understanding and accepting of the program from the first to the second years even as Diplomas Now staff members were reporting similar levels of implementation. In Year 2, those teachers most likely to have been involved in program implementation during both years (the sixth- and ninth-grade teachers) reported stronger service contrast in several areas, especially the Student Supports input, than the full sample of all participating teachers.

There was no service contrast between DN and non-DN schools in their implementation of a college readiness curriculum or in their levels of parent and community involvement, but that is largely because the responses of teachers indicated that district-wide efforts in these areas were under way in both DN and non-DN schools. Teachers at all schools reported that college readiness curricula and remediation courses for students struggling with math and English/language arts were in relatively wide use. Staff members at some DN schools were wary to change district-wide or existing curricula at their schools to the Diplomas Now curricula. Activities to boost parent and community involvement may take time to implement successfully and may have not been the highest priority for program staff members during the early phases of implementation.

It is worth noting that other types of interventions or programs not similar to those being planned and implemented in DN schools could be taking place in non-DN schools. Those types of interventions or programs would not be captured in the service contrast analyses, which are focused solely on the types of reforms included in the Diplomas Now model. Yet it is possible that such changes could also affect the student outcomes to be discussed in the next report.

Case Study Findings

The Diplomas Now model intentionally targets at-risk schools, typically those eligible for Title I funds,¹ primarily in urban school districts with large populations of low-income and minority students. It was anticipated that contextual factors like limited resources, variable and inconsistent staffing, and contentious school climates would affect both DN and non-DN schools. Although factors like these posed challenges to the implementation of the Diplomas Now model, the consistency and stability provided by Diplomas Now probably mitigated their impact. In some cases, being flexible and adaptable to the particular needs of the school may be a more effective tactic for the Diplomas Now staff than trying to meet every goal of the program model. The increasing service contrast between Year 1 and Year 2 described in Chapter 3 lends credence to the notion that in challenging circumstances Diplomas Now is enabling schools to maintain and increase the implementation of practices essential to continued school improvement. These lessons can inform the implementation of Diplomas Now moving forward and suggest how similar programs might balance flexibility in responding to the needs of schools with fidelity to the model as designed.

In Year 2, interviewees and focus group participants from case study schools reported that teachers and administrators were more likely to perceive Diplomas Now as "part of the school" than they were in Year 1. This seems to be thanks to the efforts of program staff members to align Diplomas Now model goals with school goals and to garner stronger support from teachers and administrators. These findings comport well with the theory that service contrast grew between Year 1 and Year 2 because teachers and administrators began to appreciate the benefits of the Diplomas Now model more as they came to understand it better. Still, even though Diplomas Now deployed and trained staff members more successfully in Year 2 than in

¹Title I funds from the U.S. Department of Education go to schools with high numbers or high percentages of students from low-income families.

Year 1, the case study data reveal ongoing challenges related to Diplomas Now staff turnover and the integration of new program staff members. The flexibility created by the close communication and contact of staff members from the three organizations allowed the Diplomas Now school-level teams to retain smoother implementation amid staff turnover than they may have otherwise.

Sustaining the program beyond the current grants underwriting it was a distant concern for most Diplomas Now and school staff members, and staff turnover along with schools' reliance on Diplomas Now staff members to implement the model's reforms made it hard for them to envision a clear path to sustainability. Still, schools were making progress toward sustaining some of the less resource-intensive elements of the program, such as the small learning communities structure. Case study participants' recommendations for sustaining the program included garnering administrator support and identifying funds for key program elements such as the City Year AmeriCorps members.

Next Steps

The first two reports have presented information about the implementation of Diplomas Now, setting the stage to evaluate whether the model has an impact on schools and students. Thus far, implementation of the model has been moderately successful and has resulted in DN schools becoming different from non-DN schools in their structure and organization, and in the practices employed by their staffs. Over two years, this contrast has increased despite stable implementation fidelity, and case study data suggest that at some schools the model is beginning to become part of the fabric of the school. The next report will present findings about whether this effort helps students maintain better attendance, behave better in school, and improve their academic performance in core courses. Measures of early school and student outcomes will also allow the evaluation team to test assumptions in the Diplomas Now model's theory of change, which may lead to a better understanding of how and in what sequence an integrated reform model like Diplomas Now effects change in a school.

Appendix A

Supplementary Materials for Fidelity of Implementation Analyses

Data Sources

The Diplomas Now program staff surveys serve as the basis for determining fidelity and calculating the fidelity metrics. The Diplomas Now program staff surveys were developed in collaboration with the Diplomas Now Implementation Support Team and specifically target the components within each input to measure the fidelity of their implementation. The following four surveys were administered to program staff members from each of the Diplomas Now partner organizations during each study year:

- 1. The Implementation Support Team was asked about each school's participation in the Diplomas Now summer institute, in-service training for program staff members, and the kick-off planning sessions and meetings.
- 2. The school transformation facilitator, who coordinates school reform efforts, answered questions regarding student learning environments, the school curriculum, tiered intervention support, family and community involvement, and the presence and activities of curricular support staff members, such as the instructional coaches.
- 3. The City Year program manager, who manages the City Year AmeriCorps members at a school, was asked about their staffing and activities, such as tutoring schedules and after-school programs.
- 4. The Communities In Schools site coordinator, responsible for intensive interventions, answered questions about the presence, start time, and certification of the site coordinator, and about collaboration with Diplomas Now program partners.

Response Counts

Appendix Table A.1 provides response counts for each of the program staff surveys. Year 1 program staff surveys were administered in spring/summer 2012 for "wave 1" schools (schools that joined the study in the 2011-2012 school year) and spring/summer 2013 for "wave 2" schools (schools that joined the study in the 2012-2013 school year). Year 2 program staff surveys were administered in spring/summer 2013 for wave 1 schools and spring/summer 2014 for wave 2 schools.

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Appendix Table A.1

	Year 1		Year 2		
	Total	Total	Total	Total	
	Respondents	Schools	Respondents	Schools	
Respondent type					
Diplomas Now Implementation Support Team	32	32	31	31	
Talent Development school transformation facilitator	32	32	31	31	
City Year program manager	32	32	31	31	
Communities In Schools site coordinator	32	32	31	31	
Sample size	32	32	31	31	

Program Staff Survey Response Counts, Year 1 and Year 2

SOURCE: Diplomas Now fidelity of implementation program staff surveys administered in 2012, 2013, and 2014.

NOTE: One DN school closed prior to the second year of implementation and is not included in any of the implementation analyses.

Methodology

Each of the nine inputs consists of a set of more specific components identified by the Implementation Support Team. Given the complexity of the Diplomas Now model and school-wide reform, a total of 111 components were identified under the nine Diplomas Now inputs, based on their importance in the context of the logic model as assessed by the Implementation Support Team. The fidelity of implementation score reflects all inputs and components of the Diplomas Now model. For each component, the evaluation team and the Implementation Support Team designed a scale to determine adequate implementation fidelity. A score ranging from 0 to 1 was calculated for each input, based on its components. (Since original fidelity scales and criteria for components varied, components were standardized to a 0-to-1 scale.) The average of the scores for all inputs is a school's fidelity score. A school's fidelity score therefore represents the proportion of Diplomas Now components implemented there, and provides flexibility in that it credits schools for partially implemented components. The fidelity scores for all schools were then averaged to produce pillar-level fidelity scores and an overall fidelity score.

To illustrate fidelity calculations, Appendix Table A.2 presents an excerpt from the fidelity matrix, highlighting the input Strong Learning Environments and its high school components, the scales and criteria for assessing adequate fidelity, and sample responses from a hypothetical school. One can calculate a fidelity score for Strong Learning Environments using

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Appendix Table A.2

Example of a Diplomas Now Program Model Input, Related Components, and Fidelity Measures: Strong Learning Environments

Component	Operational Definition	Fidelity Scale ^a	Criterion for Adequacy	Sample Response for Hypothetical School
Small learning communities	Interdisciplinary teams of teachers who work with the same small group of students	0: No 1: Yes	1: Adequate	1: Yes
Interdisciplinary teacher team meetings	Meetings where interdisciplinary core teachers discuss shared students	0: Do not/rarely occur 0.2: Occur monthly 0.4: Occur biweekly 0.6: Occur weekly 0.8: Occur multiple times a wee 1: Occur daily	0.8: Adequate ek	0.8: Occur multiple times a week
Site-based team standards	Site-based team (administrator, school transformation facilitator, project manager, and site coordinator) standards for collaboration, communication, and decision making	0: Not in place 0.5: Partially/in process 1: In place	0.5: Adequate	0.5: Partially/in progress
Site-based team meetings	Brief meetings for site-based team to review program implementation (approximately 30 minutes)	0: Once a month or less 0.5: Biweekly 1: Weekly or more frequently	0.5: Adequate	0: Once a month or less
4x4 block (high school only)	4 class periods of 75 to 90 minutes that meet daily (or at least 4 days a week)	0: No 0.5: Hybrid/acceptable alternative 1: Yes	0.5: Adequate	0: No

(continued)

Appendix Table A.2 (continued)

SOURCE: Diplomas Now fidelity of implementation matrix 2013.

NOTES: This table only provides Strong Learning Environments components that apply to high schools. One middle school-specific component of Strong Learning Environments has been omitted.

See Appendix Table B.2 in the first report of this evaluation (Corrin et al., 2014a) for fidelity scales and criteria for adequacy for all components in the fidelity of implementation matrix.

^aScales have been standardized to assist with the calculation of implementation metrics.

Appendix Table A.2. First, the components are standardized to a 0-to-1 scale (for example, a component scaled from 0 to 2 is recoded so that 0 = 0, 1 = 0.5, and 2 = 1), then averaged together. In this example, there are five components of the Strong Learning Environments input: small learning communities, interdisciplinary teams, Diplomas Now site-based meetings, Diplomas Now site-based collaboration, and 4x4 block scheduling. The average of the fidelity scale responses for these components equals 0.46 (that is, 1 + 0.8 + 0 + 0.5 + 0, divided by 5). This is the school's fidelity score for Strong Learning Environments. Scores for the remaining inputs are calculated similarly, and the average of all input scores provides the school's fidelity score. The average of fidelity scores from all schools provides an overall score that estimates the proportion of the Diplomas Now model (from 0 to 1) implemented across all DN schools during the first year.

Component-Level Fidelity Matrix Findings

Appendix Table A.3 provides component-level findings (the percentage of schools that adequately implemented each component) for the 111 components in the model, for Year 1 and Year 2, organized by pillar and input. It also denotes which components were identified by the Diplomas Now Implementation Support Team as critical to the early implementation of the program.
Appendix Table A.3

Component-Level Fidelity of Implementation at Diplomas Now Schools, Year 1 and Year 2

		Percentage of Schools Adequately		
	Identified	Implem	Component_	
Component Description ^a	as Critical?	Year 1	Year 2	Difference
Pillar I. Teacher Teams and Small Learning Communities: Strong Learning Environments				
Site-based team (administrator, school transformation facilitator, project manager, and site coordinator) had standards for collaboration, communication, and decision making	No	96.9	100.0	3.1
Meetings for site-based team to review program implementation of approx. 30 minutes occurred at least biweekly	Yes	78.1	71.0	-7.2
High schools had 4 class periods of 75 to 90 minutes that met daily (or at least 4 days a week) or acceptable hybrid	Yes	86.7	73.3	-13.3
Middle schools provided extended class periods of 70 to 90 minutes for core academic classes	Yes	52.9	68.8	15.8
Interdisciplinary teams of teachers were organized into small learning communities and worked with the same small group of students	Yes	68.8	77.4	8.7
Meetings where interdisciplinary core teachers discussed shared students occurred multiple times per week	Yes	25.0	29.0	4.0
Pillar II. Curriculum and Instruction with Professional Development: Professional Development and	Peer Coachin	g		
High schools provided professional development and job-embedded support for freshman seminar teachers	No	73.3	53.3	-20.0
Math coaches provided at least one period of support per week to each mathematics teacher	Yes	59.4	51.6	-7.8
Instructional coaching cycle (plan, coteach, model, and debrief) completed by math coach with teachers, on average, at least biweekly	No	43.8	38.7	-5.0
English/language arts coaches provided at least one period of support per week to each English/language arts teacher	Yes	62.5	61.3	-1.2
				(continued)

