



**Project Exc-EL  
(Excellence for English Learners)**

**Final Evaluation Report for the  
National Evaluation of Investing in  
Innovation (i3) Fund**

**NEi3 Evaluation Submission**

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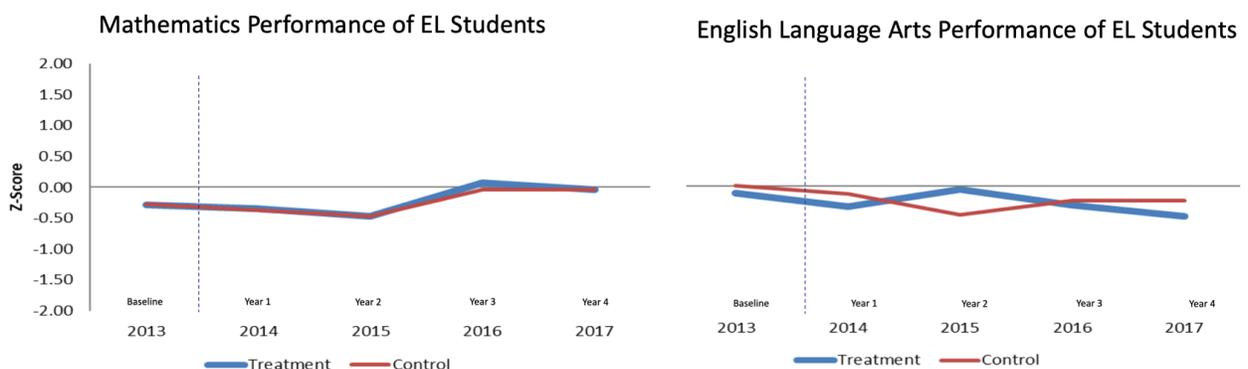
## EXECUTIVE SUMMARY

Project Exc-EL (Excellence for English Learners) is a school-wide intervention focused on providing teacher professional development and training to better support English learners (ELs). The ultimate goal of the intervention is to support the academic achievement and post-secondary success of EL students. To support EL students, Project Exc-EL focuses on training teachers to use data to identify EL student needs, creating a school climate focused on college and career readiness, and providing school coaches to support teachers as they serve EL students and their families. The core philosophy is one of enriched activities and wrap around supports focused on success, college/career readiness, and high school completion. Project participants used individualized student learning plans and tiered interventions to track and adjust student activities.

Project Exc-EL developed and implemented an enhanced, comprehensive design that addressed the unique and urgent needs of low-incidence EL population school districts – districts that are struggling to provide a comprehensive, rigorous education for the newest members of their communities. The project employed a data-driven, tiered approach to instruction that builds on community partnerships to create personalized, expanded learning opportunities for students.

External evaluators conducted an impact and an implementation study to ascertain the outcomes of the project and gauge the fidelity of implementation of the project. The evaluation questions address whether Project Exc-EL increases EL student achievement in math and English Language Arts (ELA), and how the developer implemented the program across four schools. Figure ES-1 shows the change over time in math and ELA outcomes for EL students one year prior to the intervention (baseline) and four years post-intervention. There were no statistically significant differences in math and ELA outcomes of EL students between the treatment and comparison schools.

**Figure ES-1: Impact Results for Math and English Language Arts for EL Students**



Note: Data from publicly available school records from the New York Department of Education. There were 4 treatment schools and 16 statistically matched comparison schools.



The project was implemented by the developer with fidelity all three years of project implementation, see Figure ES-2. Specifically, the developers implemented the key components related to creating a school culture of college and career readiness, training teachers in data use, and providing school coaches to support teachers.

In all, Project Exc-EL was a five-year Investing in Innovation (i3) grant funded by the US Department of Education to provide professional development, training, and coaching to school staff to better support EL students. While the developers implemented the project with fidelity, there were no significant differences in math or ELA outcomes of EL students. Given that the focus is on training teachers on data use, building school culture, and providing school coaches for teachers, future research should include intermediate outcomes, or moderators, such as improved teacher instruction and pedagogy, to better understand the mechanisms of student achievement for English learners.

**Figure ES-2: Implementation Results Project Exc-EL**

	Definitions		Findings					
			2014-15 School Year		2015-16 School Year		2016-17 School Year	
<b>Key Components of the Project Logic Model</b>	Definition of high implementation	Definition of “implementation with fidelity” at program level	Score as defined in the fidelity matrix (based on data collection during school year)	“Implementation with fidelity” for year (calculated based on score in definition)	Score as defined in the fidelity matrix (based on data collection during school year)	“Implementation with fidelity” for year (calculated based on score in definition)	Score as defined in the fidelity matrix (based on data collection during school year)	“Implementation with fidelity” for year (calculated based on score in definition)
<b>School climate and structures to support college and career readiness</b>	Evidence of operational definitions as defined in the fidelity matrix	A score of 4	4	Yes	4	Yes	4	Yes
<b>Teacher and staff training and technical assistance</b>	Evidence of operational definitions as defined in the fidelity matrix	A score of 1	1	Yes	1	Yes	1	Yes
<b>Data-driven systemic coaching</b>	Evidence of operational definitions as defined in the fidelity matrix	A score of 1	1	Yes	1	Yes	1	Yes
<b>Fidelity scores available for reporting (Month, Project Year)</b>			August, 2015		August, 2016		August, 2017	

## 1 PROJECT EXC-EL EVALUATION BACKGROUND

### 1.1 PROJECT EXC-EL KEY COMPONENTS

The University of California at Los Angeles' Center X applied for and received funding for Project Exc-EL (Excellence for English Learners) via an Investing in Innovation (i3) Development Grant in 2013. Project Exc-EL is a school-wide initiative that features 3 key components:

- School climate and structures to support college and career readiness;
- Teacher and staff training and technical assistance; and
- Data-driven systematic coaching.

These complementary components are designed to improve the college readiness rates and overall student outcomes of English learners (ELs). The college readiness rates of ELs are low when compared to the general population. ELs are often academically underprepared, resulting in significant achievement gaps. To better support EL students and their families as they prepare to graduate from high school and enter college, Project Exc-EL developers created a school-wide initiative to help schools better meet the needs of their EL population.

#### *School climate and structures to support college and career readiness*

Each school participating in Project Exc-EL had school coaches who helped to provide leadership and guidance on creating a school-wide college-ready culture. Topics of the coaching sessions included co-teaching, personalized learning settings, scheduling for teacher development and planning time, parent engagement, and reducing achievement gaps with additional wraparound student and family supports from both the school and community partners. Project Exc-EL developers assembled a partnership consisting of community organizations positioned to provide additional supports, such as tutoring, financial aid and college application assistance, and parent/family supports and training. These partners were focused on providing wrap-around supports to EL students and their families to further ensure that these students are college-ready.

#### *Teacher and staff training and technical assistance*

Project Exc-EL provided teachers and other school staff with specific training—two day Summer Institutes (SI) held each August over the life of the project. These institutes focused on classroom instructional supports and interventions, including Response to Intervention [RtI] and Dynamic Language Learning progressions [DLLP]). The institutes also provided time for project participants to share strategies and methods that helped discern and meet the needs of ELs and cross-school and cross-district. In addition to the institutes, school teams, teacher leaders, and EL students were supported as they attended and presented at nationally-known conferences on

topics relevant to ELs and their families. Conference attendees returned from these conferences and further disseminated the latest strategies among their peers.

### *Data-driven systematic coaching*

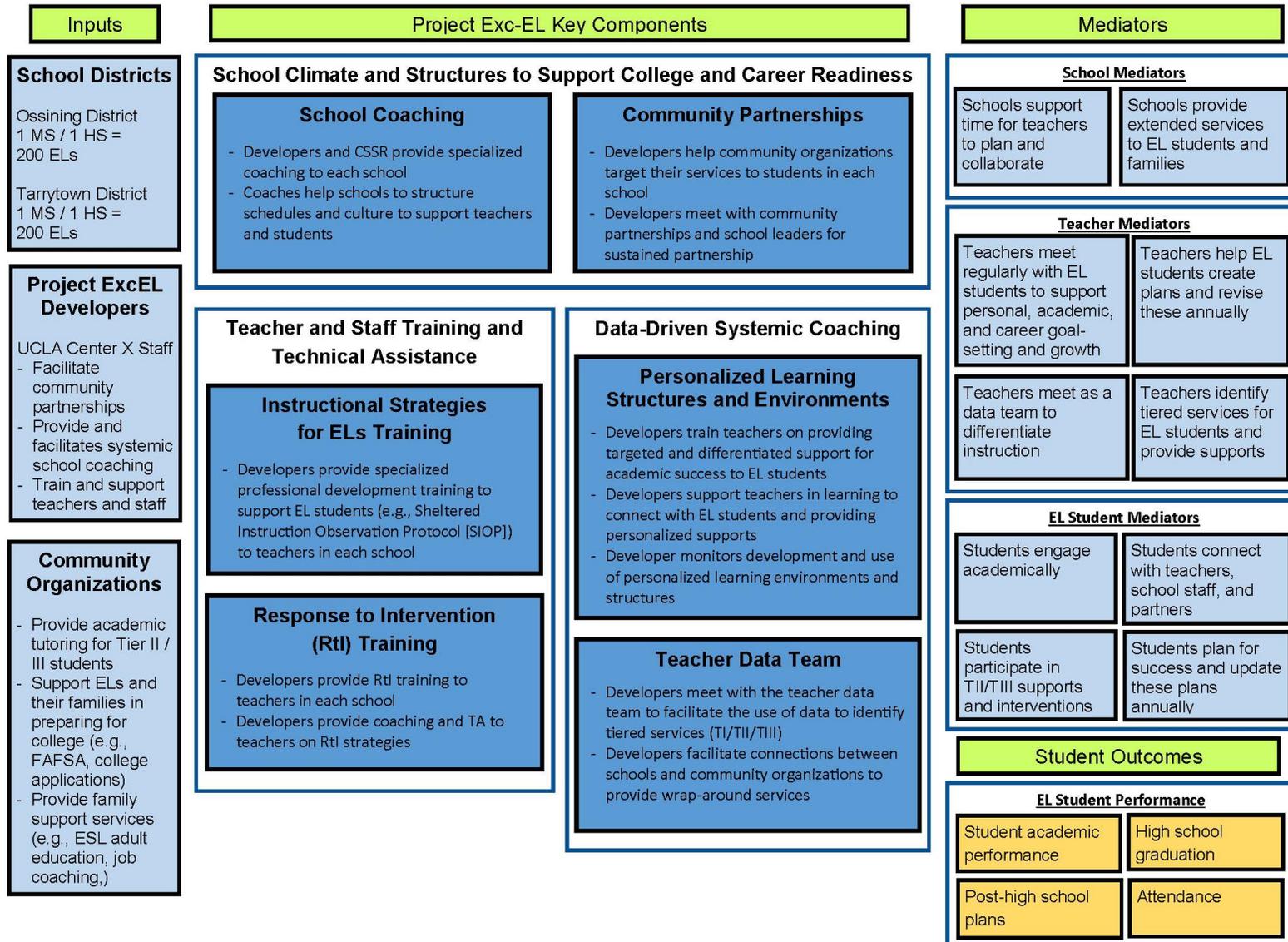
Project Exc-EL worked with teachers and school staff grouped into Professional Learning Communities (PLCs). These PLCs met regularly to review EL student data and provide more direct one-on-one supports to EL students, while collaboratively planning for co-teaching. Coaches met with the PLCs to provide feedback, guidance as needed, and to connect the school teams to broader project resources as needed.

## **1.2 PROJECT EXC-EL LOGIC MODEL**

The evaluation team worked with the developer and the evaluation technical assistance provider to refine and further develop the project logic model contained in the grant application. The resulting logic model codifies the project and is available in Figure 1 below.

- Project *Inputs* are listed in the left column of the logic model and include resources, staff, and partners necessary to implement the project.
- The center column features the *Project Exc-EL Key Components* or core features of Project Exc-EL. Key components are the ideas and concepts at the heart of Exc-EL that are intended to affect educational practice at the school level. Each key component was used to develop fidelity of implementation indicators and definitions of these indicators (see Appendix A).
- The right column, *Mediators*, lists the conduits or pathways that practices are expected to follow to ultimately manifest as *Student Outcomes*. The evaluation team used the student outcomes to discern which data would prove relevant to estimating the impact of Project Exc-EL over the life of the project.

**Figure 1: Project Exc-EL Logic Model**



### 1.3 EVALUATION OVERVIEW

#### *Impact Study*

Project Exc-EL is a school-level intervention focused on teacher training and development, school cultural changes, and teacher data teams. These key components were hypothesized to directly impact English learners (ELs) as they prepare for college and indirectly impact all students in the schools. Four schools (2 middle schools and 2 high schools from 2 Westchester County, New York school districts) implemented the intervention (treatment group).

The impact study is a quasi-experimental design (QED), wherein we statistically matched schools to be comparison group schools (Shadish, Cook, & Campbell, 2002) (see Appendix A for details). Therefore, we have four treatment schools, with a carefully matched comparison group of 16 schools (Becker, 2002; Dehejia & Wahba, 2002; Rosebaum, 1984). We compared the school outcomes of the 4 treatment schools to the 16 comparison schools on mathematics achievement for EL students in the schools and English language arts achievement for EL students in the schools. The student outcome questions (SOQ) that guided the impact study were as follows:

- *SOQ 1* What is the impact of Project Exc-EL on the school-level mathematics achievement of English learners?
- *SOQ 2* What is the impact of Project Exc-EL on the school-level reading achievement of English learners?

To estimate the impacts, we first identified the comparison schools through propensity score matching techniques and conducted baseline equivalence testing to ensure that the treatment and comparison schools were similar on key outcomes one-year prior to the intervention (See Appendix B for details). Second, our impact analytic approach included calculating the effect size based on the difference between the pre-test at baseline and post-test in Year 4, and analyzing 11 years of data based on a comparison short interrupted time series (C-ITS) design (Bloom, 2003) (See Appendix C for details).

#### *Implementation Study*

Plus Alpha worked with the project developer to design an implementation study that allowed the flexibility needed for a development grant while ensuring that fidelity to the key project components is defined and assessed across the treatment group (Nelson et al, 2012). It is important to note that fidelity of implementation measures the developer's actions in regards to the center area of the logic model, the Project Exc-EL Key Components.

Measuring Project Exc-EL fidelity began with refining the project logic model provided in the original grant application. This logic model guided the implementation study design. The logic model aligns with the management plan created by the developer and approved by the US

Department of Education (ED) Program Officer. Each key component consists of indicators of implementation, as can be seen in Appendix A in the Fidelity Matrices for each key component. We provided the operational definition for each indicator as well.

We created protocols (see Appendix D) wherein each protocol item aligns with an indicator of implementation and therefore a key component. Each protocol item was scored either yes or no (0 or 1). Scores roll up to the school level and to the full sample. We used the Fidelity Matrix to measure and assess fidelity for all components and indicators for each of the three years of implementation.

Implementation questions (IQ) guided the assessment of fidelity as follows:

- *IQ 1* Have the key components of Project Exc-EL been implemented with fidelity?
- *IQ 2* How has implementation varied across the treatment schools in terms of the key project components:
  - School climate and structures to support college and career readiness,
  - Teacher and staff training and technical assistance, and
  - Data-driven systemic coaching.

Measuring fidelity helps to better define and ascertain what implementing Project Exc-EL with high fidelity entails. We designed a series of aligning documents to map from the project logic model to the project management plan objectives, strategies, and actions. A fidelity matrix has been designed to measure fidelity based on tangible developer-dependent activities and roles and score fidelity at both the school and treatment group levels (see Appendix A: Evaluation Methodology). Instruments and protocols have been created to obtain data annually from relevant project participants (see Appendix C: Implementation Study Protocols). Fidelity scoring and content analysis were used to measure the fidelity of implementation. We used these documents to guide data gathering in response to the implementation questions.

## 2 FINDINGS

### 2.1 IMPACT STUDY

The impact study features the full sample of 4 treatment schools (2 middle and 2 high schools across 2 districts in New York) and 16 comparison schools (8 middle and 8 high schools across New York) for a total of 20 schools in the analytic sample. The impact study compares math and English language arts achievement for English learner (EL) students<sup>1</sup>, using school report card data.<sup>2</sup>

Mathematics achievement was measured by the state assessment. For middle grades (grades 6-8), the New York State Assessment in mathematics was used, and for high school, the Regents Integrated Algebra assessment was used. English language arts achievement was measured by the state assessment. For middle grades (grades 6-8), the New York State Assessment in language arts was used, and for high school, the Regents Comprehensive English assessment was used. All achievement scores were converted into a standardized score (z-score), where zero is the state mean. Scores above the mean (zero) denote test scores that were above the state average. Scores below the mean (zero) denote test scores that were less than the state average.

For graphical purposes, the figures below (Figure 2 and Figure 3) showcase five years of school-level data.

- Baseline. The 2012-2013 school year, 1 year prior to implementing Project Exc-EL.
- Year 1. The 2013-2014 school year, the first year that the 4 treatment schools were implementing Project Exc-EL.
- Year 2. The 2014-2015 school year, the second year that the 4 treatment schools were implementing Project Exc-EL.
- Year 3. The 2015-2016 school year, the third year that the 4 treatment schools were implementing Project Exc-EL.
- Year 4. The 2016-2017 school year, the fourth year that the 4 treatment schools were implementing Project Exc-EL.

To ensure that the 16 comparison schools were similar, we conducted a series of analyses to ensure that we were comparing like-to-like, or ‘apples-to-apples’. Similar schools are those schools in New York that were comparable demographically (i.e., percent LEP), academically (i.e., math and ELA performance of LEP students), and behaviorally (i.e., overall school

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<sup>1</sup> The New York State Department of Education refers to English learners (ELs) as “Limited English Proficient” (LEP) students.

<sup>2</sup> School report card data was obtained through the New York State Department of Education, <https://data.nysed.gov/downloads.php>.

attendance).<sup>3</sup> In conducting baseline equivalence, the analytic sample meets What Works Clearinghouse (WWC) Evidence Standards for baseline equivalence, where all key variables had a standardized mean difference of less than .25.

Figure 2 shows the math achievement results for EL students. At baseline, the treatment and comparison schools had similar math scores for EL students, within the .25 threshold as specified by the WWC Standards.<sup>4</sup> From baseline, there were no differences in math achievement of EL students between the treatment and comparison schools (Effect size = 0.08).<sup>5,6</sup>

**Figure 2: Math Achievement for English Learner Students**

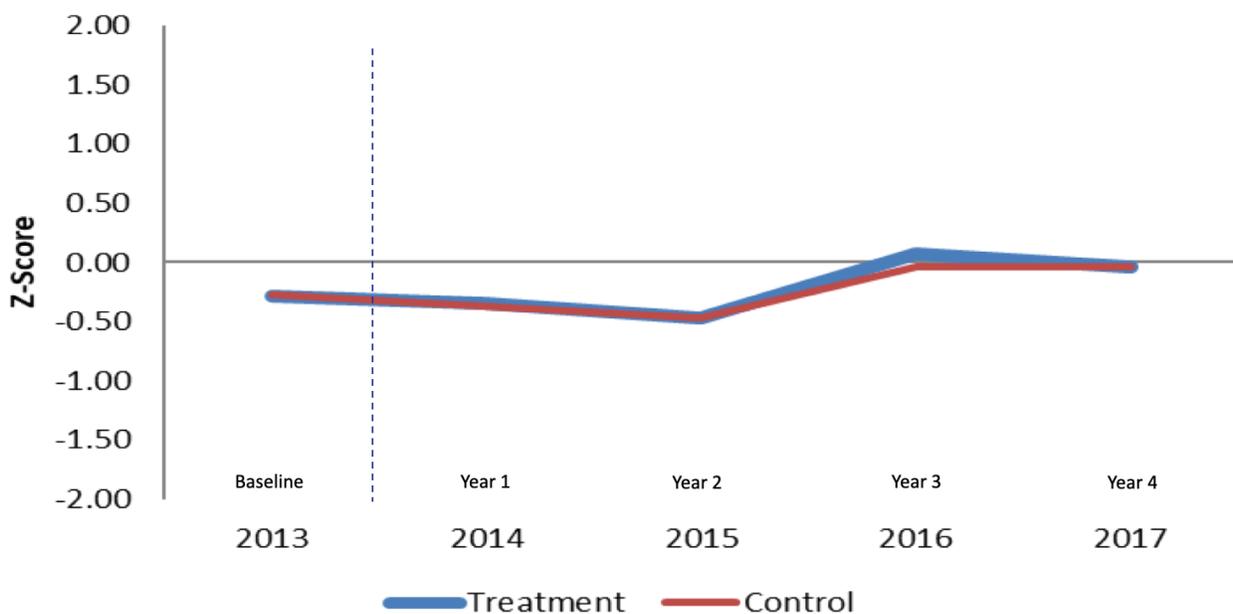


Figure 3 shows the English language arts achievement results for EL students. At baseline, the treatment and comparison schools had similar ELA scores for EL students, within the .25

<sup>3</sup> According to the *What Works Clearinghouse (WWC) Evidence Standards* (version 4.0), baseline equivalence is met if the effect size of key outcomes is less than .25 (i.e., comparing ‘apples-to-apples’). Baseline equivalence is not met if key outcomes are over .25 (i.e., comparing ‘apples-to-oranges’.)

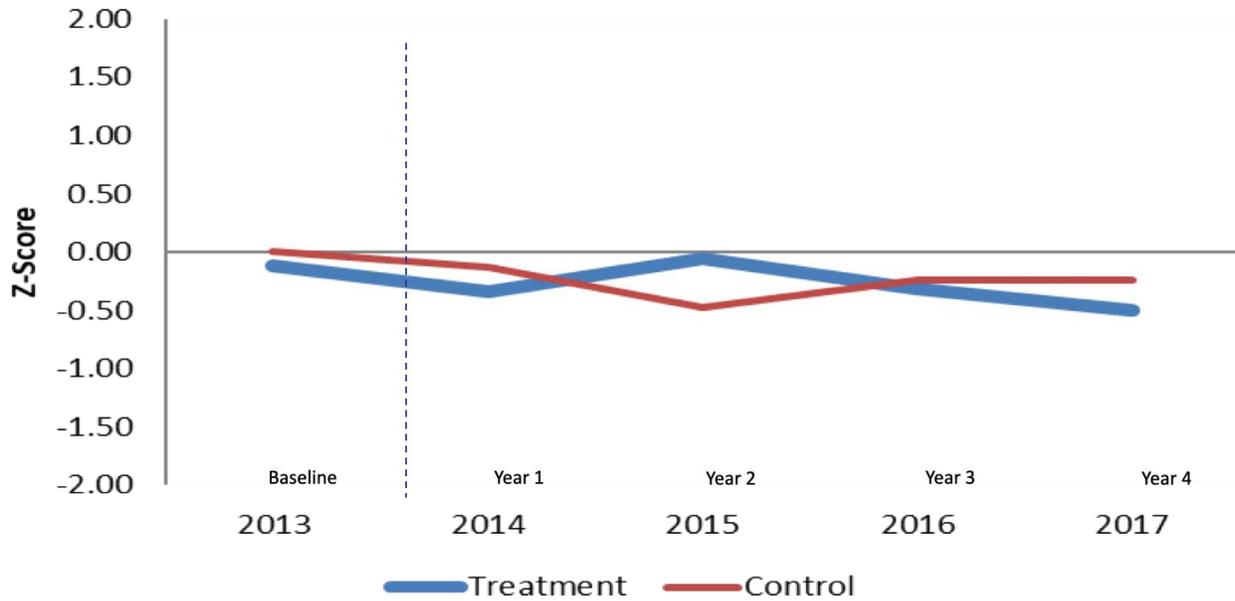
<sup>4</sup> The What Works Clearinghouse Standards 4.0 requires representativeness of the sample for cluster designs at baseline. The math outcome at baseline meets the optimistic boundary and meets WWC representativeness standards.

<sup>5</sup> The evaluators also conducted an interrupted time series with comparison analyses for math achievement and found not significant impacts. See appendix C.

<sup>6</sup> The What Works Clearinghouse Standards 4.0 requires representativeness of the sample for cluster designs at follow-up. The math outcome at follow does not meet the optimistic boundary and does not meet WWC representativeness standards.

threshold as specified by the WWC Standards.<sup>7</sup> From baseline, there were no significant differences in ELA achievement of EL students between the treatment and comparison schools (Effect size = -0.18).<sup>89</sup> However, it is interesting to note that while not statistically significant, the treatment schools had lower ELA achievement among their EL students after four years of treatment than the comparison schools, with a steady decline in the past three years.