	Identified	Percentage of Schools Adequately Implementing Compone		
Component Description ^a	as Critical?	Year 1	Year 2	Difference
Pillar II. Curriculum and Instruction with Professional Development: Professional Development and I	Peer Coachin	g		
Instructional coaching cycle (plan, coteach, model, and debrief) completed by English/language arts coach with teachers, on average, at least biweekly	No	43.8	45.2	1.4
Pillar II. Curriculum and Instruction with Professional Development: Curriculum for College Reading	ess			
High schools offered a separate academy for 9th-graders with its own administrators, teachers, and counselors	Yes	60.0	60.0	0.0
Middle schools offered the reform program on school climate to 6th-grade students	No	41.2	37.5	-3.7
Middle schools offered the reform curriculum on school success skills, Mastering the Middle Grades, to at least all 6th-grade students	No	11.8	56.3	44.5
High schools offered a freshman seminar to 9th-graders during their first semester	Yes	73.3	53.3	-20.0
High schools offered at least 6 units of the freshman seminar to 9th-grade students	No	46.7	26.7	-20.0
Middle schools met high standards of implementation of Common Core Standards in mathematics	No	76.5	81.3	4.8
Middle schools implemented an evidence-based mathematics curriculum or adequate alternative	No	58.8	56.3	-2.6
High schools implemented the Transition to Advanced Mathematics reform curriculum for 9th-grade students	No	60.0	46.7	-13.3
High schools offered Transition to Advance Mathematics in classes that met at least 4 times per week for at least 70 minutes per meeting	No	46.7	40.0	-6.7
High schools implemented Geometry Foundations reform curriculum for 10th-grade students	No	13.3	33.3	20.0

		Percentage of Schools Adequately		
	Identified	Implen	nenting (Component
Component Description ^a	as Critical?	Year 1	Year 2	Difference
High schools offered Geometry Foundations in classes that met at least 4 times per week for	288			
at least 70 minutes per meeting	No	13.3	13.3	0.0
High schools implemented Algebra II Foundations reform curriculum for 11th-grade students	No	0.0	6.7	6.7
High schools offered Algebra II Foundations in classes that met at least 4 times per week for at least 70 minutes per meeting	No	0.0	0.0	0.0
Middle schools offered the Computer and Team Assisted Mathematics Acceleration (CATAMA) curriculum that provides additional math instruction and support to underprepared students	No	29.4	18.8	-10.7
High schools offered the Computer and Team Assisted Mathematics Acceleration (CATAMA) program that provides additional math instruction and support to underprepared students	No	20.0	26.7	6.7
Middle schools offered the Student Team Literature reform curriculum or adequate alternative	Yes	41.2	50.0	8.8
Middle schools offered the Savvy Readers' Lab reform curriculum or adequate alternative	Yes	41.2	25.0	-16.2
High schools offered the Strategic Reading reform curriculum for 9th-grade students	No	60.0	53.3	-6.7
High schools offered Strategic Reading in classes that met at least 4 times per week for at least 70 minutes per meeting	No	46.7	33.3	-13.3
High schools implemented the Reading and Writing in Your Career reform curriculum for 10th-grade students	No	0.0	20.0	20.0

		Percentage of Schools Adequately		
Component Description ^a	Identified	Implem	enting (Component Difference
Pillar II. Curriculum and Instruction with Professional Development: Curriculum for College Reading				Difference
High schools offered Reading and Writing in Your Career in classes that met at least 4 times per week for at least 70 minutes per meeting	No	0.0	13.3	13.3
High schools offered the College Prep Reading and Writing reform curriculum for 11th-grade students	No	0.0	0.0	0.0
High schools offered College Prep Reading and Writing in classes that met at least 4 times per week for at least 70 minutes per meeting	No	0.0	0.0	0.0
High schools offered the Accelerating Literacy for Adolescents Lab or adequate alternative to 9th-grade students who were significantly below grade level	No	13.3	20.0	6.7
Pillar III. Tiered Student Supports: Tiered Intervention Model				
A coordinated Early Warning Indicator (EWI) data system was in place that tracked student attendance, behavior, and course performance and alerted teachers as students began to fall off the graduation track	Yes	93.8	90.3	-3.4
Interdisciplinary EWI team meetings to discuss students demonstrating off-track indicators occurred at least biweekly	Yes	90.6	80.6	-10.0
A plan for integrating the use of the EWI system and scheduling EWI meetings was in place	No	75.0	83.9	8.9
Pillar III. Tiered Student Supports: Student Supports				
Additional in-class support from City Year AmeriCorps members was offered in mathematics classrooms year-round	Yes	100.0	100.0	0.0
At least 75% of City Year AmeriCorps members were embedded in mathematic classrooms	Yes	62.5	61.3	-1.2
City Year AmeriCorps members were in mathematic classrooms at least three times per week	Yes	100.0	100.0	0.0

	Percentage of Schools Adogustaly			ge of
	Identified	Identified Implementing Comr		
Component Description ^a	as Critical?	Year 1	Year 2	Difference
Pillar III. Tiered Student Supports: Student Supports				
At least 75% of math classrooms had City Year AmeriCorps members embedded	Yes	40.6	41.9	1.3
Additional in-class support from City Year AmeriCorps members was offered in English/language arts classrooms year-round	Yes	100.0	100.0	0.0
At least 75% of City Year AmeriCorps members were embedded in English/language arts classrooms	Yes	65.6	64.5	-1.1
City Year AmeriCorps members were in English/language arts classrooms at least three times per week	Yes	100.0	100.0	0.0
At least 75% of English/language arts classrooms had City Year AmeriCorps members embedded	Yes	50.0	41.9	-8.1
Mathematics tutoring structure and schedule was in place	Yes	71.9	71.0	-0.9
City Year AmeriCorps members were integrated into mathematics tutoring structure	Yes	62.5	64.5	2.0
Ratio of students receiving mathematics tutoring to City Year AmeriCorps members was equal to or less than 7 to 1	Yes	50.0	48.4	-1.6
Literacy tutoring structure and schedule was in place	Yes	75.0	71.0	-4.0
City Year AmeriCorps members were integrated into literacy tutoring structure	Yes	59.4	61.3	1.9
Ratio of students receiving literacy tutoring to City Year AmeriCorps members was equal to or less than 7 to 1	Yes	59.4	54.8	-4.5
City Year AmeriCorps members were integrated into the school's attendance program	Yes	71.9	74.2	2.3
Ratio of students receiving attendance coaching to City Year AmeriCorps members was equal to or less than 1 to 1	Yes	93.8	100.0	6.3

		Percent Schools A Implementing		ge of equately Component
Component Description ^a	as Critical?	Year 1	Year 2	Difference
Pillar III. Tiered Student Supports: Student Supports Ratio of students receiving behavior coaching to City Year AmeriCorps members was equal to or				
less than 1 to 1	Yes	93.8	87.1	-6.7
After-school program or extended learning time was offered to a subset of the school's students	Yes	96.9	96.8	-0.1
City Year AmeriCorps members consistently recruited students not on track to graduate to attend after-school programs	No	78.1	77.4	-0.7
At least 25% of students regularly attended after-school programs	No	56.3	61.3	5.0
After-school programs were implemented all year	No	46.9	51.6	4.7
School integrated City Year AmeriCorps members into existing after-school programs	No	40.6	45.2	4.5
Existing after-school programs with integrated City Year AmeriCorps members were implemented all year	No	43.8	45.2	1.4
At least four whole-school activities (for example, health fairs or career days) were conducted during the school year	Yes	100.0	100.0	0.0
Pillar III. Tiered Student Supports: Student Case Management				
At least 75% of students identified through the EWI system as needing 1 ier III support received case management	Yes	71.9	77.4	5.5
At least 75% of case-managed students were provided with individual student plans	Yes	90.6	96.8	6.2
At least 75% of case-managed students identified with attendance issues were provided with attendance interventions	Yes	75.0	67.7	-7.3
At least 75% of case-managed students identified with behavior problems were provided with behavior interventions	Yes	90.6	74.2	-16.4

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Appendix Table A.3 (continued)

	Percentage of Schools Adequate			ge of equately
Component Description ^a	Identified	Implem	enting (Component Difference
Pillar III. Tiered Student Supports: Student Case Management	as Cittical?	I cal I	I ear 2	Difference
At least 75% of case-managed students identified with academic needs were provided with academic interventions	Yes	65.6	71.0	5.4
At least 75% of case-managed students identified with basic needs (for example, for food, clothing, or shelter) were provided with basic needs/resource interventions	No	87.5	74.2	-13.3
At least 5% of students in schools with more than 1,000 students and 10% of students in schools with fewer than 1,000 students received case management	No	65.6	74.2	8.6
Communities In Schools site coordinators provided whole-school enrichment/motivation services	No	96.9	96.8	-0.1
Communities In Schools site coordinators provided whole-school family engagement and strengthening services	No	84.4	71.0	-13.4
Communities In Schools site coordinators provided whole-school life skills and social development services	No	75.0	51.6	-23.4
Communities In Schools site coordinators provided whole-school college and career services	No	68.8	67.7	-1.1
Communities In Schools site coordinators provided whole-school professional physical health services	No	46.9	38.7	-8.2
Communities In Schools site coordinators provided whole-school community-service opportunities	No	37.5	25.8	-11.7
Communities In Schools site coordinators provided whole-school professional mental health services	No	37.5	9.7	-27.8
Pillar IV. Can-Do Culture and Climate: Integrated On-Site Support				
Mathematics instructional facilitator provided technical assistance	Yes	100.0	100.0	0.0
English/language arts instructional facilitator provided technical assistance	Yes	100.0	100.0	0.0
School and student support services (S4) facilitator provided technical assistance	Yes	100.0	100.0	0.0

(continued)

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	Identified	Percentage of Schools Adequate		
Component Description ^a	as Critical?	Year 1	Year 2	Difference
Pillar IV. Can-Do Culture and Climate: Integrated On-Site Support				
School transformation facilitator began serving school prior to the first day of school	No	81.3	87.1	5.8
Instructional mathematics coach worked at the school at least half time	Yes	75.0	71.0	-4.0
Instructional English/language arts coach worked at the school least half time	Yes	81.3	80.6	-0.6
Communities In Schools site coordinator was in place	Yes	100.0	100.0	0.0
Site coordinator began serving the school before the first school progress report	Yes	81.3	93.5	12.3
At least 75% of City Year AmeriCorps members were retained throughout the school year	Yes	100.0	93.5	-6.5
Ratio of students to City Year AmeriCorps members was less than 50 to 1	Yes	78.1	90.3	12.2
Ratio of second-year City Year AmeriCorps members to first-year City Year AmeriCorps members was equal to or greater than 1 to 10	No	78.1	83.9	5.7
Pillar IV. Can-Do Culture and Climate: Family and Community Involvement				
School offered workshops to parents at least once during the school year	No	87.5	90.3	2.8
Teachers sent information to parents on how to help their children at least once during the school year	No	78.1	83.9	5.7
School scheduled parent-teacher conferences (with all core teachers) for each student's family	No	75.0	71.0	-4.0
School had an Action Team for Partnerships, or its equivalent, to develop, implement, and evaluate work on family and community engagement	No	56.3	54.8	-1.4
School formally recruited parents and trained them to work as school volunteers	No	18.8	41.9	23.2
Actual parent engagement practices somewhat matched ideal practices	Yes	65.6	67.7	2.1

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Appendix Table A.3 (continued)

	Percentage of Schools Adequately			ge of
	Identified	Identified Implementing Compo		
Component Description ^a	as Critical?	Year 1	Year 2	Difference
Program Staff Training and Development				
Talent Development staff members had access to Communities In Schools staff members	Yes	100.0	96.8	-3.2
Talent Development staff members had access to City Year staff members	Yes	100.0	96.8	-3.2
Communities In Schools staff members had access to Talent Development staff members	Yes	100.0	100.0	0.0
Communities In Schools staff members had access to City Year staff members	Yes	100.0	100.0	0.0
City Year staff members had access to Talent Development staff members	Yes	93.8	96.8	3.0
City Year staff members had access to Communities In Schools staff members	Yes	93.8	96.8	3.0
Professional development plan for on-site training for teachers and school-based staff members focused on curriculum, school climate, and teaming was at least partially implemented	Yes	81.3	83.9	2.6
Professional development plan for school-based team to engage in continuing professional development opportunities throughout the school year was at least partially implemented	Yes	78.1	83.9	5.7
School-based team attended a three-day summer institute or alternate training session aimed at helping a new Diplomas Now school start strong	Yes	78.1	93.5	15.4
Joint planning sessions for school administrators and teachers occurred prior to the start of the school year	Yes	59.4	93.5	34.2
City Year AmeriCorps members participated in relevant teacher professional development opportunities at least once or twice during school year	Yes	93.8	96.8	3.0
School transformation facilitator attended five-day summer training session or alternate training	Yes	96.9	100.0	3.1
School's mathematics coach attended three-day summer training session or alternate training	No	43.8	58.1	14.3

	Identified	Percentage of Schools Adequately Implementing Componer		ge of equately Component
Component Description ^a	as Critical?	Year 1	Year 2	Difference
Program Staff Training and Development				
School's English/language arts coach attended three-day summer training session or alternate training	No	46.9	64.5	17.6
Site coordinators completed an 11-module online course, approximately 1.5-2 hours per module	Yes	40.6	67.7	27.1
City Year AmeriCorps members received training in the use of data to identify interventions	Yes	56.3	77.4	21.2
City Year AmeriCorps members received ongoing support in the use of data to identify interventions	Yes	53.1	74.2	21.1
City Year AmeriCorps members participated in EWI-related training sessions at least three times per year	No	34.4	29.0	-5.3

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SOURCES: Diplomas Now fidelity of implementation program staff surveys and records, 2012, 2013, and 2014. Program staff surveys and records include: the Diplomas Now Implementation Support Team survey, Talent Development school transformation facilitator survey, City Year program manager survey, Communities In Schools site coordinator survey, City Year records, and Community In Schools records.