**Figure 3: English Language Arts Achievement for English Learner Students**



## 2.2 IMPLEMENTATION STUDY

Based on data collected in all three implementation years of Project Exc-EL, as outlined in Appendix A, the developer has implemented Project Exc-EL with fidelity in three out of the four years, see Figure 4 below. Fidelity indicators were based on developer-dependent roles and responsibilities, so a finding of implemented with fidelity indicates that the developer has implemented strategies and activities as outlined in the annual project management plan.

<sup>7</sup> While ELA outcome meets baseline equivalence standards, the WWC 4.0 now requires representativeness of the sample for cluster designs. The ELA outcome at baseline does not meet the optimistic boundary and does not meet WWC representativeness standards.

<sup>8</sup> The evaluators also conducted an interrupted time series with comparison analyses for ELA achievement and found not significant impacts. See appendix C.

<sup>9</sup> The ELA outcome at follow does not meet the optimistic boundary and does not meet WWC representativeness standards.

**Figure 4: Fidelity of Implementation Rubric Results**

	Definitions		Findings					
			2014-15 School Year		2015-16 School Year		2016-17 School Year	
<b>Key Components of the Project Logic Model</b>	Definition of high implementation	Definition of “implementation with fidelity” at program level	Score as defined in the fidelity matrix (based on data collection during school year)	“Implementation with fidelity” for year (calculated based on score in definition)	Score as defined in the fidelity matrix (based on data collection during school year)	“Implementation with fidelity” for year (calculated based on score in definition)	Score as defined in the fidelity matrix (based on data collection during school year)	“Implementation with fidelity” for year (calculated based on score in definition)
<b>School climate and structures to support college and career readiness</b>	Evidence of operational definitions as defined in the fidelity matrix	A score of 4	4	Yes	4	Yes	4	Yes
<b>Teacher and staff training and technical assistance</b>	Evidence of operational definitions as defined in the fidelity matrix	A score of 1	1	Yes	1	Yes	1	Yes
<b>Data-driven systemic coaching</b>	Evidence of operational definitions as defined in the fidelity matrix	A score of 1	1	Yes	1	Yes	1	Yes
<b>Fidelity scores available for reporting (Month, Project Year)</b>			August, 2015		August, 2016		August, 2017	

## 3 CONCLUSIONS

### 3.1 IMPACT STUDY

In project year 1, we focused on creating a comparison group that met the *WWC Evidence Standards* criteria for the full sample of 4 treatment and 16 comparison schools across the state. In project years 2-4 we conducted a series of descriptive statistics to map and graph the school outcome data. In project year 5, the final year of grant, we conducted statistical analysis of the impact data in addition to mapping and graphing the school outcome data. We found that there were no statistically significant differences in mathematics and ELA outcomes of ELs among Exc-EL schools and comparison schools.

### 3.2 IMPLEMENTATION STUDY

Project Exc-EL was implemented with fidelity in year 1. All four project schools had identified teacher teams of 4-6 staff members serving ELs and general education students who meet regularly as a PLC to examine student progress and implement tiered interventions. Teams also focus on embedded professional development and action research using student data to guide classroom pedagogy. Project staff, partners, and participants indicated that enhanced communications would lead to enhanced collaboration. School staff reported they would like to work even more collaboratively with their peers across school and district lines. Community partners reported they would like to seek mutually beneficial solutions to reach their shared objectives to support EL students and families.

In year 2, Exc-EL was also implemented with fidelity, but there were concerns regarding personalized learning structures and environments (e.g., mentor/mentee programs, student advisories, personalized learning plans, student-led parent-teacher conferences, etc.) and the timelines for their implementation. The core work of year two focused on the implementation and support of New York State Department of Education Commissioner's Regulations Part 154, which requires co-teaching involving EL teachers and core content area teachers. All four project schools had core Project Exc-EL PLCs in place. Each team had between 6 and 12 members that included core content area teachers, EL teachers, guidance counselors, school administrators, school social workers, and additional student support staff. These teams were meeting regularly to examine student progress and implement tiered interventions. Teams also focused on embedded professional development and action research using student data to guide classroom pedagogy. Project staff, partners, and participants indicated that enhanced communications between community partners and teachers (regarding the outcomes of 1:1 student support efforts) would be beneficial to providing continuous and consistent wraparound supports to students.

Based on implementation data collections in year 2, it was unclear when some personalized learning structures or environments (e.g., student advisory programs, personalized learning

plans, etc.) were implemented at all of the four project schools to serve all EL students. Planning for these supports and several pilot programs were ongoing. Significant school and district staffing changes occurred in year 2. As these were taking place, Project Exc-EL developers maintained contact with new school and district leaders to ensure support and collaboration. Moving into year 3, project attentions were focused on the continued implementation of project components while also considering the impacts of components in place and how best to further refine practices.

The project developer implemented Exc-EL with fidelity in the fourth year of implementation. However, there were concerns regarding both a lack of momentum and fragmentation of the project at some of the schools involved as the final project year began. The core work of project year 4 focused on implementing Dynamic Language Learning Progressions (DLLP) as a follow-up to the Summer Institute training provided in August, 2016. However, across the 4 treatment schools, the level of DLLP implementation seemed to have lost momentum. At the school level, the larger project implementation also lost some energy and focus as the year ended. All 4 project schools have core Project Exc-EL PLC teams in place, but the number of team members and the diversity of the members (in terms of a broad range of school staff—general education, EL, administrators, counselors, etc.) seemed to have dropped at some of the schools. While some schools reported that diverse teams were meeting regularly to discern and support EL student needs using Exc-EL core concepts, others reported that only a few staff members were meeting a few times per school year. Project staff, partners, and participants indicated that enhanced communications between community partners and teachers proved beneficial to providing continuous and consistent wraparound supports to students.

As was reported in the prior year's evaluation report, it was unclear from implementation data collections when some personalized learning structures or environments (e.g., student advisory programs, personalized learning plans, etc.) were implemented at all of the four project schools to serve all EL students. Planning for these supports and several pilot programs were still ongoing at some schools as the project entered its final year of implementation. School and district staffing changes continued to occur. As these took place, Project Exc-EL developers worked to consistently maintain contact with new school and district leaders to ensure support and collaboration. These efforts were met with varying levels of success, since the level of engagement at the district and school leadership levels waned over the fourth project year. Moving into project year 5, implementation efforts were fragmenting, as some schools didn't yet feel prepared to implement various project components, while others implemented strategies and looked forward to sustaining project components beyond the end of grant funding.

## APPENDIX A: EVALUATION METHODOLOGY

The external evaluation of Project Exc-EL included an impact study of student outcomes and an implementation study of fidelity of developer objectives. The impact study used quantitative methods, relying solely on state assessment data obtained from the New York Department of Education. The implementation study used qualitative methods, relying on multiple sources of data including annual interviews of key staff, site visits, and document review. In total, the external evaluation featured a multi-method approach to understand how the developers implemented the intervention and how the intervention affected student outcomes.

### A.1 IMPACT STUDY METHODOLOGY AND DESIGN

As funded by an Investing in Innovation (i3) development grant, Project Exc-EL was a school-wide intervention designed to train teachers and counselors, facilitate teacher data teams, and provide school instructional coaches. The intent of the project was to improve school supports and instruction to ultimately improve EL student outcomes. Because of the school-wide nature of the intervention, all teachers, counselors, and principals receive the treatment, and, in turn, all EL students received, in theory, improved instruction and supports over the life of the project. Hence, the unit of intervention was the school. The long-term outcome, or impact, was English learner student achievement on state assessments. The impact study focused on the achievement of English learners in the mathematics and English language arts state assessments.

The evaluation was a quasi-experimental design (QED), where the unit of analysis was the school. All data were collected from publicly available annual school report cards, wherein key outcomes include mathematics achievement and English language arts (ELA) achievement. These achievement scores were state-accountability assessments, where all grades 3-8<sup>th</sup> students and high school students took the state assessments annually. The developer identified the treatment schools (N = 4), and the evaluation team selected the comparison schools (N = 16). There were no confounds. The treatment and comparison schools were from multiple districts, with multiple schools within the treatment and comparison conditions. Characteristics of the treatment and comparison schools were similar, except for the use of Project Exc-EL in the treatment condition. Time is not a confound since all pre- and post-test data were collected from school report cards from the same years for the treatment and comparison schools.

As indicated in Exhibit A 1, school level data were obtained for the years 2007 through 2017 through the New York Department of Education. School assessment scores, as well as school demographic information, were all publicly available through the school report cards as part of the New York State Education Department's (NYSED's) annual public reporting. In a review of the data, we discerned that while data is available publicly from as early as the 1998-1999 school year, the consistent data needed for analysis, such as key school demographic information and assessment scores, started from the 2006-2007 school year. Therefore, our pre-intervention data

starts from the 2006-2007 school year. Exhibit A 1 indicates the years that were pre-treatment and treatment years for the treatment schools.

Given the multiple years of school-level data, starting with the 2006-2007 school year through the 2016-2017 school year (11 years of data), our analytic approach included a descriptive approach using a treatment-comparison difference (effect size), and an inferential approach using a short interrupted time series with a comparison group (C-ITS) design (Bloom, 2003). We have seven years of baseline data and four years of post-intervention data, where the final year of treatment data were obtained from the 2016-2017 school year, reflecting the fourth year of the five-year i3 grant.

***Exhibit A 1: Treatment Years and Pre-treatment Years for Student Outcomes of Treatment and Comparison Schools***

Type of School (Treatment or Comparison)	2006-2007	2007-2008	2008-2009	2009-2010	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016	2016-2017	Number of Schools
Treatment	x	x	x	x	x	x	x	T	T	T	T	4
Comparison	x	x	x	x	x	x	x	c	c	c	c	16
Total												20

All achievement scores came from New York State Department of Education assessments administered in the spring of each school year.

“x”: indicates a pre-treatment year when a school outcome score will be obtained.

“T”: For Treatment schools.

“c”: For Comparison schools.

***Treatment Schools: Identification, Selection, and Assignment***

The developer identified the treatment schools and recruited the schools during the proposal phase in the 2011-2012 school year. In the proposal, there were three districts as part of the treatment—Ossining Union Free School District, Tarrytown Union Free School District, and White Plains Public Schools. The developer had long-standing partnerships with these districts and the superintendent from each district for many years. Upon award, White Plains school district withdrew from the project prior to the start of the study with the approval of the US Department of Education. Therefore, across two school districts (Ossining and Tarrytown), there were four schools in the treatment condition. Both districts, as is the case in many of the districts in Westchester County, had one middle school and one high school. Therefore, the four treatment schools included the sole middle school and high school in their respective districts.

***Comparison Schools: Identification, Selection, and Assignment***

Across two districts in Westchester County, the developers were working with two middle (grades 6-8) schools and two high (grades 9-12) schools. The evaluators identified comparison schools for this study by conducting propensity score matching to identify schools and by

conducting baseline equivalence testing to ensure the schools were similar in observed characteristics to the treatment schools prior to the intervention. Key observed variables included percent Limited English Proficient (LEP) students in the school, math achievement for LEP students, and English language arts achievement for LEP students.

The comparison schools serve as “business as usual” conditions. The comparison schools did not have Project Exc-EL in their schools during the duration of the study. There was variation across the comparison schools in curriculum and instruction, professional development, and college-readiness efforts targeted at EL students. However, under the NYSED, curriculum and instruction across the state follow the New York State Learning Standards. To graduate from high school, all New York students must have a minimum of 22 specific high school credits and pass five Regents examinations.

Our identification process included a series of methods and analyses to ensure baseline equivalence, see Appendix B for details. We identified and selected 16 comparison schools, or a balance of 1:4 treatment to comparison schools (eight middle school comparison schools, and eight high school comparison schools). To identify and select the 16 comparison schools, we first identified the matching variables across math outcomes of LEP students and ELA outcomes of LEP students. Second, we conducted propensity score matching (PSM) for each outcome separately (i.e. two separate PSM for math and ELA), and propensity score matching for all outcomes (i.e. one PSM). For the propensity score matching for each outcome, we selected different samples of comparison schools. For the propensity score matching for all outcomes, we selected one set of comparison schools. Third, we calculated effect sizes for the baseline equivalence tests for the achievement outcomes separately, and both outcomes combined.

Because our confirmatory impact analyses were for all four treatment schools, our primary goal was to ensure baseline equivalence, at a minimum, of the confirmatory analytic sample of twenty schools (4 treatment and 16 comparison schools).<sup>10</sup> We compared baseline equivalence across the three sets: 1) ELA outcome of LEP students, 2) Math outcome of LEP students, and 3) All outcomes combined. We chose the comparison schools from all outcomes combined because it met the *WWC Evidence Standards* for baseline equivalence, and it was efficient to have a single comparison group of schools (rather than separate samples of schools per outcome).

### ***Impact Study Data Sources***

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<sup>10</sup> We conducted separate analyses to select comparison schools for middle and high schools separately and conducted baseline equivalence testing. Our sample was small, with two middle schools matched with eight comparison middle schools and two high schools matched with eight comparison high schools. Due to the small sample size, we were unable to achieve baseline equivalence that meets WWC standards for schools disaggregated by grade level.

We collected all administrative (secondary) school-level data from school report cards, as published by the NYSED each summer. We downloaded school report cards from the NYSED website annually (see: <https://data.nysed.gov/downloads.php>). NYSED makes this data publicly available via Access databases. We downloaded and converted the Access databases into a SAS and an R databases for analyses.

Because of the longitudinal nature of the administrative data, we were able to obtain school-level data from the treatment and comparison schools from the 2006-2007 school year, obtaining seven years of data prior to Project Exc-EL and four years of data after the initiation of Project Exc-EL, through the 2016-2017 school year.

Although most data for the analysis was obtained from the NYSED website, data from earlier years, such as from the 2006-2007 through 2011-2012 school years, were missing data for LEP students. The publicly available school report card data suppressed data for LEP students in the sample due to the small number of LEP students in each of the schools (note, the intervention and treatment was designed for schools with a low-incidence of ELs). Data suppression is based on less than 10 students per cell, following US Department of Education guidelines. Therefore, the evaluation team worked with NYSED to obtain school-level data of treatment and comparison school math and ELA outcomes of LEP students from the 2006-2007 through 2011-2012 school years.

### ***Student Achievement Domain***

Student achievement is measured by the New York state assessment for mathematics and English language arts. For middle school students, the achievement measure was the New York state math and reading assessments administered each spring. For high school students, the math achievement measure was the Regents Integrated Algebra exam administered each spring, and the reading achievement measure was the Regents Comprehensive English exam administered each spring. These state-wide assessments were not over-aligned with the intervention. The data for these math and ELA outcomes were specifically for the subgroup of ELs, taken from the school report card.

The school EL scores were the average scaled scores for all EL students in the school (denoted as Limited English Proficient or LEP in the school report card data). These measures were consistently collected using the same procedures and rules in both treatment and comparison conditions.

We standardized (*z*-score) the achievement data. We converted each school's achievement data by grade and by school year, utilizing the standard deviation for the students in that grade, in that given school year. We calculated our population standard deviation by including all schools in New York that are middle schools (grade 6-8<sup>th</sup>) and high schools (grades 9-12<sup>th</sup>) and using only

the schools that had EL test scores by grade level in a given year. For example, a z-score was calculated for 6th grade EL students for each school in the 2006-2007 school year using our calculated LEP population mean and our calculated LEP population standard deviation as denoted in the formula below:

$$Z = \frac{x - \mu}{\sigma}$$

Where:

$x$  is the school-level mean from the annual school report card data. For example, this is the school-level average of 6<sup>th</sup> grade EL student mean scores.

$\mu$  is the mean of the population calculated by the authors using NYSED population data. For example, this is the population of 6<sup>th</sup> grade EL student mean scores.

$\sigma$  is the standard deviation of the population calculated by the authors using NYSED population data. For example, this is the population of 6<sup>th</sup> grade EL student standard deviation.

To create a middle school score, we first created z-scores for the 6th, 7th, and 8th grades for each given year and for each school in the analytic sample. We then created a single score by averaging across the z-scores for each grade. As such, each school has grade-specific z-scores, as well as an average z-score across grades (i.e., school average) for each year of data.

For the high school score, students took the Regents Integrated Algebra assessment and the Regents Comprehensive English assessment. Students did not take the same algebra or reading assessment every year (e.g., 9<sup>th</sup>, 10<sup>th</sup>, 11<sup>th</sup>, and 12<sup>th</sup> grades) but rather once during their high school experience. Therefore, we created a z-score of the math and reading outcomes to reflect the high school scores of all EL students who took the test that school year.

To create an overall math achievement outcome, we created an average score from the 6th, 7th, and 8th grade z-scores and from the Regents Integrated Algebra z-scores. Similarly, to create an overall reading achievement outcome, we created an average score from the 6<sup>th</sup>, 7<sup>th</sup>, and 8<sup>th</sup> grade z-scores and from the Regents Comprehensive English z-scores.

To estimate the impact of Project Exc-EL across education levels, middle schools and high schools were analyzed together using the averaged z-scores as the outcome. The math and reading outcomes were a common metric for all grades and were interpreted as performance relative to the reference population of the LEP students in the state of New York in any given year.

We also obtained from the school report cards the percent of LEP students in the school to use as a covariate. Given that Project Exc-EL focuses on students who were learning English as a new language (ENLs), we believe that this is an important covariate to include in the model.

### ***Impact Study Data Analysis***

We had two confirmatory research questions:

- 1) What is the impact of Project Exc-EL on math achievement for middle and high schools offered Project Exc-EL for 4 years as compared to middle and high schools in the business as usual condition? and
- 2) What is the impact of Project Exc-EL on ELA achievement for middle and high schools offered Project Exc-EL for 4 years as compared to middle and high schools in the business as usual condition?

The exhibit A 2 below shows the confirmatory contrasts for the achievement domain. The confirmatory contrast was used to estimate the impact on school math and reading performance for middle and high schools offered Project Exc-EL for four years as compared to middle and high schools in the business as usual condition. For the confirmatory analysis, we met baseline equivalence with the treatment and comparison schools using school-level data from the 2012-2013 school year (one-year prior to the intervention). Baseline equivalence was met for the mathematics and English language arts state assessment, and for percent of LEP students in the school. See Appendix B for detailed information, and Table B.2 for baseline equivalence analysis results.

**Exhibit A 2: Confirmatory Contrasts for Math and English Language Arts Student Outcomes of Treatment and Comparison Schools**

Contrast Name <sup>a</sup> [Expected Reporting Date]	Design	Condition/Description	Treatment Group		Comparison Group		Outcome		Baseline	
			Age/grade during intervention	Exposure	Condition/Description	Domain	Unit of observation <sup>b</sup> : Measure [Scale] <sup>c</sup>	Timing of measurement	Unit of observation <sup>b</sup> : Measure [Scale] <sup>c</sup>	Timing of measurement
<b>Math Achievement</b>  09/01/2018	QED with matched schools	Project Exc-EL students in treatment schools. Treatment schools receive intervention in 2014-15, 2015-16, and 2016-17 school years.	Grades 6-12	In 2014-15: all grades have one year of treatment:  In 2015-16: 6 <sup>th</sup> graders have 1 year of treatment, 7 <sup>th</sup> -12 <sup>th</sup> graders have 2 years of treatment.  In 2016-17: 6 <sup>th</sup> graders have 1 year of treatment, 7 <sup>th</sup> graders have 2 years of treatment, 8 <sup>th</sup> -12 <sup>th</sup> graders have 3 years of treatment.	[Business as Usual (BAU)]  Students in matched comparison schools	Achievement	School: Standardized school math achievement combining NYSTB Math and Regents  [Continuous]	6 <sup>th</sup> -12 <sup>th</sup> grade (z-scores calculated for each grade, pooled across grades to generate school level averages)  scores from three years: Spring 2015, Spring 2016, and Spring 2017	School: A. Standardized school math achievement pretest combining NYSTB and Regents  B. Standardized school English language arts achievement combining NYSTB ELA and Regents  C. Percent of LEP students  [Continuous]	Spring 2014  A. 6 <sup>th</sup> -12 <sup>th</sup> grade (z-scores calculated for each grade, pooled across grades to generate school level averages)  B. 6 <sup>th</sup> -12 <sup>th</sup> grade (z-scores calculated for each grade, pooled across grades to generate school level averages)  C. School-level percent in 2013-2014 school year

<b>English Language Arts Achievement</b>	QED with matched schools	Project Exc-EL All 6 <sup>th</sup> – 12 <sup>th</sup> EL students in treatment schools. Treatment schools receive intervention in 2014-15, 2015-16, and 2016-17 school years.	Grades 6-12	In 2014-15: all grades have one year of treatment:  In 2015-16: 6 <sup>th</sup> graders have 1 year of treatment, 7 <sup>th</sup> -12 <sup>th</sup> graders have 2 years of treatment.  In 2016-17: 6 <sup>th</sup> graders have 1 year of treatment, 7 <sup>th</sup> graders have 2 years of treatment, 8 <sup>th</sup> -12 <sup>th</sup> graders have 3 years of treatment.	[BAU]  Students in matched comparison schools	Achievement	School: Standardized school English language arts achievement combining NYSTB ELA and Regents  [Continuous]	6 <sup>th</sup> -12 <sup>th</sup> grade (z-scores calculated for each grade, pooled across grades to generate school level averages) scores from three years: Spring 2015, Spring 2016, and Spring 2017	School: A. Standardized school English language arts achievement combining NYSTB ELA and Regents  B. Standardized school math achievement pretest combining NYSTB and Regents  C. Percent of LEP students  [Continuous]	Spring 2014 A. 6 <sup>th</sup> -12 <sup>th</sup> grade (z-scores calculated for each grade, pooled across grades to generate school level averages)  B. 6 <sup>th</sup> -12 <sup>th</sup> grade (z-scores calculated for each grade, pooled across grades to generate school level averages)  C. School-level percent in 2013-2014 school year
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a These names and expected reporting dates are provided for the AR Team's administrative purposes only and are not recorded for the purposes of assessing scientific process. The names consist of the NEI3 research question associated with that contrast and a contrast label. You may choose whether or not to adopt them for your own use.

b The 'unit of observation' is defined as the level at which the data are analyzed. For example, 'Student' is listed if each student represents a single case in the dataset (as with individual level state test scores). 'School' is listed if each school represents a single case in the dataset (as with school characteristics like AYP or school means of student test scores).

c The measurement scale describes how the measure is constructed. A measure may be categorized as continuous, ordinal, or binary. Please consult with your TA liaison if you have any questions regarding these measurement scales.

## **A.2 IMPLEMENTATION STUDY METHODOLOGY AND DESIGN**

Plus Alpha worked with the project developer to design an implementation study that allows the flexibility needed for a development grant while ensuring that fidelity to the key project components is defined and assessed across the treatment group (Nelson et al, 2012). Measuring Project Exc-EL fidelity began with refining the project logic model provided in the original grantee application. The evaluation team worked closely with the intervention developer and the evaluation technical assistance provider to develop the logic model (p. 5). The logic model aligns with the management plan created by the developer and approved by the USED Program Officer. The logic model was used to guide the implementation study design (see Figure 1). Each key component consists of indicators of implementation, as can be seen in the Fidelity Matrices for each key component (Exhibits 2 – 4). We have provided the operational definition for each indicator as well. The same matrix was used for each year during which fidelity was measured. Protocols have been created (see Appendix C); each protocol item aligns with an indicator of implementation and therefore a key component. Each protocol item is designed to be scored either yes or no (0 or 1). Scores roll up to the full sample. We used the Fidelity Matrix to measure and assess fidelity for all components and indicators for each of the three years of implementation.