NOTE: Average percentage of sites adequate for middle and high school-specific components reflect only the appropriate number of middle (17) or high (15) schools. One DN school closed prior to the second year of implementation and is not included in the Year 2 analyses.

^aEmbedded within each component description is the criterion for adequate implementation as defined by the Implementation Support Team. See Appendix Table B.2 in the first report of this evaluation (Corrin et al., 2014a) for fidelity scales and criteria for adequacy for all components in the fidelity of implementation matrix. Appendix B

Service Contrast Supplemental Materials

This appendix includes supplementary materials connected to the service contrast analyses found in Chapters 2 and 3. First, it discusses the teacher and administrator survey data used for these analyses and the response rates associated with these data sources. The second section describes the creation of measures used in the service contrast analyses where more than one survey item was combined. The following section discusses the methodology utilized in the service contrast analyses. Finally, supplemental service contrast tables are shared.

Data Sources and Survey Response Rates

The measures used in the service contrast analyses come from teacher and administrator (principal and assistant principal) surveys administered at all study schools. Teacher and administrator surveys used in analyses of Year 2 implementation were administered online or in pencil-and-paper format during the spring of the second year of implementation (2013 for "wave 1" schools — schools that joined the study in the 2011-2012 school year — and 2014 for "wave 2" schools — schools that joined the study in the 2012-2013 school year). Teacher surveys used in the analyses of Year 1 implementation were administered in the spring of the first year of implementation (2012 for wave 1 schools and 2013 for wave 2 schools). Copies of both teacher and administrator surveys can be found in the *Data Collection Instrument Supplement* to the first report.¹

Appendix Table B.1 describes the response rate and sample size for the teacher and administrator surveys. The first set of columns shows the school-level response rates for study schools assigned to implement the Diplomas Now model (DN schools), study schools not assigned to implement it (non-DN schools), and all schools (DN schools and non-DN schools combined). School-level response rates were calculated by dividing the number of schools with at least one survey respondent by the total number of schools. The second set of columns demonstrates the individual-level response rates within those same groups of schools. Tables 2.3, 2.5, 2.7, and 2.9 use data from the Year 2 teacher survey. Appendix Tables B.2-B.5 use data from the Year 2 administrator survey. Data from the Year 1 teacher survey are in Appendix Tables B.6-B.9, and Appendix Tables B.10-B.13 use data from sixth- and ninth-grade teachers during the second year of implementation. (Tables are at the end of this appendix.)

During the first year of implementation, all schools were included in the teacher survey analyses since each school had at least one survey respondent. In the second year of implementation, one DN school closed and is not included in any of the service contrast analyses. One school was dropped from the Year 2 teacher survey analyses for sixth and ninth grades because none of the teachers in those grade levels responded to the survey.

¹Corrin et al. (2014b), available at www.mdrc.org.

Appendix Table B.1

Teacher and Administrator Survey Response Rates, School and Individual

	S	chool Lev	el	In	Individual Level				
	DN	Non-DN	All	DN	Non-DN	All			
	Schools	Schools	Schools	Schools	Schools	Schools			
Panel A: Teachers									
Year 2 response rate (%)	96.9	100.0	98.4	75.6	78.8	77.3			
Sample size	31	30	61	1,476	1,652	3,128			
Year 1 response rate (%)	100.0	100.0	100.0	80.8	85.1	83.0			
Sample size	32	30	62	1,635	1,732	3,367			
Panel B: Administrators									
Year 2 response rate (%)	96.9	100.0	98.4	84.5	83.2	83.9			
Sample size	31	30	61	110	107	217			

SOURCE: Survey administration documentation, 2012, 2013, and 2014.

NOTES: One DN school closed prior to the second year of implementation and is not included in the Year 2 analyses. First-year administrator response rates are not included in this table because these data are not referred to in this report.

The construction of the analytic samples from the pool of eligible teachers and administrators is presented in Appendix Figures B.1 through B.3. Appendix Figure B.1 shows that 3,128 eligible teachers were identified during the second year of implementation (on average, 51 teachers per school). Of these eligible teachers, 2,418 (77 percent) responded to the survey questionnaire. Among the survey respondents, 2,288 were teachers who were kept in the analysis, while 130 were nonteachers (for example, counselors or academic advisers) who were dropped from the analysis. The primary analysis sample in Year 2 is composed of the 1,818 teachers who taught sixth, seventh, ninth, or tenth grade, since these grade levels were the most fully served by Diplomas Now during the second year of implementation. In addition, for certain school practices Diplomas Now only targets specific academic subjects, which results in three subsamples of teachers. Within the primary analytic sample, there were 1,269 core subject teachers, 827 math and English/language arts teachers, and 465 high school math and English/language arts teachers.² For the secondary analysis on the transition years in Year 2, the study team examined 1,339 sixth- and ninth-grade teachers, of whom 853 taught core subjects, 577 taught math and English/language arts, and 332 taught high school math and English/language arts.

As shown in Appendix Figure B.2, in the first year of implementation the study team identified 3,367 eligible teachers from the 62 participating schools (on average, 54 teachers per school). Out of the eligible pool of teachers, there were 2,795 survey respondents (an 83 percent response rate). The majority of survey respondents (2,643) were teachers who remained in the analysis, but 152 nonteacher respondents were excluded from the analysis. Diplomas Now focused its attention on students in transition years (sixth and ninth grades) during the first year of implementation, so the primary analysis sample in Year 1 consists of the 1,620 teachers instructing those grade levels. Among the primary sample of sixth- and ninth-grade teachers in Year 1, there were 1,043 core subject teachers, 685 math and English/language arts teachers, and 404 high school math and English/language arts teachers.

Appendix Figure B.3 illustrates that 217 eligible administrators (principals and assistant principals) were identified during the second year of implementation. Of these eligible administrators, 182 (84 percent) responded to the survey questionnaire. This group was then divided into the 170 administrator respondents who were kept in the analysis and the 12 nonadministrator respondents who were dropped from the analysis. Because a few aspects of the Diplomas Now model only applied to high schools, a subsample of 102 high school administrators was also examined for some service contrast measures.

Service Contrast Measure Creation and Factor Analysis

Many of the tables and graphs in Chapters 2 and 3 as well as the tables in this appendix compare the programs and services in DN and non-DN schools during the first two years of implementation. All of these exhibits are based on surveys of teachers and administrators. In most cases, single survey items were used in the analyses, but in some cases, multiple survey items were combined to create a single measure. The following discussion describes the creation of measures that were constructed out of more than one survey item and the factor analysis for those measures.

²"Core" academic areas are identified as math, English/language arts, sciences, and social studies.

Appendix Figure B.1





Appendix Figure B.2

Construction of the Sample of Teachers for the Service Contrast Analyses in Year 1









Teacher Survey Items

Table 2.3, Appendix Table B.6, and Appendix Table B.10 include the teacher survey measure: "Core teachers reported hours spent each week collaborating with an interdisciplinary team and teaching coordinated content across disciplines." The value for the construct was calculated by taking an average of the survey item responses and then rescaling to a 0-10 scale. Responses that stated "Not occurring in your school [this year]" were coded as 0. (Three items, Cronbach's alpha = 0.88.)

During the [current] school year, how many hours did you spend each week participating in the following activities at your school?

- Common planning with an interdisciplinary team of teachers that shared the same students.
- Collaborating with an interdisciplinary team of teachers to determine approaches to respond to student needs.
- Teaching academic content coordinated across an interdisciplinary team, academy or small learning community.

(Scale: 0 = Not occurring in your school [this year], 1 = None, 2 = Less than 1 hour a week, 3 = 1-2 hours each week, 4 = 2-3 hours each week, 5 = More than 3 hours each week)

Table 2.5, Appendix Table B.7, and Appendix Table B.11 include the teacher survey measure: "Average times per month, math and English/language arts teachers reported working with an instructional coach." The value for the construct was calculated by weighting the frequency per month and then summing the weighted survey items in order to get a total timesper-month measure. For example, 0 = never, 0.5 = more than once a year but not monthly, 1 = at least once a month, 2 = more than once a month but not weekly, 5 = once a week, 12 = more than once a week but not daily, 20 = daily. Responses that stated "not occurring in your school [this year]" were coded as 0 (two items).

During the [current] school year, how often did the following occur at your school?

- _ A Math coach provided you with instructional mentoring and support.
- A Language Arts coach provided you with instructional mentoring and support.

(Scale: 0 = Not occurring in your school [this year], 1 = Never, 2 = More than once a year, but not monthly, 3 = At least once a month, 4 = More than once a month, but not weekly, 5 = Once a week, 6 = More than once a week, but not daily, 7 = Daily)

Table 2.5, Appendix Table B.7, and Appendix Table B.11 include the teacher survey measure: "Average times per month, math and English/language arts teachers reported receiving support from a school leader or a coach." The value for the construct was calculated by weighting the frequency per month and then summing the weighted survey items in order to get a total times-per-month measure. For example, 0 = never, 0.5 = more than once a year but not monthly, 1 = at least once a month, 2 = more than once a month but not weekly, 5 = once a

week, 12 = more than once a week but not daily, 20 = daily. Responses that stated "not occurring in your school [this year]" were coded as 0 (three items).

During the [current] school year, how often did the following occur at your school?

- School leaders (including peer coaches, mentors, and/or facilitators) provided you with instructional mentoring and support.
- _ A Math coach provided you with instructional mentoring and support.
- _ A Language Arts coach provided you with instructional mentoring and support.

(Scale: Not occurring in your school [this year], 1 =Never, 2 =More than once a year, but not monthly, 3 =At least once a month, 4 =More than once a month, but not weekly, 5 =Once a week, 6 =More than once a week, but not daily, 7 =Daily)

Table 2.5, Appendix Table B.7, and Appendix Table B.11 include the teacher survey measure: "Math and English/language arts teachers reported struggling students in their courses received additional classes to catch up with their peers." The value for the construct was calculated by combining the two survey questions based on the subject that a teacher instructs. The first question in the construct below was used for math teachers, while the second question in the construct below was used for English/language arts teachers. Responses that stated "don't know/does not apply" were coded as missing values (two items).

Please indicate "yes" or "no" to the following statements describing your school or your teaching during the [current] school year.

- _ Students who were struggling in math received a "double dose" of math or a supplemental math course to help them catch up to their classmates.
- Students who were struggling in reading received a "double dose" of language arts or a supplemental literacy course to help them catch up to their classmates.

(Scale: 0 = No, 1 = Yes, 3 = Don't know/Does not apply)

Table 2.5, Appendix Table B.7, and Appendix Table B.11 include the teacher survey measure: "Math and English/language arts teachers reported the average frequency they used a variety of student-centered teaching strategies." The value for the construct was calculated by taking an average of the survey item responses and then rescaling to a 0-10 scale. (Four items, Cronbach's alpha = 0.71.)

During the past month, how often did the following instructional activities occur in most of your classes?

- _ Students worked in small groups or pairs.
- _ Students worked on individual or group projects that lasted several days.
- _ Students were engaged in different learning activities at the same time.
- _ You provided demonstrations, modeling of strategies, and mini-lessons.

(Scale: 1 =Never, 2 =At least once a month, 3 =More than once a month, but not weekly, 4 =Once a week, 5 =More than once a week, but not daily, 6 =Daily)

Table 2.5, Appendix Table B.7, and Appendix Table B.11 include the teacher survey measure: "Math and English/language arts teachers reported the average frequency students applied classroom activities to real-life issues and used critical thinking and reasoning skills." The value for the construct was calculated by taking an average of the survey item responses and then rescaling to a 0-10 scale. (Three items, Cronbach's alpha = 0.72.)

During the past month, how often did the following instructional activities occur in most of your classes?

- _ Students used manipulative materials to illustrate concepts.
- _ Students applied classroom activities to real-life issues.
- _ Tasks required students to use critical thinking and reasoning skills to solve problems.

(Scale: 1 =Never, 2 =At least once a month, 3 =More than once a month, but not weekly, 4 =Once a week, 5 =More than once a week, but not daily, 6 =Daily)

Table 2.5, Appendix Table B.7, and Appendix Table B.11 include the teacher survey measure: "Math and English/language arts teachers reported the average frequency academic courses included career applications and exploration." The value for the construct was calculated by taking an average of the survey item responses and then rescaling to a 0-10 scale. (Two items, Cronbach's alpha = 0.89.)

During the past month, how often did the following instructional activities occur in most of your classes?

 You taught academic content that blended career applications across academic courses. You taught a curriculum that included career exploration and planning.

(Scale: 1 =Never, 2 =At least once a month, 3 =More than once a month, but not weekly, 4 =Once a week, 5 =More than once a week, but not daily, 6 =Daily)

Table 2.7, Appendix Table B.8, and Appendix Table B.12 include the teacher survey measure: "Core teachers reported the average frequency they used attendance, behavior, and course performance data to target at-risk students." The value for the construct was calculated by taking an average of the survey item responses and then rescaling to a 0-10 scale. (Three items, Cronbach's alpha = 0.90.)

During the past month, how often did you analyze the following types of data to target at-risk students?

- _ Course performance data.
- _ Student attendance data.
- _ Student behavior data.

(Scale: 1 =Never, 2 =At least once a month, 3 =More than once a month, but not weekly, 4 =Once a week, 5 =More than once a week, but not daily, 6 =Daily)

Table 2.7, Appendix Table B.8, and Appendix Table B.12 include the teacher survey measure: "Average times per month, math and English/language arts teachers reported students received academic help in class from volunteers." The value for the construct was calculated by weighting the frequency per month and then summing the weighted survey items in order to get a total times-per-month measure. For example, 0 = never, 1 =at least once a month, 2 =more than once a month but not weekly, 5 = once a week, 12 =more than once a week but not daily, 20 = daily (five items).

During the past month, how often did each of the following volunteer activities occur with students in your classes?

- _ Literacy one-on-one tutoring.
- Math one-on-one tutoring.
- Literacy small group tutoring.
- _ Math small group tutoring.
- _ Whole class academic support.

(Scale: 1 =Never, 2 =At least once a month, 3 =More than once a month, but not weekly, 4 =Once a week, 5 =More than once a week, but not daily, 6 =Daily)

Table 2.7, Appendix Table B.8, and Appendix Table B.12 include the teacher survey measure: "Core teachers reported the frequency academic and non-academic services were coordinated for students at-risk of dropping out of school." The value for the construct was calculated by taking an average of the survey item responses and then rescaling to a 0-10 scale. (Two items, Cronbach's alpha = 0.95.)

To the best of your ability, please indicate how frequently the following activities occurred at your school during the [current] school year.

- Academic and non-academic services for students at-risk of dropping out of school were coordinated to meet students' needs.
- Academic and non-academic services for students at-risk of dropping out of school were monitored to ensure students' needs were met.

(Scale: 1 = Never, 2 = Rarely, 3 = Sometimes, 4 = Often, 5 = Always, as needed)

Table 2.9, Appendix Table B.9, and Appendix Table B.13 include the teacher survey measure: "Average times per month, math and English/language arts teachers reported City Year AmeriCorps members, college students, or volunteers from organized programs worked with students." The value for the construct was calculated by weighting the frequency per month and then summing the weighted survey items in order to get a total times-per-month measure. For example, 0 = never, 1 = at least once a month, 2 = more than once a month but not weekly, 5 = once a week, 12 = more than once a week but not daily, 20 = daily (three items).

During the past month, how often did each of the following volunteers work with students in at least some of your classes?

- _ Students from local college/teacher preparation programs.
- _ City Year corps members.
- Members of organized volunteer programs or other City Year Ameri-Corps members.

(Scale: 1 =Never, 2 =At least once a month, 3 =More than once a month, but not weekly, 4 =Once a week, 5 =More than once a week, but not daily, 6 =Daily)

Table 2.9, Appendix Table B.9, and Appendix Table B.13 include the teacher survey measure: "Average times per month, math and English/language arts teachers reported any volunteer worked with students." The value for the construct was calculated by weighting the frequency per month and then summing the weighted survey items in order to get a total timesper-month measure. For example, 0 = never, 1 = at least once a month, 2 = more than once a month but not weekly, 5 = once a week, 12 = more than once a week but not daily, 20 = daily (eight items).

During the past month, how often did each of the following volunteers work with students in at least some of your classes?

- Parents/guardians.
- _ Community members.
- _ Students from local college/teacher preparation programs.
- _ City Year corps members.
- Members of organized volunteer programs or other City Year Ameri-Corps members.
- Peer tutors (students from other classes in the school).
- _ Other community members.
- _ Others, please specify.

(Scale: 1 =Never, 2 =At least once a month, 3 =More than once a month, but not weekly, 4 =Once a week, 5 =More than once a week, but not daily, 6 =Daily)

Administrator Survey Items

Appendix Table B.3 includes the administrator survey measure: "Average frequency of opportunities to participate in a principal/leader support network or other professional development." The value for the construct was calculated by taking an average of the survey item responses and then rescaling to a 0-10 scale. (Two items, Cronbach's alpha = 0.79.)

During the [current] school year, how often did principals and assistant principals at your school have the opportunity to participate in the following:

- Professional development activities.
- _ Principal/leader support network.

(Scale: 1 = Never or once a year, 2 = More than once a year, but not monthly, 3 = At least monthly, 4 = More than once a month, but not weekly, 5 = At least once a week, 6 = More than once a week, 7 = Daily)

Appendix Table B.3 includes the administrator survey measure: "Average frequency students were provided with information about career fairs, job shadowing, internship opportunities, or college readiness." The value for the construct was calculated by taking an average of the survey item responses and then rescaling to a 0-10 scale. (Two items, Cronbach's alpha = 0.87.)

During the [current] school year, how frequently were the following supports provided to students at your school?

- Information about career fairs, job shadowing, and/or internship opportunities.
- Information about college readiness (e.g., college tours, SAT preparation, FAFSA support).

(Scale: 1 = Never, 2 = Rarely, 3 = Sometimes, 4 = Often, 5 = Always, as needed)

Appendix Table B.4 includes the administrator survey measure: "The school had a data system that tracked students' attendance, behavior, and course performance to identify at-risk students during the school year." The value for the construct was calculated by taking an average of the survey item responses. (Three items, Cronbach's alpha = 0.79.)

During the [current] school year, did your school regularly track student-level data on any of the below characteristics in order to identify at-risk students?

- _ Course performance.
- _ Attendance.
- _ Behavior.
- (Scale: 0 = No, 1 = Yes)

Appendix Table B.4 includes the administrator survey measure: "Average frequency teams of teachers reviewed individual student's data to identify needs and determine interventions." The value for the construct was calculated by taking an average of the survey item responses and then rescaling to a 0-10 scale. (Four items, Cronbach's alpha = 0.95.)

During the past month, how often did teachers engage in the following activities at your school?

 Teams of teachers reviewed data on individual students' academic progress and/or course performance to identify student needs.

- Teams of teachers reviewed data on individual students' attendance to identify student needs.
- Teams of teachers reviewed data on individual students' behavior to identify student needs.
- Teams of teachers determined approaches to respond to identified student needs.

(Scale: 1 =Never, 2 =At least once a month, 3 =More than once a month, but not weekly, 4 =At least once a week, 5 =More than once a week, but not daily, 6 =Daily)

Appendix Table B.4 includes the administrator survey measure: "Average frequency students participated in individual, group, or family counseling." The value for the construct was calculated by taking an average of the survey item responses and then rescaling to a 0-10 scale. (Three items, Cronbach's alpha = 0.75.)

During the [current] school year, how often were students offered opportunities to participate in each of the following activities?

- _ Individual counseling.
- _ Group counseling.
- _ Family counseling.

(Scale: 1 = Rarely, 2 = Monthly, 3 = Bi-weekly, 4 = Weekly, 5 = Daily)

Appendix Table B.4 includes the administrator survey measure: "Average frequency students were provided with non-academic basic needs when necessary." The value for the construct was calculated by taking an average of the survey item responses and then rescaling to a 0-10 scale. (Three items, Cronbach's alpha = 0.84.)

During the [current] school year, how frequently were the following supports provided to students at your school?

- Students were provided with clothing, school supplies, and/or food as needed.
- _ Students were provided with health and wellness services as needed.

Students were provided with mental health services as needed.

(Scale: 1 = Never, 2 = Rarely, 3 = Sometimes, 4 = Often, 5 = Always, when needed)

Appendix Table B.5 includes the administrator survey measure: "The school had a math and English/language arts coach." The value for the construct was calculated by reversing the values for each of the survey items, taking an average of the survey item responses, and then rescaling to a 0-10 scale. (Two items, Cronbach's alpha = 0.85.)

During the [current] school year, did your school have a Language Arts coach to provide teachers with instructional mentoring and support that was...

During the [current] school year, did your school have a Math coach to provide teachers with instructional mentoring and support that was...

(Scale: 1 = Working full-time in only your school?, 2 = Working at least half-time in your school?, 3 = Working less than half-time in your school?, 4 = Or did your school not have one?)

Appendix Table B.5 includes the administrator survey measure: "Average times per month, City Year AmeriCorps members, college students, or volunteers from organized programs worked with students." The value for the construct was calculated by weighting the frequency per month and then summing the weighted survey items in order to get a total timesper-month measure. For example, 0 = never, 1 = at least once a month, 2 = more than once a month but not weekly, 5 = once a week, 12 = more than once a week but not daily, 20 = daily (three items).

During the past month, how often did each of the following volunteers work with students in at least some of your classes?

- _ Students from local college/teacher preparation programs.
- _ City Year corps members.
- Members of organized volunteer programs or other City Year Ameri-Corps members.

(Scale: 1 =Never, 2 =At least once a month, 3 =More than once a month, but not weekly, 4 =Once a week, 5 =More than once a week, but not daily, 6 =Daily)

Methodology for Service Contrast Analysis

This section describes the statistical model used to estimate the service contrast measures in this report. Recall that the service contrast investigates the extent to which the Diplomas Now intervention — as implemented in the DN schools — differs from the school practices or other reform models implemented in the non-DN schools. The analysis of service contrast is based on

teacher and administrator surveys. Since schools were randomly assigned to implement the DN model, service contrast measures can be estimated by comparing the average survey responses of teachers and administrators in DN and non-DN schools. For each service contrast measure, the analysis uses a two-level fixed-effects model, which combines models at the teacher (or administrator) and school levels. This approach mimics the one planned for the confirmatory impact analyses that will be presented as part of the third report.

Level 1: Teachers and Administrators Within Schools

Level 1 describes the relationship between teacher and administrator measures and their background characteristics. The Level 1 model is given by:

$$Y_{ij} = \pi_{0j} + \sum \pi_{1s} X_{sij} + \sum \lambda_s M_{sij} + e_{ij},$$
(1)

where

 Y_{ij} is a measure for teacher and administrator *i* in school *j*;

 X_{ij} is a set of *S* teacher-level and administrator-level covariates for teacher and administrator *i* in school *j*, centered on the grand mean in the sample;

 M_{sij} is a set of S missing indicators for each of the teacher-level and administrator-level characteristics, coded 1 if missing and 0 otherwise;³ and

 e_{ij} is a random error term for teacher and administrator i from school j, assumed to be independently and identically distributed across teachers and administrators within schools (that is, the "within-school" residual).

Therefore,

 π_{0j} is the average of measure Y at school j for the "average" teacher and administrator in the sample (that is, with mean value on the S covariates).

Level 2: Schools

Given that random assignment occurs at the school level, program impacts are estimated at the school level. Thus, Level 2 examines the difference between the school-level adjusted measures (π_{0i}) of DN and non-DN schools, controlling for school characteristics and random

³As discussed below, missing information on the teacher and administrator characteristics will be imputed using a dummy-variable approach.

assignment blocks, where blocks are defined by the district and school level. Therefore:

$$\pi_{0i} = \sum_{K} \delta_k D_k + \sum_{K} \beta_{1k} T_j D_k + u_{0i} \tag{2}$$

where

 $T_j = 1$ if school *j* was randomly assigned to implement the Diplomas Now program and 0 otherwise;

 D_k denotes random assignment block indicators, equal to 1 if teacher and administrator *i* is in random assignment block *k* (defined by district and school level) and 0 otherwise;

 u_{0i} is a random error term for school *j*, assumed to be independently and identically distributed across schools (that is, the "between-school" residual).