*Exhibit 2: Fidelity Matrix Key Component 1. School climate and structures to support college and career readiness*

<b>Indicator</b>	<b>Operational Definition</b>	<b>Data Sources</b>	<b>School Fidelity</b>	<b>Full Sample Fidelity</b>
School coach conducts needs assessment	School coach conducts one needs assessment at each school	Evaluator interview with school coach using check list protocol  School Coaching Form created by the evaluator completed by school coaches after each session  Review of the Program Officer monthly/bi-monthly update provided by the developer	0 = Annual needs assessment not conducted 1 = Annual needs assessment conducted	0 = Less than 100% of schools meet school- level threshold 1 = 100% of schools meet school-level threshold
School coach provides coaching sessions to the school	Five (5) coaching sessions are provided at each school per year	Evaluator interview with school coach using checklist protocol  School Coaching Form created by the evaluator completed by school coaches after each session  Review of the Program Officer monthly/bi-monthly update provided by the developer	0 = <3 planned coaching sessions provided to the school 1 = ≥3 planned coaching sessions provided to the school	0 = Less than 100% of schools meet school- level threshold 1 = 100% of schools meet school-level threshold
Community partnership meetings	Developer meets quarterly with the community partnership with district and school representatives present	Evaluator interview with community partner organizations using check list protocol  Meeting Form created by the evaluator and completed by partnering organizations and competed after each meeting  Review of the Program Officer monthly/bi-monthly update provided by the developer	0 = A school representative does not attend each quarterly community partnership meeting 1 = A school representative attends each quarterly community partnership meeting	0 = Less than 100% of schools meet school- level threshold 1 = 100% of schools meet school-level threshold
Community partnership	Developer coordinates community	Evaluator interview with community partner organizations using check list protocol	0 = Developer does not coordinate community partnership services at each school (less than 100% of the	0 = Less than 100% of schools meet

Indicator	Operational Definition	Data Sources	School Fidelity	Full Sample Fidelity
service coordination	partnership services each semester at each school	Meeting Form created by the evaluator and completed by partnering organizations and completed after each meeting  Review of the Program Officer monthly/bi-monthly update provided by the developer	checklist items confirmed during interview) 1 = Developer coordinates community partnership services at each school (100% of the checklist items confirmed during interview)	school- level threshold 1 = 100% of schools meet school-level threshold
<b>Key Component Fidelity Range</b>				0-4
<b>Key Component Fidelity Threshold</b>				4

*Exhibit 3: Fidelity Matrix Key Component 2. Teacher and staff training and technical assistance*

Indicator	Operational Definition	Data Sources	School Fidelity	Full Sample Fidelity
Developers provide training on best instructional practice for ELs to school-based teams	Twenty (20) hours of instructional practice training are provided to each school-based team per year	Evaluator interview with developer and professional development provider using checklist protocol  Professional development attendance lists collected from the developer  Professional development debrief form created by the evaluator completed by the developer after each PD session  Review of the Program Officer monthly/bi-monthly update provided by the developer	0 = <15 hours of instructional practice training are provided to each school per year 1 = ≥16 hours of instructional practice training are provided to each school per year	0 = Less than 100% of schools meet school- level threshold 1 = 100% of schools meet school-level threshold
<b>Key Component Fidelity Range</b>				0-1
<b>Key Component Fidelity Threshold</b>				1

*Exhibit 4: Fidelity Matrix Key Component 3. Data-driven systematic coaching*

Indicator	Operational Definition	Data Sources	School Fidelity	Full Sample Fidelity
School based teams receive training on establishing Professional Learning Communities focused on student data.	Five (5) teacher training sessions on Professional Learning Communities are provided at each school	Evaluator interview with developer using check list protocol  Team meeting attendance lists collected from the developer  Team meeting debrief form created by the evaluator completed by the developer after each PD session.  Review of the Program Officer monthly/bi-monthly update provided by the developer	0 = <3 planned trainings conducted at each school 1 = ≥3 planned trainings conducted at each school	0 = Less than 100% of schools meet school-level threshold 1 = 100% of schools meet school-level threshold
			<b>Key Component Fidelity Range</b>	0-1
			<b>Key Component Fidelity Threshold</b>	1

Implementation questions (IQ) guided the assessment of fidelity as follows:

- *IQ 1* Have the key components of Project Exc-EL been implemented with fidelity?
- *IQ 2* How has implementation varied across the treatment schools in terms of the key project components:
  - School climate and structures to support college and career readiness,
  - Teacher and staff training and technical assistance, and
  - Data-driven systemic coaching.

To guide data gathering in response to the implementation questions, a series of aligning documents were created to map from the project logic model to the project management plan objectives, strategies, and actions. A fidelity matrix and fidelity indicators were designed and aligned with the management plan as well. For the purposes of this development grant implementation study, only the project activities within the control of the developer were measured, in order to better define and ascertain what implementing Project Exc-EL with high fidelity entails.

### ***Implementation Protocol and Alignment***

The implementation study began with the development of protocols aligned with the project management plan, logic model, and evaluation plan. A community partnership form was designed to be completed by a community partner member following each community partnership meeting. The community partner interview protocol was developed in Year 1, and interviews were conducted annually since Year 2 with the same participants (as feasible) to ensure consistency. The developer interview protocol was developed in Year 1 and interviews have been conducted annually since Year 2. A school administrator / team leader interview protocol was developed in Year 1, and interviews have been conducted annually since Year 2 with the same participants (as feasible) to ensure consistency. A school coach interview protocol was developed in Year 1, and interviews have been conducted annually since Year 2. The school coaching activity form was designed in Year 1 to record school coach activities and impressions of on-going school coaching throughout the project school year, as completed by school coaches. The miscellaneous event protocol was designed to be used by evaluation team members attending non-recurring, unplanned, or unscheduled project activities. The final protocol, the quarterly management team activity form, was designed to collect information on the quarterly project Exc-EL management team meetings, but this form ended up collecting information nearly identical to the monthly/bi-monthly Program Officer updates provided by the developer. Thus, these forms (completed in full in Year 1 and partially in Year 2) were synthesized and analyzed together with the monthly/bi-monthly reports. In Years 3-5, the Program Officer updates were used exclusively, in place of the quarterly management team activity form.

Project protocols were aligned with the Project Management Plan submitted annually to the Department of Education. The Project Exc-EL management plan focused on 4 core objectives

also found in the logic model and the implementation study fidelity matrix. Each objective was further composed of strategies, and each strategy was composed of activities. For example, “Objective 1. Improve the capacity of educators to effectively educate ELs within a framework of tiered interventions” was supported by four distinct strategies as outlined in the plan, (e.g., “Strategy #1.1: Participants on school-based teams participate in training and coaching focused on best instructional practices for ELs and effectively incorporate these practices into classroom instruction (instructional practices training)”. Strategy 1 was then comprised of eight activities (e.g., “Activity 1.1.1 Identify participating schools and educator teams). Following this overarching objective, strategy, and activity structure, each study protocol question or item mapped back the management plan. The following exhibits detail the alignment of the protocols and the management plan objectives (Exhibits 5-7).

**Exhibit 5: Management Plan Objective 1 Instrument / Protocol Alignment**

**Objective 1. Improve the capacity of educators to effectively educate ELs within a framework of tiered interventions.**

<b>Instrument / Protocol</b>	Strategy #1.1: Participants on school-based teams participate in training and coaching focused on best instructional practices for ELs and effectively incorporate these practices into classroom instruction (instructional practices training)	Strategy #1.2: Participants on school-based teams participate in training and coaching focused on using data to personalize instruction and intervention (tiered intervention training)	Strategy #1.3: School based teams meet 4 times per year for coaching and data team discussion in order to ensure student progress is regularly monitored and data is used to provide students with appropriate supports and interventions (data team meetings)	Strategy #1.4: School based teams participate in a year-end data fair designed to promote the sharing of best practices and lessons learned (dissemination)
Community Partnership Form				
Community Partner Interview				
Developer Interview	✓	✓	✓	✓
School Admin. / Team Leader Interview	✓	✓	✓	✓
School Coach Interview	✓	✓	✓	✓
School Coaching Activity Form	✓	✓	✓	✓
Miscellaneous Event Protocol	✓	✓	✓	✓
Quarterly Management Team Activity Form				
Program Officer monthly/bi-monthly update provided by the developer				

**Exhibit 6: Management Plan Objective 2 Instrument / Protocol Alignment**

**Objective 2. Structural elements of each school will ensure EL students are part of a smaller learning community with a common team of teachers and personalization supports.**

<b>Instrument / Protocol</b>	Strategy #2.1: School based teams are formed that include core content area teachers, ESL, guidance, social worker and administrative support. Each team works with a common set of EL students assigned to their team. Teams are inclusive of mainstream and special needs students, and are the same teams identified for professional development under Obj. #1.	Strategy #2.2: School-based teams meet together and focus on student progress during regularly scheduled common planning time.	Strategy #2.3: A regular time and process for individualized student advising (career, academic and personal) is structured and implemented.	Strategy #2.4: A process for Personal Learning Plan (PLP) development and regular use by EL students is developed and implemented. A critical feature of this PLP will be the incorporation of student-led conferencing. The use of digital portfolios will be explored as an adjunct use of technology.
Community Partnership Form				
Community Partner Interview				
Developer Interview	✓	✓	✓	✓
School Admin. / Team Leader Interview	✓	✓	✓	✓
School Coach Interview	✓	✓	✓	✓
School Coaching Activity Form	✓	✓	✓	✓
Miscellaneous Event Protocol	✓	✓	✓	✓
Quarterly Management Team Activity Form  Program Officer monthly/bi-monthly update provided by the developer				

**Exhibit 7: Management Plan Objectives 3 and 4 Instrument / Protocol Alignment**

	<b>Objective 3. An interagency, inter-district team will be formed to leverage and share resources and provide support for at-risk EL students and their families.</b>		<b>Objective 4. An objective evaluation process will be integrated into project activities to document and improve process and outcome.</b>
<b>Instrument / Protocol</b>	Strategy #3.1: An inter-agency, inter-district team will be formed (Project Exc-EL Team) to leverage resources and provide wrap around supports for at-risk EL students and their families.	Strategy #3.2: Interagency partners will host community meetings to engage families (topics may include: immigration law, assistance with FAFSA, college applications, etc.).	Strategy #4.1: An outside, objective evaluator is engaged in partnership with program staff, providing on-going data collection and feedback. Outside evaluator will share findings with the core management team. Core management team will be charged with further disseminating information to entire project members and outside organizations.
Community Partnership Form	✓	✓	✓
Community Partner Interview	✓	✓	✓
Developer Interview	✓	✓	✓
School Admin. / Team Leader Interview	✓	✓	✓
School Coach Interview			✓
School Coaching Activity Form	✓	✓	✓
Miscellaneous Event Protocol	✓	✓	✓
Quarterly Management Team Activity Form			
Program Officer monthly/bi-monthly update provided by the developer	✓		✓



Exhibit 8 below shows the key components of the fidelity study cross-walked (i.e., aligned) with the fidelity indicators and definitions and the PARC-developed evaluation protocols.

**Exhibit 8: Implementation Fidelity Matrix Key Components Instrument / Protocol Alignment**

	<b>Component 1: School climate and structures to support college and career readiness</b>				<b>Component 2. Teacher and staff training and technical assistance</b>	<b>Component 3. Data-driven systematic coaching</b>
<b>Fidelity Indicators</b>	School coach conducts needs assessment	School coach provides coaching sessions to the school	Community partnership meetings	Community partnership service coordination	Developers provide training on best instructional practice for ELs to school-based teams	School based teams receive training on establishing Professional Learning Communities focused on student data
<b>Fidelity Definitions</b>	School coach conducts one needs assessment at each school	Five (5) coaching sessions are provided at each school per year	Developer meets quarterly with the community partnership with district and school representatives present	Developer coordinates community partnership services each semester at each school	Twenty (20) hours of instructional practice training are provided to each school-based team per year	Five (5) teacher training sessions on Professional Learning Communities are provided at each school
<b>Instruments / Protocols</b>						
Community Partnership Form			✓	✓		
Community Partner Interview			✓	✓		
Developer Interview	✓	✓	✓	✓	✓	✓
School Admin. / Team Leader Interview	✓	✓			✓	✓
School Coach Interview	✓	✓				
School Coaching Activity Form	✓	✓			✓	✓
Miscellaneous Event Protocol	✓	✓	✓	✓	✓	✓
Quarterly Management Team Activity Form / Program Officer update			✓	✓		

### ***Implementation Study Data Analysis***

We administered the community partner interview check list protocol once per school year, and the check list sum was tallied. The community partnership activity form was completed during each community partnership activity during each of the implementation years and the resulting data was analyzed for content. We administered the developer interview check list protocol once per school year, and the check list sum was tallied. The school coaching form was completed following each school coaching session during each of the implementation years, and the resulting data was analyzed for content. We administered the school coach interview check list protocol once per school year, and the check list sum was tallied. The school meeting form was completed during each school team meeting session during each of the implementation years, and resulting data was analyzed for content.

Content analysis involved coding the open ended responses using extant codes based on Project Exc-EL key components with developer feedback. Emergent codes were used during the coding process to provide additional formative feedback to the developer. Two coders coded all qualitative data, and a third coder helped to reconcile any coding differences to reach 100% agreement in the application of codes.