Therefore:

 β_{1k} is the difference between the school-level average of measure Y in the DN schools and the non-DN schools in block/district k, (that is, the impact of the DN program on service contrast measure Y in block/district k).

The two-level model can be estimated by substituting (2) into (1):

$$Y_{ij} = \sum_{K} \delta_{k} D_{k} + \sum_{K} \beta_{1k} T_{j} D_{k} + \sum_{S} \pi_{1S} X_{sij} + u_{0i} + e_{ij}$$
(3)

and then fitting Equation (3).

There are several features to note about these models:

• The average (pooled) estimate. The average impact of the DN program across school district-school level blocks $(\overline{\beta_1})$ will be obtained by weighting the block-level impacts (β_{ik}) by the number of DN schools in the block. Thus, $\overline{\beta_1}$ is a fixed-effects estimate of the impact of the Diplomas Now program for the average DN school in the study sample. Therefore, the average estimate cannot be used to make statistical inferences about the impact of the program in some larger population of schools. This "fixed-effects" approach to obtaining a pooled impact estimate is used because the school districts in the study were selected pur-

posefully and are not a random sample of districts from a larger target population.⁴

- Random assignment blocks. Indicators for random assignment blocks (D_k) are included in the model to capture a central feature of the research design in which random assignment was conducted separately for each school district and subgroups of schools within district (that is, middle schools and high schools). These blocks also account for all variation in mean measure levels across blocks. Thus, the only two sources of variation in this model are (1) between schools within blocks and (2) between teachers and administrators within schools.
- **Teacher-level and administrator-level covariates.** The model allows for the inclusion of teacher-level and administrator-level covariates (X_{ii}) to reduce both within- and between-school variation in the service contrast measure, thereby increasing the precision of the impact estimates. The decision about which covariates to include in the model was made based on whether the covariate was an important predictor of service contrast measures in theory. The following teacher-level covariates are included in the statistical model: whether a teacher has four years of teaching experience or less; whether a teacher has temporary, emergency, or provisional certification; whether a teacher has advanced or National Board certification; and whether a teacher has a master's degree or higher level of education. The following administrator-level covariate is included in the statistical model: whether an administrator has four years of administrator experience or less. When data are missing for covariates, and when there are not many covariates with missing values relative to the number of observations available, the analysis adopts the "dummy variable" approach. This consists of imputing missing values to a given variable using the grand mean for the sample, and then including an indi-

⁴Another option for pooling the results would be to use a "random-effects" approach (with block random effects), which attempts to estimate the impact of the program for the broader population of sites represented by the study sample (as opposed to the fixed-effects approach, which restricts its inferences to the sites in the study sample). To date, given the typically small number of sites (districts) for most social experiments, it has been common practice to use fixed-effect models for pooling experimental findings (Schochet, 2005). In this study, for example, the small number of districts/blocks will not provide enough information about how true impacts vary across districts to support generalizations with adequate precision.

cator of "missingness" for this variable in statistical models that include the variable in question as a covariate.⁵

Ceiling-Effect Analysis for Administrator Surveys

It is possible that fewer administrator survey service contrast measures showed significant differences between DN and non-DN schools than teacher survey service contrast measures because of a ceiling effect on administrator responses. In other words, some of the administrator items may have had such positive responses across all administrators that they were not successful in capturing variation, and thus there was no room for a significant difference to emerge between DN and non-DN schools. For example, there were eight administrator service contrast measures in which survey respondents could choose among at least five different possible responses and in which the average response for both DN and non-DN administrators was greater than 7.5 on a scale from 0 to 10. For seven of these eight administrator measures there was no statistically significant difference between DN and non-DN administrator responses. Conversely, not a single teacher measure on the 0-to-10 scale had an average score over 7.5.

In order to test whether ceiling effects exist, a descriptive analysis was conducted that examined the percentage of respondents who got the maximum score on the survey scale, the skewness of the distribution, and a histogram of the survey measure. The analysis was only conducted for the seven administrator measures for which no significant differences were found between DN and non-DN schools. For each of the measures at least 39.7 percent of survey respondents gave the maximum score, and each measure was also negatively skewed with a skewness statistic of -0.44 or lower.⁶ In addition, the histograms of the measures appear to get "bunched up" at the top end of the scores. These results suggest that the seven administrator measures show signs of having ceiling effects, which, in turn, may partially explain why there were limited differences between DN and non-DN schools on these measures.

⁵Puma, Olsen, Bell, and Price (2009) and internal studies at MDRC have shown that with low rates of missing data, this approach yields unbiased estimates of program impacts, and is just as effective as more complex imputation methods (for example, regression imputation, expectation-maximization algorithms, etc.).

⁶If the data had ceiling effects, there should be negative values for skewness. Bulmer (1979) suggests this rule of thumb regarding how to interpret the magnitude of the skewness statistic: if skewness is less than -1 or greater than +1 then the distribution is highly skewed, if skewness is between -1 and -0.5 or between +0.5 and +1, the distribution is moderately skewed, if skewness is between -0.5 and +0.5, the distribution is approximately symmetric.

Service Contrast Supplemental Tables

This section includes supplementary findings for the service contrast analysis discussed in Chapters 2 and 3. Appendix Tables B.2 through B.5 show the pillar-by-pillar Year 2 service contrast results for administrator survey measures, which provide additional information about differences in school practices between DN and non-DN schools during the second year of implementation, the subject of Chapter 2. As part of the comparison of service contrast measures across implementation years in Chapter 3, Appendix Tables B.6 through B.9 present the Year 1 service contrast findings based on surveys of teachers who taught the sixth and ninth grades during the first year of implementation. To reveal whether there were differences in service contrast across the whole school compared with the transition years in the second year of implementation, Appendix Tables B.10 through B.13 show the Year 2 service contrast findings from surveys of teachers who taught the sixth and ninth grades.

Appendix Table B.2

Pillar I: Teacher Teams and Small Learning Communities, Service Contrast, Administrator Responses, Year 2

	DN	Non-DN	Estimated	Effect	
Survey Item	Schools	Schools	Difference	Size	P-Value
Strong Learning Environments					
The school had a collective mission statement with clearly stated goals and priorities. ($0 = $ strongly disagree, $10 = $ strongly agree)	7.8	8.0	-0.2	-0.07	0.632
The school was subdivided into distinct organizational units, such as small learning communities. (%)	58.5	55.0	3.5	0.07	0.689
High school administrators reported classes were organized in a 4x4 block schedule with extended learning periods. (%)	48.5	26.7	21.8	0.45 ***	• 0.001
Frequency with which interdisciplinary teams of teachers engaged in common planning. $(0 = never, 5 = less than weekly, 10 = daily)$	5.4	4.0	1.4	0.48 **	0.016
Frequency with which same-subject professional learning communities engaged in common planning. $(0 = \text{never}, 5 = \text{less than weekly}, 10 = \text{daily})$	5.7	5.6	0.0	0.01	0.964
Sample size	31	30			

SOURCE: Follow-up surveys of administrators (principals and assistant principals) administered during the school years of 2012-2013 and 2013-2014.

NOTES: Across 61 study schools, 170 administrators participated in the follow-up survey. Across 29 study high schools, 102 administrators participated in the follow-up survey. One DN school closed prior to the second year of implementation and is not included in this analysis. For each of the above measures, data are missing for no more than 5.3 percent of the administrators. The difference in the percentage of missing data between DN and non-DN schools is no more than 4.3 percent for any of the above measures.

A two-tailed t-test was used for all statistical tests presented in this table. Statistical significance levels are indicated as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.

Effect sizes were computed using the standard deviations of all non-DN school administrators for the respective measures.

Rounding may cause slight discrepancies in calculating sums and differences.

Appendix Table B.3

Pillar II: Curriculum and Instruction with Professional Development, Service Contrast, Administrator Responses, Year 2

	DN	Non-DN	Estimated Effect		
Survey Item	Schools	Schools	Difference	Size	P-Value
Professional Development and Peer Coaching					
Average frequency of opportunities to participate in a principal/leader support network or other professional development. ($0 = never$, $5 = weekly$, 10 = daily)	4.2	4.3	-0.1	-0.06	0.754
Curriculum for College Readiness					
Curriculum included a course in effective transitions to middle or high school. (%)	68.2	54.4	13.9	0.28	0.109
All high school students participated in the same college preparation curricula in core academic classes. (%)	85.1	80.1	5.0	0.13	0.623
Average frequency students were provided with information about career fairs, job shadowing, internship opportunities, or college readiness. (high school only) $(0 = never, 5 = sometimes, 10 = always, when needed)$	8.4	8.2	0.1	0.09	0.776
Sample size	31	30			

SOURCE: Follow-up surveys of administrators (principals and assistant principals) administered during the school years of 2012-2013 and 2013-2014.

NOTES: Across 61 study schools, 170 administrators participated in the follow-up survey. Across 29 study high schools, 102 administrators participated in the follow-up survey. One DN school closed prior to the second year of implementation and is not included in this analysis. For each of the above measures, data are missing for no more than 5 percent of the administrators. The difference in the percentage of missing data between DN and non-DN schools is no more than 2.7 percent for any of the above measures.

A two-tailed t-test was used for all statistical tests presented in this table. Statistical significance levels are indicated as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.

Effect sizes were computed using the standard deviations of all non-DN school administrators for the respective measures.

Rounding may cause slight discrepancies in calculating sums and differences.

Appendix Table B.4

Pillar III: Tiered Student Supports, Service Contrast, Administrator Responses, Year 2

	DN	Non-DN	Estimated	Effect				
Survey Item	Schools	Schools	Difference	Size	P-Value			
Tiered Intervention Model								
The school had a data system that tracked students' attendance, behavior, and course performance to identify at-risk students during the school year. (%)	98.6	92.2	6.4	0.41	0.222			
Average frequency teams of teachers reviewed individual students' data to identify needs and determine interventions. $(0 = never,$ 5 = less than weekly, 10 = daily)	5.6	4.4	1.1	0.51 *	** 0.007			
Frequency parents/guardians were invited to meet with teachers to discuss strategies for meeting individual students' needs. $(0 = never, 5 = sometimes, 10 = always, when needed)$	7.8	8.2	-0.4	-0.19	0.341			
<u>Student Supports</u>								
Frequency of academic enrichment opportunities offered to students outside of normal school hours. ^a (0 = never, 5 = less than weekly, 10 = daily)	8.7	7.6	1.1	0.38 *	0.067			
Frequency students were engaged in mentoring services from college students or recent graduates who served as role models. ($0 = rarely$, $5 = biweekly$, 10 = daily)	3.8	3.8	0.0	0.01	0.960			
Frequency students were offered opportunities to participate in academic tutoring. ($0 = rarely$, 5 = biweekly, $10 = daily$)	9.1	8.6	0.4	0.19	0.339			
Frequency teachers, other staff members, or volunteers at the school followed up with students when they had attendance issues. ($0 = never$, 5 = sometimes, $10 = always$, as needed)	8.0	7.9	0.1	0.08	0.684			
Students with frequent disruptive behavior received a daily check-in with an adult to monitor their progress. (%)	84.3	75.3	9.0	0.20	0.264			
(continued)								

	DN	Non-DN	Estimated	Effect	
Survey Item	Schools	Schools	Difference	Size	P-Value
Student Case Management					
Average frequency students participated in individual, group, or family counseling. (0 = rarely, 5 = biweekly, 10 = daily)	7.3	5.7	1.6	0.60 ***	0.001
Average frequency students were provided with nonacademic basic needs when necessary. ^b (0 = never, 5 = sometimes, 10 = always, when needed)	8.2	8.1	0.1	0.07	0.750
Students identified as at risk were provided with an individual case plan to set goals and monitor progress. (%)	83.9	80.0	3.9	0.09	0.591
Sample size	31	30			

SOURCE: Follow-up surveys of administrators (principals and assistant principals) administered during the school years of 2012-2013 and 2013-2014.

NOTES: Across 61 study schools, 170 administrators participated in the follow-up survey. One DN school closed prior to the second year of implementation and is not included in this analysis. For each of the above measures, data are missing for no more than 8.2 percent of the administrators. The difference in the percentage of missing data between DN and non-DN schools is no more than 6.7 percent for any of the above measures.

A two-tailed t-test was used for all statistical tests presented in this table. Statistical significance levels are indicated as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.

Effect sizes were computed using the standard deviations of all non-DN school administrators for the respective measures.

Rounding may cause slight discrepancies in calculating sums and differences.

^aAcademic enrichment opportunities include homework help, service learning tutoring, and test preparation.