We calculate fidelity based on data collected using protocols that we developed (see Appendix C). Each protocol item aligned with an indicator, and each indicator aligned with a key component. For example, for Project Exc-EL *Key Component 2 Teacher and staff training and technical assistance* to be implemented with fidelity at the school level, 16 or more hours of instructional practice training had to be provided to the school each year. We conducted interviews with the developer, the school coaches, and the school administrators/team leaders using checklist protocols aligned with the management plan activities and professional development debrief forms created by the evaluator and completed by the developer after each professional development session. These protocols and procedures have been used to determine whether or not the key component fidelity threshold was reached each year. See the fidelity matrices provided above in Exhibits 2-4. The School Fidelity and Full Sample Fidelity (right) columns and the Key Component Fidelity Range and Key Component Fidelity Threshold rows (bottom) detail the fidelity score calculation at the key component level.

## APPENDIX B: DETAILED PROCESS FOR IDENTIFYING AND SELECTING COMPARISON SCHOOLS

The developers identified and recruited the treatment districts and schools. To select comparison schools, we used state-wide data from the New York Department of Education to identify a matched set of comparison schools. Our identification process included a series of methods and analyses to ensure baseline equivalence between four treatment schools and 16 comparison schools. To select 16 comparison schools, we followed three steps: 1) Identify matching variables, 2) Conduct propensity score matching, and 3) Select a pool of comparison schools by conducting baseline equivalence testing to meet WWC standards. Because our confirmatory impact analyses were for all four treatment schools, our primary goal was to ensure baseline equivalence of the confirmatory analytic sample.

### *Step 1: Identifying Matching Variables*

Our matching variables included the outcomes in the achievement domain and the outcome in the behavior domain, in addition a key school characteristic, percent of LEP students. The following is our list of school-level matching variables:

- Prior achievement in Math for ELs
- Prior achievement in ELA for ELs
- % LEP students
- % school-wide attendance

It is important to note the small sample size in these analyses where there were four treatment schools (2 high schools and 2 middle schools) to find suitable matched comparison schools.

### *Step 2: Conducting Propensity Score Matching*

We employed propensity score matching techniques (PSM) to identify a group of potential comparison schools. In this step, we conducted PSM on the following as matching variables:

- Prior achievement in Math for ELs
- Prior achievement for ELA for ELs
- ELA and Math combined (All outcomes).

For each outcome, we created propensity scores for each school in our sample (treatment and comparison). We selected 6-7 comparison schools per treatment school via distance matching. To obtain our four comparison schools per treatment school, we then used school outcomes such as achievement, attendance, and percent LEP to select the final group of comparison schools.

We used three different samples of schools. We conducted PSM and identified comparison schools within Westchester county, within four contiguous counties surrounding Westchester county and New York City (Nassau, Putnam, Suffolk, and Rockland), and state-wide (all schools in the state of New York). In essence, we had the following set of comparison schools:

1. Math outcome: Westchester County
2. Math outcome: Surrounding Counties

3. Math outcome: Whole State
4. ELA outcome: Westchester County
5. ELA outcome: Surrounding Counties
6. ELA outcome: Whole State
7. Combined Math and ELA: Westchester County
8. Combined Math and ELA: Surrounding Counties
9. Combined Math and ELA: Whole State

Again, given the small number of treatment schools, we first assumed that there would be good matches for comparison schools within the same county, Westchester county, given similar sizes of school districts and local context. We expanded the potential pool of comparison schools by including surrounding contiguous counties, also assuming that these counties share a similar local context that surrounds New York City. Finally, we also looked at the whole state for matched comparison schools.

### ***Step 3: Selecting a Pool of Comparison Schools***

We tested for baseline equivalence on all nine samples of comparison schools to determine which group of comparison schools were the most like the four treatment schools. We used baseline equivalence standards outlined in the *What Works Clearinghouse (WWC) Standards and Procedures Handbook Version 3*.

For the confirmatory analysis, the target size for the analytic sample was 20 schools, wherein 4 will be treatment schools and 16 will be comparison schools (8 middle schools and 8 high schools). The baseline equivalence testing involved creating an effect size measure for each matching variable. For continuous variables, such as school achievement in math and ELA, we calculated the effect size based on Hedges'  $g$ . For dichotomous variables, such as school attendance rate and percent LEP, we used the Cox's Index Ratio for Hedge's  $g$ . Our threshold for acceptable baseline equivalence, regardless of significance, was  $ES = .25$  following the WWC standards<sup>11</sup>.

In comparing the effect sizes across the nine samples, we ultimately chose the sample from the combined Math and ELA outcomes and whole state (Choice #9 above). Exhibit B.1 shows the descriptive results of the confirmatory analysis sample of comparison and treatment schools. Exhibit B.2 shows the baseline equivalence results for the confirmatory analysis sample of schools (four treatment and 16 comparison schools). Exhibit B.3 maps the 20 schools in the state of New York. Most of the schools are clustered around the Westchester county area, but there are a few comparison schools in other metro regions, such as Albany, Buffalo, and Rochester.

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<sup>11</sup> Available for download here:

[https://ies.ed.gov/ncee/wwc/Docs/referenceresources/wwc\\_procedures\\_v3\\_0\\_standards\\_handbook.pdf](https://ies.ed.gov/ncee/wwc/Docs/referenceresources/wwc_procedures_v3_0_standards_handbook.pdf)

*Exhibit B 1: Baseline Descriptive Results*

Individual School Performance and Demographic Characteristics						
School Year 2012-2013 (Baseline Equivalence)						
School name	Total student enrollment	Total LEP enrollment	% LEP in school	Math (z-score) for LEP students	ELA (z-score) for LEP students	School attendance Rate
<b>TREATMENT SCHOOLS</b>						
SLEEPY HOLLOW MIDDLE SCHOOL	581	80	14	-1.23	-0.90	96
ANNE M DORNER MIDDLE SCHOOL	912	67	7	-1.33	-1.18	97
SLEEPY HOLLOW HIGH SCHOOL	874	134	15	0.87	0.84	95
OSSINING HIGH SCHOOL	1298	120	9	0.55	0.76	97
<b>TOTAL TREATMENT SCHOOLS</b>	<b>3,665</b>	<b>401</b>	<b>11%</b>	<b>-0.29</b>	<b>-0.12</b>	<b>96.25</b>
<b>COMPARISON SCHOOLS</b>						
DUNKIRK MIDDLE SCHOOL	472	62	13	-1.52	-1.23	96
LAWRENCE ROAD MIDDLE SCHOOL	762	63	8	-1.29	-1.19	96
TURTLE HOOK MIDDLE SCHOOL	723	76	10	-1.29	-0.80	96
IS 192 THE LINDEN	568	34	6	-0.95	-1.00	95
SAXTON MIDDLE SCHOOL	742	49	7	-1.45	-1.11	96
EAST MIDDLE SCHOOL	996	158	16	-1.03	-0.84	96
SOUTH MIDDLE SCHOOL	910	162	18	-1.19	-0.86	96
FOX LANE MIDDLE SCHOOL	990	34	3	-1.22	-1.20	97
WEBSTER-SCHROEDER HIGH SCHOOL	1442	17	1	1.13	1.92	96
WESTBURY HIGH SCHOOL	1262	265	21	-0.11	0.36	94
MANHATTAN BRIDGES HIGH SCHOOL	555	377	68	1.39	1.64	92
INTERNATIONAL HIGH SCHOOL AT PROSPECT HEIGHTS	395	377	94	0.25	0.86	90
WALTER G O'CONNELL COPIAGUE HIGH SCHOOL	1509	181	12	0.94	1.67	96
COMSEWOGUE HIGH SCHOOL	1242	52	4	0.16	-0.35	96
PATCHOGUE-MEDFORD HIGH SCHOOL	2486	120	5	0.63	0.97	95
WESTHAMPTON BEACH SENIOR HIGH SCHOOL	1025	32	3	1.09	1.14	97
<b>TOTAL 1COMPARISON SCHOOLS</b>	<b>16,079</b>	<b>2,059</b>	<b>13%</b>	<b>-0.28</b>	<b>0.00</b>	<b>95.25</b>

**Exhibit B 2: Baseline Equivalence Results- Confirmatory Sample School Year 2012-2013**

Contrast Name	Treatment			Comparison			T – C Difference			
	Treatment N	Unadjusted Treatment $\bar{X}$	Unadjusted Treatment SD <sup>a</sup>	Comparison N	Unadjusted Comparison $\bar{X}$	Unadjusted Comparison SD <sup>a</sup>	Treatment-Comparison Difference (T-C) <sup>b</sup>	Effect Size <sup>c</sup>	S.E. <sup>c</sup>	p-value <sup>d,e</sup>
<b>ELA Achievement for English Learners</b>	4	-0.12	1.07	16	0.00	1.19	-0.12	-0.16	0.63	0.88
<b>Math Achievement for English Learners</b>	4	-0.29	1.16	16	-0.28	1.07	-0.01	-0.01	0.65	0.99

Table Note:

<sup>a</sup> Standard deviation for the treatment and comparison groups were calculated from state-wide data.

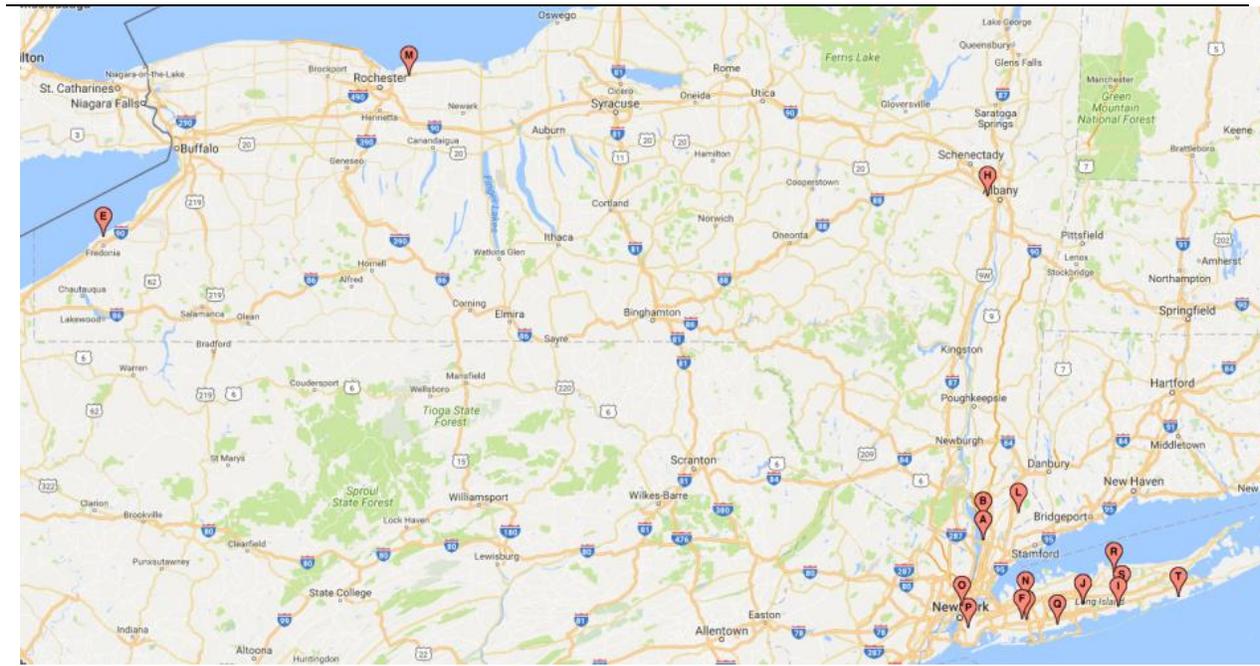
<sup>b</sup> The treatment-comparison difference was calculated as the simple difference of unadjusted means.

<sup>c</sup> The effect size was calculated using the Hedge’s g formula.

<sup>d</sup> The standard error (s.e.) was calculated using the formula,  $s.e. = \text{Square root}((N_{Trt}+N_{Ctrl}) / (N_{Trt} * N_{Ctrl}) + (\text{Hedge’s } G^2) / (2 * (N_{Trt} + N_{Ctrl})))$ .

<sup>e</sup> The p-value was calculated using the formula:  $p = 2 * (1 - \text{stdnorm}(\text{absolute\_value}(\text{Hedge’s } G / \text{Hedge’s } G \text{ Standard Error})))$ .