^bNonacademic basic needs refer to clothing, school supplies, food, health and wellness services, and mental health services.
Appendix Table B.5

Pillar IV: Can-Do Culture and Climate, Service Contrast, Administrator Responses, Year 2

	DN	Non-DN	Estimated	Effect	
Survey Item	Schools	Schools	Difference	Size	P-Value
Integrated On-Site Support					
An adult other than the principal or assistant principal coordinated school reform efforts. (%)	64.3	51.7	12.6	0.25	0.198
An adult other than the principal or assistant principal coordinated interventions and community resources. (%)	88.7	72.1	16.6	0.36	** 0.050
The school had a math and English/language arts coach. $(0 = \text{none}, 5 = \text{half-time}, 10 = \text{full-time})$	7.0	4.8	2.2	0.54	*** <0.001
Average times per month City Year AmeriCorps members, college students, or volunteers from organized programs worked with students. ^a	31.1	11.6	19.6	1.42	*** <0.001
Family and Community Involvement					
Average frequency staff members engaged with parents/guardians about students' academic, behavioral, and attendance issues or progress. (0 = never, 5 = less than weekly, 10 = daily)	7.9	7.9	0.1	0.03	0.883
Frequency school sponsored events that included participation from families or community members. $(0 = never, 5 = less than weekly, 10 = daily)$	3.1	2.8	0.3	0.20	0.413
Frequency students were offered opportunities to participate in service-learning or community-service projects. $(0 = rarely, 5 = biweekly, 10 = daily)$	4.6	4.0	0.6	0.16	0.401
High school students were offered opportunities to participate in work-based learning. (%)	76.0	90.0	-14.1	-0.44	0.156
The school offered services or referrals to students' parents/guardians (for example, English courses). (%)	79.8	81.0	-1.2	-0.03	0.882
Sample size	31	30			
·					(continued)

Appendix Table B.5 (continued)

SOURCE: Follow-up surveys of administrators (principals and assistant principals) administered during the school years of 2012-2013 and 2013-2014.

NOTES: Across 61 study schools, 170 administrators participated in the follow-up survey. Across 29 study high schools, 102 administrators participated in the follow-up survey. One DN school closed prior to the second year of implementation and is not included in this analysis. For each of the above measures, data are missing for no more than 5.9 percent of the administrators, except for the "administrators reported students were offered opportunities to participate in service-learning or community-service projects" item, where 10.6 percent of data are missing. The difference in the percentage of missing data between DN and non-DN schools is no more than 5.6 percent for any of the above measures.

A two-tailed t-test was used for all statistical tests presented in this table. Statistical significance levels are indicated as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.

Effect sizes were computed using the standard deviations of all non-DN school administrators for the respective measures.

Rounding may cause slight discrepancies in calculating sums and differences.

^aSurvey items in this input have been calculated by weighting the frequency per month and then summing the weighted survey items in order to get a total times-per-month measure. For example, 0 = never, 1 = at least once a month, 2 = more than once a month but not weekly, 5 = once a week, 12 = more than once a week but not daily, and 20 = daily.

Appendix Table B.6

Pillar I: Teacher Teams and Small Learning Communities, Service Contrast, Teacher Responses, Year 1

	DN	Non-DN	Estimated	Effect	
Survey Item	Schools	Schools	Difference	Size	P-Value
Strong Learning Environments					
Core teachers reported how many of their classes were 70 to 90 minutes. $(0 = \text{none}, 5 = \text{few}, 10 = \text{most})$	6.2	6.3	-0.1	-0.03	0.789
Core teachers reported the frequency they collaborated with an interdisciplinary team of teachers who shared the same group of students. (0 = never, 5 = less than weekly, 10 = daily)	5.7	5.2	0.5	0.16 *	0.087
Core teachers reported hours spent each week collaborating with an interdisciplinary team and teaching coordinated content across disciplines. (0 = none, 5 = 1 to 2, 10 = 3 or more)	3.7	3.5	0.2	0.07	0.446
Math and English/language arts teachers reported participating in a professional learning community with teachers within the same subject area. (0 = never, 5 = less than weekly, 10 = daily)	5.3	5.4	-0.1	-0.04	0.677
Sample size	32	30			

SOURCE: Follow-up surveys of teachers administered during the school years of 2011-2012 and 2012-2013. Respondents included middle school teachers who taught sixth grade and high school teachers who taught ninth grade.

NOTES: "Core" academic areas are identified as math, English/language arts, sciences, and social studies. Across 62 study schools, 1,043 core teachers participated in the follow-up survey, including 685 math and English/language arts teachers. For each of the above measures, data are missing for no more than 3.2 percent of the teachers. The difference in the percentage of missing data between DN and non-DN schools is no more than 1 percent for any of the above measures.

A two-tailed t-test was used for all statistical tests presented in this table. Statistical significance levels are indicated as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.

Effect sizes were computed using the standard deviations of all non-DN school teachers for the respective measures.

Rounding may cause slight discrepancies in calculating sums and differences.

Appendix Table B.7

Pillar II: Curriculum and Instruction with Professional Development, Service Contrast, Teacher Responses, Year 1

	DN	Non-DN	Estimated	Effect	
Survey Item	Schools	Schools	Difference	Size	P-Value
Professional Development and Peer Coaching					
Average times per month math and English/language arts teachers reported working with an instructional coach. ^a	7.1	6.1	1.0	0.11	0.301
Average times per month math and English/language arts teachers reported receiving support from a school leader or a coach. ^a	13.2	11.1	2.1	0.15	0.224
Curriculum for College Readiness					
Math and English/language arts teachers reported implementing the same college preparation curriculum with all students in their classes. (high school only) (%)	55.4	59.3	-3.9	-0.08	0.583
Math and English/language arts teachers reported struggling students in their courses received additional classes to catch up with their peers. (%)	76.4	81.5	-5.0	-0.13	0.205
Math and English/language arts teachers reported the average frequency they used a variety of student-centered teaching strategies. ^b ($0 = never$, $5 = less$ than weekly, $10 = daily$)	0.7	0.7	0.0	0.03	0.782
Math and English/language arts teachers reported the average frequency students applied classroom activities to real-life issues and used critical thinking and reasoning skills. ($0 = never$, $5 = less$ than weekly, $10 = daily$)	0.7	0.7	0.0	0.06	0.552
Math and English/language arts teachers reported the average frequency academic courses included career applications and exploration. (<i>high school only</i>) $(0 = never, 5 = less than weekly, 10 = daily)$	0.5	0.5	0.0	0.02	0.886
			5.0		
Sample size	32	30			

Appendix Table B.7 (continued)

SOURCE: Follow-up surveys of teachers administered during the school years of 2011-2012 and 2012-2013. Respondents included middle school teachers who taught sixth grade and high school teachers who taught ninth grade.

NOTES: Across 62 study schools, 685 math and English/language arts teachers participated in the follow-up survey. Across 29 study high schools, 404 math and English/language arts teachers participated in the follow-up survey. For each of the above measures, data are missing for no more than 6.4 percent of the teachers. The difference in the percentage of missing data between DN and non-DN schools is no more than 1.9 percent for any of the above measures.

A two-tailed t-test was used for all statistical tests presented in this table. Statistical significance levels are indicated as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.

Effect sizes were computed using the standard deviations of all non-DN school teachers for the respective measures.

Rounding may cause slight discrepancies in calculating sums and differences.

^aSurvey items in this input have been calculated by weighting the frequency per month and then summing the weighted survey items in order to get a total times-per-month measure. For example, 0 = never, 1 = at least once a month, 2 = more than once a month but not weekly, 5 = once a week, 12 = more than once a week but not daily, and 20 = daily.

^bStudent-centered teaching strategies include demonstrations, modeling of strategies, and minilessons.

Appendix Table B.8

Pillar III: Tiered Student Supports, Service Contrast, Teacher Responses, Year 1

	DN	Non-DN	Estimated	Effect	
Survey Item	Schools	Schools	Difference	Size	P-Value
Tiered Intervention Model					
Core teachers reported the average frequency they used attendance, behavior, and course performance data to target at-risk students. (0 = never, 5 = less than weekly, 10 = daily)	5.1	5.4	-0.3	-0.09	0.275
Core teachers reported hours spent each week reviewing student data with an interdisciplinary team of teachers to identify student needs. $(0 = never,$ 5 = 1 to 2, $10 = 3$ or more)	3.9	3.5	0.4	0.13	0.110
Core teachers reported the average frequency they participated in meetings with administrators or counselors to identify at-risk students and plan interventions. (0 = never, 5 = less than weekly, 10 = daily)	4.8	4.1	0.7	0.24 **	0.026
Core teachers reported the average frequency they invited parents of at-risk students to participate in discussions about interventions to support their child. ($0 = never$, $5 = less$ than weekly, 10 = daily)	3.9	4.2	-0.3	-0.10	0.388
<u>Student Supports</u>					
Math and English/language arts teachers reported students who were often disruptive were offered behavior coaching. ($0 = never$, $5 = sometimes$, 10 = always, as needed)	5.6	5.8	-0.1	-0.04	0.703
Math and English/language arts teachers reported the frequency students were provided additional support related to attendance. ($0 = never$, 5 = less than weekly, $10 = daily$)	6.6	6.5	0.1	0.05	0.641
Math and English/language arts teachers reported the frequency students were offered individual or small-group tutoring during their classes. (0 = never, 5 = less than weekly, 10 = daily)	7.5	7.2	0.3	0.11	0.299

	DN	Non-DN	Estimated	Effect	
Survey Item	Schools	Schools	Difference	Size	P-Value
Average times per month math and English/ language arts teachers reported students received whole-class behavioral support from volunteers. ^a	7.0	-9.5	16.5	0.22 *	0.059
Average times per month math and English/ language arts teachers reported students received academic help in class from volunteers. ^a	38.3	26.0	12.3	0.37 **	* 0.002
Student Case Management					
Core teachers reported the frequency they arranged intensive support and interventions for students by making appropriate referrals. ($0 =$ never, 5 = sometimes, $10 =$ always, as needed)	6.9	7.0	-0.1	-0.04	0.657
Core teachers reported the frequency needs assessments were conducted to quickly identify students' needs and address them effectively. (0 = never, 5 = sometimes, 10 = always, as needed)	6.1	5.9	0.2	0.06	0.579
Core teachers reported the frequency academic and nonacademic services were coordinated for students at risk of dropping out of school. (0 = never, 5 = sometimes, 10 = always, as needed)	6.1	5.9	0.2	0.08	0.419
Sample size	32	30			

Appendix Table B.8 (continued)

SOURCE: Follow-up surveys of teachers administered during the school years of 2011-2012 and 2012-2013. Respondents included middle school teachers who taught sixth grade and high school teachers who taught ninth grade.

NOTES: "Core" academic areas are identified as math, English/language arts, sciences, and social studies. Across 62 study schools, 1,043 core teachers participated in the follow-up survey, including 685 math and English/language arts teachers. For each of the above measures, data are missing for no more than 6.9 percent of the teachers. The difference in the percentage of missing data between DN and non-DN schools is no more than 2 percent for any of the above measures.

A two-tailed t-test is used for all statistical tests presented in this table. Statistical significance levels are indicated as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.

Effect sizes were computed using the standard deviations of all non-DN school teachers for the respective measures.

Rounding may cause slight discrepancies in calculating sums and differences.

^aSurvey items in this input have been calculated by weighting the frequency per month and then summing the weighted survey items in order to get a total times-per-month measure. For example, 0 = never, 1 = at least once a month, 2 = more than once a month but not weekly, 5 = once a week, 12 = more than once a week but not daily. and 20 = daily.

Appendix Table B.9

Pillar IV: Can-Do Culture and Climate, Service Contrast, Teacher Responses, Year 1

	DN	Non-DN	Estimated	Effect	
Survey Item	Schools	Schools	Difference	Size	P-Value
Integrated On-Site Support					
Average times per month math and English/language arts teachers reported City Year AmeriCorps members worked with students. ^a	12.9	3.4	9.5	1.40 ***	s <0.001
Average times per month math and English/language arts teachers reported City Year AmeriCorps members, college students, or volunteers from organized programs worked with students. ^a	16.3	5.5	10.8	1.07 ***	• <0.001
Average times per month math and English/language arts teachers reported any volunteer worked with students. ^{a,b}	21.7	10.0	11.7	0.66 ***	• <0.001
Family and Community Involvement					
Teachers reported the frequency parents and community members were offered opportunities to participate in school initiatives. ($0 = never$, $5 = less$ than weekly, $10 = daily$)	0.4	0.4	0.0	-0.01	0.937
Teachers reported the school had a plan for parent and community engagement linked to specific goals for improving student learning and healthy development. (%)	49.2	51.3	-2.1	-0.04	0.677
Teachers reported the school helped all parents understand what they could do at home to support a student's success in school. (0 = strongly disagree, 10 = strongly agree)	0.6	0.6	0.0	0.01	0 937
			5.0	0.01	0.257
Sample size	32	30			

Appendix Table B.9 (continued)

SOURCE: Follow-up surveys of teachers administered during the school years of 2011-2012 and 2012-2013. Respondents included middle school teachers who taught sixth grade and high school teachers who taught ninth grade.