**Exhibit B 3: Map of the Confirmatory Sample**



**Representativeness of the Sample at Pre-Test (2012-2013 School Year)**

While this study focuses on utilizing school-level data, students are nested within schools. Therefore, this study is considered a cluster design. In the *What Works Clearinghouse (WWC) Standards and Procedures Handbook Version 4*, representativeness of the sample is a new criteria to ensure that the tested students represent the school. Exhibit B.4 shows the total number of students in the school, total number of LEP students in the school per start of the school year (by the end of September for accountability documentation), and percent LEP tested and the number of LEP tested for math and English language arts. As such exhibit B.4 shows the representativeness of the treatment and comparison samples at baseline. Exhibit B.5 shows the calculations of representativeness for mathematics and B.6 shows the calculations of representativeness for ELA. At baseline, we met representativeness for the mathematics outcome using the WWC optimistic boundary but did not meet representative for ELA outcome using the WWC optimistic boundaries.

All data are publicly available through the New York State Department of Education, using state accountability measures. For overall student enrollment and LEP student enrollment, schools collect and report on the data on September 30 or October 1<sup>st</sup> of each year, or in the fall semester. State assessments, including the score and the number of students who took the assessment, occur in May, or in the spring semester. Therefore, while data are all from the same school year, it is important to note that enrollment is collected by the school in the fall semester, and state assessments data are collected by the school eight months later in spring semester. For specific student subgroups, including LEP students (with other subgroups including homeless or migrant students), mobility within a single school year can be a factor for student representativeness. In addition, federal policies are an important context to the requirements for accountability reporting. New York Department of Education received the No Child Left Behind waiver, where for the 2012-2013 school year, schools were encouraged to have high percentages of subgroups, such as LEP students, tested and reported to the state.

*Exhibit B 4: Representativeness of the Sample*

Individual School Testing Information: Representativeness of the Sample at Baseline						
School name	School Year 2012-2013 (Representativeness)					
	Total student enrollment	Total LEP enrollment	% LEP Tested in Math	# LEP Tested in Math	% LEP Tested in ELA	# of LEP Tested in ELA
<b>TREATMENT SCHOOLS (N=4)</b>						
SLEEPY HOLLOW MIDDLE SCHOOL	581	80	100	85	89	71
ANNE M DORNER MIDDLE SCHOOL	912	67	100	67	87	58
SLEEPY HOLLOW HIGH SCHOOL	874	134	40	54	30	40
OSSINING HIGH SCHOOL	1298	120	44	53	21	25
<b>TOTAL TREATMENT SCHOOLS</b>	<b>3,665</b>	<b>401</b>	<b>65%</b>	<b>259</b>	<b>48%</b>	<b>194</b>
<b>COMPARISON SCHOOLS (N=16)</b>						
DUNKIRK MIDDLE SCHOOL	472	62	100	62	94	58
LAWRENCE ROAD MIDDLE SCHOOL	762	63	100	63	97	61
TURTLE HOOK MIDDLE SCHOOL	723	76	100	76	89	68
IS 192 THE LINDEN	568	34	100	34	71	24
SAXTON MIDDLE SCHOOL	742	49	98	48	84	41
EAST MIDDLE SCHOOL	996	158	100	158	89	140
SOUTH MIDDLE SCHOOL	910	162	99	160	94	152
FOX LANE MIDDLE SCHOOL	990	34	97	33	88	30
WEBSTER-SCHROEDER HIGH SCHOOL	1442	17	47	8	47	8
WESTBURY HIGH SCHOOL	1262	265	34	90	28	75
MANHATTAN BRIDGES HIGH SCHOOL	555	377	39	145	47	179
INTERNATIONAL HIGH SCHOOL AT PROSPECT HEIGHTS	395	377	51	192	39	146
WALTER G O'CONNELL COPIAGUE HIGH SCHOOL	1509	181	50	91	29	53
COMSEWOGUE HIGH SCHOOL	1242	52	46	24	42	22
PATCHOGUE-MEDFORD HIGH SCHOOL	2486	120	38	45	32	38
WESTHAMPTON BEACH SENIOR HIGH SCHOOL	1025	32	38	12	22	7
<b>TOTAL COMPARISON SCHOOLS</b>	<b>16,079</b>	<b>2,059</b>	<b>60%</b>	<b>1241</b>	<b>54%</b>	<b>1102</b>

*Exhibit B 5: Representativeness Calculation between the Treatment and Control Group for the Mathematics Outcome*

	Treatment group	Control group	Overall
# of EL students enrolled in school in September 2012	401	2059	2460
# of EL students tested in May 2013	259	1241	1500
Attrition	35.4%	39.7%	39.0%
Differential attrition			4.3%

*Exhibit B 6: Representativeness Calculation between the Treatment and Control Group for the English language arts (ELA) Outcome*

	Treatment group	Control group	Overall
# of EL students enrolled in school in September 2012	401	2059	2460
# of EL students tested in May 2013	194	1102	1296
Attrition	51.6%	46.5%	47.3%
Differential attrition			5.1%

## APPENDIX C: DETAILED INFORMATION OF THE IMPACT ANALYSIS

To answer the research questions regarding the impact of Project Exc-EL on student math and ELA outcomes, we analyzed the school-level data by first graphically representing the math and ELA outcomes by treatment and comparison groups. This graphical representation was helpful to understand the data and change over time, but also instrumental in relaying impact information to practitioners. Second, given the small sample size driven by the number of treatment schools (N = 4 treatment schools), we calculated the treatment and comparison differences and created an effect size for math and ELA outcomes using the Hedges' g formula. Third, given that we had 11 years of school-level data, we also conducted an interrupted time series with comparison analysis. In all three methods, the results were consistent where we did not find significant differences in LEP student math or ELA outcomes.

In addition, the *What Works Clearinghouse Standards 4.0* also requires calculations for representativeness for cluster design studies. From school report card data collected through the New York Department of Education, we documented the number of LEP students, and percent and number of LEP students tested in math and ELA at baseline (2012/13 school year) and at follow-up (2016/17 school year). Using the optimistic boundary set forth by WWC, while we met the representative benchmark for the baseline math outcome, we did not meet representativeness for baseline ELA outcome, nor the math and ELA outcomes at follow-up.

In sum, the impact study is a cluster design that did not meet representativeness standards for LEP students, and there were no significant impacts for math and ELA outcomes of LEP students.

### ***Treatment and Comparison Difference Approach (Effect Size)***

The effect size approach to the impact analysis focused on the difference between the baseline year (one year prior to the intervention in the 2012/13 school year) and the post-test year (in the 2016/17 school year). Given the small sample size of schools (4 treatment schools with 16 matched comparison schools), we first calculated the treatment and comparison group difference using the Hedges' g formula to calculate the effect size.

The standard deviation is the pooled sample standard deviation for each outcome (Bloom, 2003; May et al, 2009). Given that the outcome was standardized using our calculated population value, the standard deviation used to calculate the effect size was the pooled standard deviation of the standardized (z-score) outcome for the study sample.

$$g = \frac{M_1 - M_2}{SD_{pooled}^*}$$

Where:

$M_1 - M_2$  is the difference between the treatment group mean and comparison group mean; and

$SD_{pooled}^*$  is the weighted pooled standard deviation of the standardized (z-score) outcome for the study sample,  $SD_{pooled}^* = \sqrt{\frac{(n_1-1)SD_1^2 + (n_2-1)SD_2^2}{n_1+n_2-2}}$

Exhibit C.1 shows the effect size for the two confirmatory contrasts. For English language arts (ELA) for English learners, the effect size was -0.18 and not significant. For mathematics for English learners, the effect size was 0.08 and not significant.

***Exhibit C 1: Impact Estimate of Math and ELA Outcomes for English Learners School Year 2016-2017***

Contrast Name	Treatment			Comparison			T – C Difference			
	Treatment N	Unadjusted Treatment $\bar{X}$	Unadjusted Treatment SD <sup>a</sup>	Comparison N	Unadjusted Comparison $\bar{X}$	Unadjusted Comparison SD <sup>a</sup>	Treatment-Comparison Difference (T-C)	Effect Size <sup>b</sup>	S.E. <sup>c</sup>	p-value <sup>d</sup>
<b>ELA Achievement for English Learners</b>	4	-0.50	0.94	16	-0.24	1.13	-0.26	-0.18	0.58	0.77
<b>Math Achievement for English Learners</b>	4	-0.04	1.61	16	-0.03	1.17	-0.01	0.08	0.11	0.45

Table Note:

<sup>a</sup> Standard deviation for the treatment and comparison groups were calculated from state-wide data.

<sup>b</sup> The treatment-comparison difference was calculated as the simple difference of unadjusted means.

<sup>c</sup> The effect size was calculated using the Hedge’s g formula.

<sup>d</sup> The standard error (s.e.) was calculated using the formula, s.e. =Square root((N<sub>Ttr</sub>+N<sub>Ctr</sub>)/ (N<sub>Ttr</sub>\*N<sub>Ctr</sub>)+(Hedge’s G<sup>2</sup>)/(2\*(N<sub>Ttr</sub>+N<sub>Ctr</sub>))).

<sup>e</sup> The p-value was calculated using the formula: p = 2\*(1-stdnorm(absolute\_value(Hedge’s G/Hedge’s G Standard Error))).

***Interrupted Time Series with Comparison Approach***

In addition to the effect size approach, we utilized an interrupted time series with comparison approach to take advantage of the 11 years of administrative data from 2006/07 to 2016/17 school years, where we had seven (7) years of baseline data, and four (4) years of post-test data. The comparison interrupted time series (C-SITS) model was analyzed using a linear regression model. The C-SITS model adjusts for baseline differences in a way similar to a baseline covariate. The model included a dummy variable and interactions of this dummy with the change in average test score over time (from before treatment to after treatment was implemented). The following is the formal model:

$$\begin{aligned}
 Y_{tj} = & \beta_0 + \beta_1(\text{time})_{tj} + \beta_2(\text{group})_{tj} + \beta_3(\text{intervention})_{tj} + \beta_4(\text{time} \times \text{group})_{tj} \\
 & + \beta_5(\text{time since intervention})_{tj} + \beta_6(\text{group} \times \text{intervention})_{tj} \\
 & + \beta_7(\text{group} \times \text{time since intervention})_{tj} + LEP + \varepsilon_{tj}
 \end{aligned}$$

Where  $Y_{tj}$  is the outcome for academic achievement scores for EL learners at  $t = 1, \dots, 12$  time points for math or ELA. *Year* is a continuous variable indicating the year of measurement; *group* is a dichotomous variable representing treatment (group = 1) versus control schools (group = 0); *intervention* is another dichotomous variable indicating pre- and post-treatment period (1 = post-treatment), where the 2016/17 school year was coded as the post-treatment period. The error term  $\varepsilon_{tj}$  is assumed to be independent and identically distributed according to a normal distribution with a mean of zero and variance  $\sigma^2$ .

Consistent with the simple effect size approach, exhibit C.2 shows the regression results for math and English language arts where there were no significant impacts of the intervention.

***Exhibit C 2: Regression Results of the Interrupted Time Series with Comparison (C-SITS) for Math and ELA Outcomes for English Learners***

Parameter	Math Achievement for English Learners	ELA Achievement for English Learners
Fixed	Est. (S.E.)	Est. (S.E.)
Intercept	-0.31 (0.69)	-0.50 (2.98)
Time	0.10 (0.03)*	-0.09 (0.19)
Intervention	-0.74 (0.25)*	-0.61 (1.17)
Time Since Intervention	0.08 (0.08)	0.00 (0.41)
English Learner Percentage	0.02 (0.04)	0.06 (0.15)
Group	0.00 (0.34)	0.71 (1.57)
Group*Time	-0.07 (0.05)	0.16 (0.29)
Group*Intervention	0.17 (0.35)	-0.21 (1.65)
Group*Time Since Intervention	0.08 (0.11)	-0.18 (0.58)

Note: The variable for time is centered. \* p<.05.

***Representativeness of the Sample at Post-Test (2016-2017 School Year)***

Exhibit C.3 shows the total number of students in the school, total number of LEP students in the school per start of the school year (by the end of September for accountability documentation), and percent LEP tested and the number of LEP tested for math and English language arts. As such exhibit C.4 shows the representativeness of the treatment and comparison samples at follow-up. Exhibit C.4 shows the calculations of representativeness for mathematics and C.5 shows the calculations of representativeness for ELA. At follow-up, we did not meet representativeness for the mathematics outcome using the WWC optimistic boundary and also did not meet representative for ELA outcome using the WWC optimistic boundaries.