NOTES: Across 62 study schools, 1,620 teachers participated in the follow-up survey including 685 math and English/language arts teachers. For each of the above measures, data are missing for no more than 8.6 percent of the teachers. The difference in the percentage of missing data between DN and non-DN schools is no more than 1.8 percent for any of the above measures.

A two-tailed t-test was used for all statistical tests presented in this table. Statistical significance levels are indicated as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.

Effect sizes were computed using the standard deviations of all non-DN school teachers for the respective measures.

Rounding may cause slight discrepancies in calculating sums and differences.

^aSurvey items in this input have been calculated by weighting the frequency per month and then summing the weighted survey items in order to get a total times-per-month measure. For example, 0 = never, 1 = at least once a month, 2 = more than once a month but not weekly, 5 = once a week, 12 = more than once a week but not daily, and 20 = daily.

^bVolunteers include: City Year AmeriCorps members, students from local college or teacher-preparation programs, members of organized volunteer groups, peer tutors, and community members.

Appendix Table B.10

Pillar I: Teacher Teams and Small Learning Communities, Service Contrast, Teacher Responses, Sixth and Ninth Grades, Year 2

	DN	Non-DN	Estimated	Effect	
Survey Item	Schools	Schools	Difference	Size	P-Value
Strong Learning Environments					
Core teachers reported how many of their classes were 70 to 90 minutes. $(0 = \text{none}, 5 = \text{few}, 10 = \text{most})$	6.5	5.1	1.5	0.31 ***	< 0.001
Core teachers reported the frequency they collaborated with an interdisciplinary team of teachers who shared the same group of students. (0 = never, 5 = less than weekly, 10 = daily)	5.7	4.3	1.5	0.45 ***	0.002
Core teachers reported hours spent each week collaborating with an interdisciplinary team and teaching coordinated content across disciplines. (0 = none, 5 = 1 to 2, 10 = 3 or more)	4.1	3.2	0.9	0.33 ***	0.003
Math and English/language arts teachers reported participating in a professional learning community with teachers within the same subject area. (0 = never, 5 = less than weekly, 10 = daily)	5.5	5.1	0.4	0.16	0.255
Sample size	30	30			

SOURCE: Follow-up surveys of teachers administered during the school years of 2012-2013 and 2013-2014. Respondents included middle school teachers who taught sixth grade and high school teachers who taught ninth grade.

NOTES: "Core" academic areas are identified as math, English/language arts, sciences, and social studies. Across 60 study schools, 853 core teachers participated in the follow-up survey, including 577 math and English/language arts teachers. Two study schools were excluded from the analysis due to missing survey data. For each of the above measures, data are missing for no more than 3.3 percent of the teachers. The difference in the percentage of missing data between DN and non-DN schools is no more than 1 percent for any of the above measures.

A two-tailed t-test was used for all statistical tests presented in this table. Statistical significance levels are indicated as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.

Effect sizes were computed using the standard deviations of all non-DN school teachers for the respective measures.

Rounding may cause slight discrepancies in calculating sums and differences.

Appendix Table B.11

Pillar II: Curriculum and Instruction with Professional Development, Service Contrast, Teacher Responses, Sixth and Ninth Grades, Year 2

Survey ItemSchoolsSchoolsProfessional Development and Peer CoachingAverage times per month math and English/language arts teachers reported working with an	<u>a Difference</u> 3.7	Size	P-Value
<u>Professional Development and Peer Coaching</u> Average times per month math and English/language arts teachers reported working with an	3.7	0.41.**	
Average times per month math and English/language arts teachers reported working with an	3.7	0.41 **	
instructional coach. ^a 8.5 4.9		0.41	0.013
Average times per month math and English/language arts teachers reported receiving support from a school leader or a coach. ^a 15.0 9.2	5.9	0.41 **	0.010
Curriculum for College Readiness			
Math and English/language arts teachers reportedimplementing the same college preparationcurriculum with all students in their classes.(high school only) (%)60.260.3	-0.2	0.00	0.983
Math and English/language arts teachers reported struggling students in their courses received additional classes to catch up with their peers. (%)71.372.2	-1.0	-0.02	0.877
Math and English/language arts teachers reported the average frequency they used a variety of student-centered teaching strategies. ^b ($0 = never$, $5 = less than weekly$, $10 = daily$) 0.7 0.7	0.0	0.14	0.194
Math and English/language arts teachers reported the average frequency students applied classroom activities to real-life issues and used critical thinking and reasoning skills. $(0 = never, 5 = less than weekly, 10 = daily)$ 0.7 0.7	0.0	0.06	0.558
Math and English/language arts teachers reported the average frequency academic courses included career applications and exploration. (high school only) ($0 = never$, $5 = less than weekly$, $10 = daily$) 0.5 0.5	0.0	0.04	0.744
Sample size3030			

Appendix Table B.11 (continued)

SOURCE: Follow-up surveys of teachers administered during the school years of 2012-2013 and 2013-2014. Respondents included middle school teachers who taught sixth grade and high school teachers who taught ninth grade.

NOTES: Across 60 study schools, 577 math and English/language arts teachers participated in the follow-up survey. Across 29 study high schools, 332 math and English/language arts teachers participated in the follow-up survey. Two study schools were excluded from the analysis due to missing survey data. For each of the above measures, data are missing for no more than 6.6 percent of the teachers. The difference in the percentage of missing data between DN and non-DN schools is no more than 3.4 percent for any of the above measures.

A two-tailed t-test was used for all statistical tests presented in this table. Statistical significance levels are indicated as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.

Effect sizes were computed using the standard deviations of all non-DN school teachers for the respective measures.

Rounding may cause slight discrepancies in calculating sums and differences.

^aSurvey items in this input have been calculated by weighting the frequency per month and then summing the weighted survey items in order to get a total times-per-month measure. For example, 0 = never, 1 = at least once a month, 2 = more than once a month but not weekly, 5 = once a week, 12 = more than once a week but not daily, and 20 = daily.

^bStudent-centered teaching strategies include demonstrations, modeling of strategies, and minilessons.

Appendix Table B.12

Pillar III: Tiered Student Supports, Service Contrast, Teacher Responses, Sixth and Ninth Grades, Year 2

DN	Non-DN	Estimated I	Effect		
Schools	Schools	Difference	Size		P-Value
5.6	4.7	0.8	0.29	***	0.006
4.2	3.3	0.9	0.33	***	0.006
5.0	3.4	1.6	0.56	***	<0.001
4.3	4.1	0.2	0.08		0.361
5.7	4.9	0.8	0.26	**	0.018
6.9	6.2	0.7	0.22	**	0.041
7.3	6.8	0.5	0.18	*	0.100
	DN Schools 5.6 4.2 5.0 4.3 5.7 6.9 7.3	DN Non-DN Schools Schools 5.6 4.7 4.2 3.3 5.0 3.4 4.3 4.1 5.7 4.9 6.9 6.2 7.3 6.8	DN Non-DN Estimated I 5.6 4.7 0.8 4.2 3.3 0.9 5.0 3.4 1.6 4.3 4.1 0.2 5.7 4.9 0.8 6.9 6.2 0.7 7.3 6.8 0.5	DN Non-DN Estimated Effect Schools Schools Difference Size 5.6 4.7 0.8 0.29 4.2 3.3 0.9 0.33 5.0 3.4 1.6 0.56 4.3 4.1 0.2 0.08 5.7 4.9 0.8 0.26 6.9 6.2 0.7 0.22 7.3 6.8 0.5 0.18	DN Non-DN Estimated Effect Schools Schools Difference Size 5.6 4.7 0.8 0.29 *** 4.2 3.3 0.9 0.33 *** 5.0 3.4 1.6 0.56 *** 4.3 4.1 0.2 0.08 5.7 4.9 0.8 0.26 ** 6.9 6.2 0.7 0.22 ** 7.3 6.8 0.5 0.18 *

	DN	Non-DN	Estimated 1	Effect		
Survey Item	Schools	Schools	Difference	Size		P-Value
Average times per month math and English/ language arts teachers reported students received whole-class behavioral support from volunteers. ^a	8.0	4.1	3.9	0.54	***	0.001
Average times per month math and English/ language arts teachers reported students received academic help in class from volunteers. ^a	46.5	22.2	24.3	0.73	***	<0.001
Student Case Management						
Core teachers reported the frequency they arranged intensive support and interventions for students by making appropriate referrals. ($0 =$ never, 5 = sometimes, $10 =$ always, as needed)	7.2	7.1	0.1	0.21	**	0.034
Core teachers reported the frequency needs assessments were conducted to quickly identify students' needs and address them effectively. (0 = never, 5 = sometimes, 10 = always, as needed)	6.1	6.1	0.1	0.22	**	0.016
Core teachers reported the frequency academic and nonacademic services were coordinated for students at risk of dropping out of school. (0 = never, 5 = sometimes, 10 = always, as needed)	6.4	6.3	0.1	0.42	***	<0.001
Sample size	30	30				

Appendix Table B.12 (continued)

SOURCE: Follow-up surveys of teachers administered during the school years of 2012-2013 and 2013-2014. Respondents included middle school teachers who taught sixth grade and high school teachers who taught ninth grade.

NOTES: "Core" academic areas are identified as math, English/language arts, sciences, and social studies. Across 60 study schools, 853 core teachers participated in the follow-up survey, including 577 math and English/language arts teachers. Two study schools were excluded from the analysis due to missing survey data. For each of the above measures, data are missing for no more than 7.6 percent of the teachers. The difference in the percentage of missing data between DN and non-DN schools is no more than 6.9 percent for any of the above measures.

A two-tailed t-test is used for all statistical tests presented in this table. Statistical significance levels are indicated as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.

Effect sizes were computed using the standard deviations of all non-DN school teachers for the respective measures.

Rounding may cause slight discrepancies in calculating sums and differences.

^aSurvey items in this input have been calculated by weighting the frequency per month and then summing the weighted survey items in order to get a total times-per-month measure. For example, 0 = never, 1 = at least once a month, 2 = more than once a month but not weekly, 5 = once a week, 12 = more than once a week but not daily, and 20 = daily.

Appendix Table B.13

Pillar IV: Can-Do Culture and Climate, Service Contrast, Teacher Responses, Sixth and Ninth Grades, Year 2

	DN	Non-DN	Estimated	Effect	
Survey Item	Schools	Schools	Difference	Size	P-Value
Integrated On-Site Support					
Average times per month math and English/language arts teachers reported City Year AmeriCorps members worked with students. ^a	14.4	1.6	12.8	2.07 **	* <0.001
Average times per month math and English/language arts teachers reported City Year AmeriCorps members, college students, or volunteers from organized programs worked with students. ^a	18.9	3.6	15.3	1.68 **	* <0.001
Average times per month math and English/language arts teachers reported any volunteer worked with students. ^{a,b}	26.0	7.7	18.3	1.02 **	** <0.001
Family and Community Involvement					
Teachers reported the frequency parents and community members were offered opportunities to participate in school initiatives. ($0 = never$, $5 = less$ than weekly, $10 = daily$)	0.4	0.4	0.0	0.07	0.426
Teachers reported the school had a plan for parent and community engagement linked to specific goals for improving student learning and healthy development. (%)	55.8	55.8	0.0	0.02	0.838
Teachers reported the school helped all parents understand what they could do at home to support a student's success in school. (0 = strongly disagree, 10 = strongly agree)	0.6	0.6	0.0	0.05	0.515
	20	200	5.0		
Sample size	30	30			

Appendix Table B.13 (continued)

SOURCE: Follow-up surveys of teachers administered during the school years of 2012-2013 and 2013-2014. Respondents included middle school teachers who taught sixth grade and high school teachers who taught ninth grade.

NOTES: Across 60 study schools, 1,339 teachers participated in the follow-up survey, including 577 math and English/language arts teachers. Two study schools were excluded from the analysis due to missing survey data. For each of the above measures, data are missing for no more than 7.6 percent of the teachers. The difference in the percentage of missing data between DN and non-DN schools is no more than 3.5 percent for any of the above measures.

A two-tailed t-test was used for all statistical tests presented in this table. Statistical significance levels are indicated as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.

Effect sizes were computed using the standard deviations of all non-DN school teachers for the respective measures.

Rounding may cause slight discrepancies in calculating sums and differences.

^aSurvey items in this input have been calculated by weighting the frequency per month and then summing the weighted survey items in order to get a total times-per-month measure. For example, 0 = never, 1 = at least once a month, 2 = more than once a month but not weekly, 5 = once a week, 12 = more than once a week but not daily, and 20 = daily.

^bVolunteers include: City Year AmeriCorps members, students from local college or teacher-preparation programs, members of organized volunteer groups, peer tutors, and community members.

Appendix C

Qualitative Data from Case Study Sites

This appendix provides additional details about qualitative case study data-collection activities at nine case study schools from four school districts during the second year of Diplomas Now implementation. (These findings are primarily discussed in Chapter 4.) The first section includes counts of participants in interviews and focus groups (Appendix Table C.1), the second section describes the qualitative research methodology, and the final section includes the fidelity of implementation findings for the nine schools that participated in the case studies (Appendix Table C.2).

Interview and Focus Group Response Counts

Appendix Table C.1 includes the response counts of interview and focus group participants during the spring of the second year of implementation.

Diplomas Now

Appendix Table C.1

	DN Middle	Schools	DN High S	chools	All DN Sc	hools
	Total	Total	Total	Total	Total	Total
	Participants	Schools	Participants	Schools	Participants	Schools
Case study round						
Spring 2013	32	1	117	3	150	4
Spring 2014	104	3	45	2	151	5
Respondent type						
Diplomas Now staff members	57	4	77	5	137	9
District/school staff members	30	4	42	5	72	9
Parents	15	3	10	4	25	7
Students	34	4	33	5	67	9
Sample size	136	4	162	5	301	9

Counts of Interview and Focus Group Participants, Case Study Schools

SOURCES: Diplomas Now program staff, school, and district interviews and focus groups, 2013 and 2014.

NOTES: Data were collected at nine DN schools representing four districts. The total number of participants is higher than the sum of the middle and high school total participants because three interviews were conducted with field managers who oversaw both DN middle schools and DN high schools, and who were not included in either separate count.

Case Study Methodology

Case study research team members used standardized processes for the collection and analysis of case study data to ensure the consistent use of best practices. The following sections provide detail regarding interview and focus group protocol development, on-site data-collection activities, and qualitative analysis procedures.

Protocol Development

Interview protocols, focus group guides, and consent forms used by the case study research team were preapproved by three separate Institutional Review Boards from ICF International, Johns Hopkins University, and MDRC to ensure human subject protections during each round of case study data collection.¹ Each protocol was developed based on the program logic model and the following five research questions to gather in-depth information about participants' experiences during the second year of implementation:

- 1. How was the Diplomas Now model implemented in case study schools?
- 2. What factors facilitated or hindered implementation of the model?
- 3. What are the perceived benefits of the Diplomas Now model in case study schools?
- 4. What were the drawbacks to implementing the Diplomas Now model?
- 5. What lessons can be learned from the implementation of the Diplomas Now model in case study schools?

Interview and focus group protocols contained similar sets of open-ended questions tailored to each participant group and focused on key topics including: implementation, collaborative activities, perceived impact, lessons learned, and sustainability.

Data Collection

Case study data-collection activities were conducted with four schools in spring 2013 and five schools in spring 2014 to capture the range of programmatic experiences from school

¹Protocols and focus group guides can be found in the *Data Collection Instrument Supplement* to the first report, Corrin et al. (2014b), available at www.mdrc.org.

staff members, program staff members, parents, and students during the second year of implementation. Case study schools represented four mostly urban school districts and included four middle schools and five high schools. Two to three research team members visited each school for three to five days to conduct interviews and facilitate focus groups. Individual interviews approximately 60 minutes in length — included school-based program staff members (for example, Talent Development school transformation facilitators, City Year program managers and team leaders, Communities In Schools site coordinators, school administrators, school counselors, and instructional coaches) and district-based staff members (for example, instructional facilitators, Diplomas Now field managers, school and student support services facilitators, and school district leaders). Focus groups lasted between 60 and 90 minutes and were conducted separately with parents, students, teachers, and City Year AmeriCorps members, and ranged from 2 to 11 participants per group. Interviews and focus groups were digitally recorded and supplemented by research team members' notes. Following each site visit, the research team completed site-visit summaries to capture overall impressions and main takeaways from the visit. All interviews and focus group recordings were transcribed verbatim.

Coding Processes and Procedures

Transcripts were stored, managed, and analyzed using the qualitative data analysis software Atlas.ti. This software was selected based on the research team's previous experience using it and because it makes it easy to synthesize information drawn from different participant groups and data sources. Qualitative data were segmented into "quotations," or sections/units of data that were relevant and that stood on their own.² Not all sections of transcripts were assigned codes and some quotations received multiple or overlapping codes.

The research team used the same coding framework to analyze Year 2 data that was used to analyze Year 1 data. (See Box C.1 for the coding framework.) An inductive process of coding interview and focus group data was iterative and continuously driven both by research purpose and by the data themselves.³ The research team developed an initial set of codes prior to analyzing Year 1 case study data, following a review of the program logic model and other program materials. Codes, with their corresponding definitions, were documented in a codebook and the research team reviewed the codebook collectively to facilitate a shared understanding prior to coding.

²Lincoln and Guba (1985).

³Merriam (2009).

Box C.1

Coding Framework for Interviews and Focus Groups Activity type. Program inputs and activities specific to Diplomas Now. Background information. Introductory and background information on interview/focus group participants. Implementation challenges. Activities/practices identified as challenging to implement or barriers that reportedly made implementation a challenge. Implementation facilitators. Activities/practices identified as effectively implemented or factors that reportedly made implementation successful. Collaboration. Types of interactions to establish and capitalize on relationships (for example, formal meetings, informal communication, or planning) among key players such as Diplomas Now school-based staff members, administrators, and teachers.

Perceived program impact. Perceived effects that participants attributed to Diplomas Now program-specific activities/inputs and details about whom or what was affected (for example, student behavior, student attendance, student course performance, or school climate).

Lessons learned. Things respondents would do differently or recommendations from the first year of implementation (for example, lessons, quotes, examples, or stories).

School context. Information about the setting in which Diplomas Now is implemented (for example, regarding resources, school characteristics, or staff stability) or external factors that may be affecting implementation (for example, regarding school closures, principal turnover, or teacher layoffs).

The research team conducted two phases of coding. The first phase included initial content analysis, whereby codes, established a priori, were applied to data.⁴ Each transcript was independently analyzed by two research team members. To ensure inter-rater reliability, the team resolved any discrepant analyses during consensus-building meetings that occurred every two weeks. These regular meetings for peer debriefing also served as an opportunity to con-firm consistent application of processes, provide feedback on trends in coding (for example, on the over- or underemphasis of particular codes), clarify or revise operational definitions of codes, organize codes into logical groups, and determine the need for additional codes. Coding decisions were discussed and analyzed until the team members reached agreement and clarified inconsistencies. In the second phase of coding, research team mem-

⁴Miles and Huberman (1994); Saldaña (2009); Patton (2002).

bers conducted ad hoc analysis to identify additional themes not previously identified using a priori codes. This final review was conducted to ensure the application of ad hoc codes to all transcripts. The research team also applied the "memo" function in Atlas.ti to document preliminary interpretations for reporting purposes and to document questions to discuss and clarify during consensus-building meetings.

Data Analysis Processes and Procedures

After completing two phases of coding, the team analyzed the frequency with which each code was applied to transcripts, or its "groundedness," to determine which codes should be aggregated, disaggregated, or deleted. In other words, codes with no or few quotations (low groundedness) were merged with other codes and codes with high groundedness were further analyzed to consider whether it was necessary to break them apart into more specific codes. This process looked for correspondence among codes, and helped achieve a manageable number of codes based on frequency, uniqueness, and importance.⁵

Code frequency tables and code co-occurrence tables were used to identify prominent themes, similarities, and trends from Year 1 to Year 2. Narrative summaries were used as a data-reduction technique and included an additional process to group quotations for further inquiry based on commonly co-occurring themes.⁶ This allowed the research team to fully understand emerging themes based on the data and to pull direct quotations or vignettes to illustrate relevant concepts.

Fidelity Scores for Case Study Schools

Appendix Table C.2 includes the Year 1 and Year 2 average fidelity scores for the nine schools that participated in the case study.

⁵Creswell (1998); Merriam (1998).

⁶Seidman (2006); Maxwell (1995).

Appendix Table C.2

Fidelity of Implementation Findings, Case Study Schools, Comparison of Year 1 and Year 2

Model Inputs	Average Fidelity Score		
	Year 1	Year 2	Difference
Pillar I. Teacher Teams and Small Learning Communities	0.80	0.80	-0.01
Strong Learning Environments ^{a,b}	0.80	0.80	-0.01
Pillar II. Curriculum and Instruction with Professional Development	0.44	0.37	-0.07
Professional Development and Peer Coaching ^{a,b}	0.56	0.37	-0.20
Curriculum for College Readiness ^b	0.32	0.37	0.05
<u>Pillar III. Tiered Student Supports</u>	0.73	0.72	-0.01
Tiered Intervention Model ^a	0.81	0.81	0.01
Student Supports ^a	0.72	0.77	0.04
Student Case Management ^a	0.65	0.57	-0.08
Pillar IV. Can-Do Culture and Climate	0.64	0.65	0.00
Integrated On-Site Support ^a	0.86	0.85	-0.02
Family and Community Involvement	0.42	0.45	0.03
Program Staff Training and Development	0.68	0.66	-0.01
Overall	0.65	0.63	-0.02
Sample size	7	9	

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Appendix Table C.2 (continued)

SOURCE: Diplomas Now fidelity of implementation program staff surveys, 2012, 2013, and 2014.

NOTES: Each of the nine inputs consists of a set of more specific components measured on a 0-1 scale. For each case study school, all of the component scores under an input are averaged to create the implementation score for that input. These scores are then averaged to create the pillar-level and overall implementation scores.

A two tailed t-test was applied to differences. No significant differences were found between groups with the exception of Strong Learning Environments in Year 1, for which case study schools scores were significantly better than non-case study schools.

Rounding may cause slight discrepancies in calculating sums and differences.

^aIndicates model inputs designated as critical to the Diplomas Now model.

^bStrong Learning Environments, Professional Development and Peer Coaching, and Curriculum for College Readiness include some components specific to either middle schools or high schools.

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Earlier MDRC Publications on Diplomas Now

Laying Tracks to Graduation The First Year of Implementing Diplomas Now 2014. William Corrin, Susan Sepanik, Aracelis Gray, Felix Fernandez, Ashley Briggs, Kathleen K. Wang

Data Collection Instrument Supplement to Laying Tracks to Graduation The First Year of Implementing Diplomas Now 2014. William Corrin, Susan Sepanik, Aracelis Gray, Felix Fernandez, Ashley Briggs, Kathleen K. Wang

NOTE: All the publications listed above are available for free download at www.mdrc.org.

About MDRC

MDRC is a nonprofit, nonpartisan social and education policy research organization dedicated to learning what works to improve the well-being of low-income people. Through its research and the active communication of its findings, MDRC seeks to enhance the effectiveness of social and education policies and programs.

Founded in 1974 and located in New York City and Oakland, California, MDRC is best known for mounting rigorous, large-scale, real-world tests of new and existing policies and programs. Its projects are a mix of demonstrations (field tests of promising new program approaches) and evaluations of ongoing government and community initiatives. MDRC's staff bring an unusual combination of research and organizational experience to their work, providing expertise on the latest in qualitative and quantitative methods and on program design, development, implementation, and management. MDRC seeks to learn not just whether a program is effective but also how and why the program's effects occur. In addition, it tries to place each project's findings in the broader context of related research — in order to build knowledge about what works across the social and education policy fields. MDRC's findings, lessons, and best practices are proactively shared with a broad audience in the policy and practitioner community as well as with the general public and the media.

Over the years, MDRC has brought its unique approach to an ever-growing range of policy areas and target populations. Once known primarily for evaluations of state welfare-to-work programs, today MDRC is also studying public school reforms, employment programs for exoffenders and people with disabilities, and programs to help low-income students succeed in college. MDRC's projects are organized into five areas:

- Promoting Family Well-Being and Children's Development
- Improving Public Education
- Raising Academic Achievement and Persistence in College
- Supporting Low-Wage Workers and Communities
- Overcoming Barriers to Employment

Working in almost every state, all of the nation's largest cities, and Canada and the United Kingdom, MDRC conducts its projects in partnership with national, state, and local governments, public school systems, community organizations, and numerous private philanthropies.