All data are publicly available through the New York State Department of Education, using state accountability measures. For overall student enrollment and LEP student enrollment, schools continue to collect and report on the data on September 30 or October 1<sup>st</sup> of each year, or in the fall semester. State assessments, including the score and the number of students who took the assessment, occur in May, or in the spring semester. Therefore, while data are all from the same school year, it is important to note that enrollment is collected by the school in the fall semester, and state assessments data are collected by the school eight months later in spring semester. For specific student subgroups, including LEP students (with other subgroups including homeless or migrant students), mobility within a single school year can be a factor for student representativeness. This issue of mobility, especially amongst LEP students, has been noted as an issue in recent years from the school staff interviews from the implementation study. In addition, federal policies are an important context to the requirements for accountability reporting. It is important to note that during the 2016-2017 school year, the Every Student Succeeds Act (ESSA) replaced NCLB and the NCLB waiver. Under ESSA, state education agencies and local education agencies no longer had specifications to report individual subgroups such as ELs, but rather to report for a “high needs” group that included students from low-income families, English learners, and students in special education.

*Exhibit C 3: Representativeness of the Sample*

<b>Individual School Testing Information: Representativeness of the Sample</b>						
<b>School name</b>	<b>School Year 2016-2017 (Representativeness)</b>					
	<b>Total student enrollment</b>	<b>Total LEP enrollment</b>	<b>% LEP Tested in Math</b>	<b># LEP Tested in Math</b>	<b>% LEP Tested in ELA</b>	<b># of LEP Tested in ELA</b>
<b>TREATMENT SCHOOLS (N=4)</b>						
SLEEPY HOLLOW MIDDLE SCHOOL	581	78	82	64	68	53
ANNE M DORNER MIDDLE SCHOOL	912	81	84	68	75	61
SLEEPY HOLLOW HIGH SCHOOL	874	92	35	32	25	23
OSSINING HIGH SCHOOL	1298	135	30	41	35	47
<b>TOTAL TREATMENT SCHOOLS</b>	<b>3665</b>	<b>386</b>	<b>53%</b>	<b>205</b>	<b>48%</b>	<b>184</b>
<b>COMPARISON SCHOOLS (N=16)</b>						
DUNKIRK MIDDLE SCHOOL	472	79	87	69	84	66
LAWRENCE ROAD MIDDLE SCHOOL	762	109	22	24	17	18
TURTLE HOOK MIDDLE SCHOOL	723	136	18	25	21	28
IS 192 THE LINDEN	568	35	100	35	63	22
SAXTON MIDDLE SCHOOL	742	72	22	16	24	17
EAST MIDDLE SCHOOL	996	277	25	69	25	69
SOUTH MIDDLE SCHOOL	910	231	15	35	21	48
FOX LANE MIDDLE SCHOOL	990	75	93	70	72	54
WEBSTER-SCHROEDER HIGH SCHOOL	1442	17	29	5	29	5
WESTBURY HIGH SCHOOL	1262	468	23	109	21	96
MANHATTAN BRIDGES HIGH SCHOOL	555	246	61	151	32	78
INTERNATIONAL HIGH SCHOOL AT PROSPECT HEIGHTS	395	355	58	205	39	140
WALTER G O'CONNELL COPIAGUE HIGH SCHOOL	1509	264	33	88	31	82
COMSEWOGUE HIGH SCHOOL	1242	107	23	25	33	35
PATCHOGUE-MEDFORD HIGH SCHOOL	2486	189	28	52	23	44
WESTHAMPTON BEACH SENIOR HIGH SCHOOL	1025	32	22	7	6	2
<b>TOTAL COMPARISON SCHOOLS</b>	<b>16079</b>	<b>2692</b>	<b>37%</b>	<b>985</b>	<b>30%</b>	<b>804</b>

*Exhibit C 4: Representativeness Calculation between the Treatment and Control Group for the Mathematics Outcome*

	Treatment group	Control group	Overall
# of EL students enrolled in school in September 2016	386	2692	3078
# of EL students tested in May 2017	205	985	1190
Attrition	46.9%	63.4%	61.3%
Differential attrition			16.5%

*Exhibit C 5: Representativeness Calculation between the Treatment and Control Group for the English language arts (ELA) Outcome*

	Treatment group	Control group	Overall
# of EL students enrolled in school in September 2016	386	2692	3078
# of EL students tested in May 2017	184	804	988
Attrition	52.3%	70.1%	67.9%
Differential attrition			17.8%

## APPENDIX D: IMPLEMENTATION STUDY PROTOCOLS

### D.1 COMMUNITY PARTNERSHIP ACTIVITY FORM

<b>Project Exc-EL</b> Community Partnership Activity Form	1) <i>Location of Activity:</i> _____ _____	2) <i>Activity Host:</i> _____ _____												
3) <i>Length of Activity:</i> _____	4) <i>Activity Date:</i> _____	5) <i>Activity Time:</i> _____												
6) <i>When did this group last meet, or when did this activity last occur?</i> _____	7) <i>When will this group next meet, or when will this activity occur again?</i> _____	8) <i>This activity occurred:</i> <input type="checkbox"/> In person <input type="checkbox"/> By Phone <input type="checkbox"/> Via Webinar <input type="checkbox"/> As part of another event												
9) <i>Activity Participants (Please list name, role, and affiliation):</i> _____ _____ _____														
10) <i>Activity Topic(s) (Please check all that apply and describe briefly below):</i> <table style="width: 100%; border: none;"> <tr> <td style="width: 50%; border: none;"><input type="checkbox"/> Academic Tutoring</td> <td style="width: 50%; border: none;"><input type="checkbox"/> Adult English language instruction</td> </tr> <tr> <td style="border: none;"><input type="checkbox"/> Assisting with college applications</td> <td style="border: none;"><input type="checkbox"/> Assisting with FAFSA completion</td> </tr> <tr> <td style="border: none;"><input type="checkbox"/> Assisting with immigration law</td> <td style="border: none;"><input type="checkbox"/> Career awareness</td> </tr> <tr> <td style="border: none;"><input type="checkbox"/> College awareness</td> <td style="border: none;"><input type="checkbox"/> Field trip</td> </tr> <tr> <td style="border: none;"><input type="checkbox"/> Job shadowing</td> <td style="border: none;"><input type="checkbox"/> Life skills training</td> </tr> <tr> <td style="border: none;"><input type="checkbox"/> Meeting</td> <td style="border: none;"><input type="checkbox"/> Mentoring</td> </tr> </table> _____ _____ _____			<input type="checkbox"/> Academic Tutoring	<input type="checkbox"/> Adult English language instruction	<input type="checkbox"/> Assisting with college applications	<input type="checkbox"/> Assisting with FAFSA completion	<input type="checkbox"/> Assisting with immigration law	<input type="checkbox"/> Career awareness	<input type="checkbox"/> College awareness	<input type="checkbox"/> Field trip	<input type="checkbox"/> Job shadowing	<input type="checkbox"/> Life skills training	<input type="checkbox"/> Meeting	<input type="checkbox"/> Mentoring
<input type="checkbox"/> Academic Tutoring	<input type="checkbox"/> Adult English language instruction													
<input type="checkbox"/> Assisting with college applications	<input type="checkbox"/> Assisting with FAFSA completion													
<input type="checkbox"/> Assisting with immigration law	<input type="checkbox"/> Career awareness													
<input type="checkbox"/> College awareness	<input type="checkbox"/> Field trip													
<input type="checkbox"/> Job shadowing	<input type="checkbox"/> Life skills training													
<input type="checkbox"/> Meeting	<input type="checkbox"/> Mentoring													
11) <i>Briefly outline the community partnership activity. Please list activities, topics, and approximate time spent on each. Feel free to share an agenda, notes, minutes, or supporting materials:</i> _____ _____ _____														
12) <i>Activity Goal(s):</i> _____ _____														
13) <i>Activity Outcome(s):</i> _____ _____														
14) <i>Question(s) / Concern(s):</i> _____ _____														
15) <i>Rate the effectiveness of the Activity (group consensus):</i> _____ 1 = Little or no learning/effectiveness _____ 2 = Partial learning or effectiveness _____ 3 = Adequate group learning or effectiveness														



## D.2 COMMUNITY PARTNER INTERVIEW CHECK LIST PROTOCOL

### Introduction and Purpose

Plus Alpha Research & Consulting, LLC (Plus Alpha) is completing this interview as part of the implementation study of UCLA’s Center X i3 development grant in support of Project Exc-EL. Your responses will help us understand: whether or not the key components of Project Exc-EL have been implemented with fidelity and how the implementation has varied across the treatment schools in terms of the key project components, such as school climate and structures to support college and career readiness, teacher and staff training and technical assistance, and data-driven systemic coaching. Your participation is voluntary. You can stop the interview at any time. You will not be individually identified in resulting reports. Project Exc-EL evaluation activities have been reviewed and approved by UCLA’s Institutional Review Board (IRB). The interview will last approximately 60 minutes.

### Participants

Project Exc-EL community partners selected by the development team.

### Method

Interviews are being conducted either in person as part of other project meetings or over the phone. Plus Alpha staff will take notes during the interview and will not audio record the interview. Analysts will synthesize notes from each interview and include the findings in project reports. The protocol below will be completed by the interviewer during the interview.

### *Plus Alpha Staff Member(s) Conducting the Interview:*

*Date of the interview:*

*This interview was conducted:*  In person (list location/event): or  Over the phone

*Start Time:* \_\_\_\_\_ *End Time:* \_\_\_\_\_

*Interview Participant(s) (affiliation, role):*

### *Project Fidelity<sup>12</sup> Measures*

Indicator:	Definition:	Interviewee Involvement and Support(s):
Community partnership meetings	<input type="checkbox"/> Developer meets quarterly with the community partnership with district and school representatives present	<input type="checkbox"/> Academic tutoring <input type="checkbox"/> Adult English language instruction <input type="checkbox"/> Assisting with college applications <input type="checkbox"/> Assisting with FAFSA completion <input type="checkbox"/> Assisting with immigration law

<sup>12</sup> Taken from the *Study Design Summary* submitted to the US Department of Education as part of the national evaluation of the i3 program. These measures are part of project *Component 1. School climate and structures to support college and career readiness.*

Indicator:	Definition:	Interviewee Involvement and Support(s):
Community partnership service coordination	<input type="checkbox"/> Developer coordinates community partnership services each semester at each school	<input type="checkbox"/> Career awareness <input type="checkbox"/> College awareness <input type="checkbox"/> Field trip(s) (list purpose and location below) <input type="checkbox"/> Job shadowing <input type="checkbox"/> Life skills training <input type="checkbox"/> Meeting (list type and purpose below) <input type="checkbox"/> Mentoring (for whom, how) <input type="checkbox"/> Observing a classroom <input type="checkbox"/> Observing a presentation

Discussion Notes:

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*Project Activities*<sup>13</sup>

Strategy #3.1: An inter-agency, inter-district team will be formed (Project Exc-EL Team) to leverage resources and provide wrap around supports for at-risk EL students and their families.

Activities:	Discussion Notes:
<input type="checkbox"/> <i>Activity 3.1.1</i> Catalog of available resources and supports developed	
<input type="checkbox"/> <i>Activity 3.1.2</i> Project Exc-EL team is formed and meets quarterly to purposefully match students with services	
<input type="checkbox"/> <i>Activity 3.1.3</i> EL students identified as at-risk are offered identified services (i.e., tutoring, summer boot camps, family ESL classes)	
<input type="checkbox"/> <i>Activity 3.1.4</i> Participation and outcomes for all services are monitored	
<input type="checkbox"/> <i>Activity 3.1.5</i> Evaluate effectiveness of community support programs	

Strategy #3.2: Interagency partners will host community meetings to engage families (topics may include: immigration law, assistance with FAFSA, college applications, etc.).

Activities:	Discussion Notes:

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<sup>13</sup> Taken from the annual *Project Management Plan* submitted to the i3 grant funder, the US Department of Education.



*Project Activities<sup>13</sup>*

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*Activity 3.2.1* Catalog of available topics, dates and sites developed

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***Additional Discussion Points and Notes:***



### D.3 DEVELOPER INTERVIEW CHECK LIST PROTOCOL

#### Introduction and Purpose

Plus Alpha Research & Consulting, LLC (Plus Alpha) is completing this interview as part of the implementation study of UCLA’s Center X i3 development grant in support of Project Exc-EL. Your responses will help us understand: whether or not the key components of Project Exc-EL have been implemented with fidelity and how the implementation has varied across the treatment schools in terms of the key project components, such as school climate and structures to support college and career readiness, teacher and staff training and technical assistance, and data-driven systemic coaching. Your participation is voluntary. You can stop the interview at any time. You will not be individually identified in resulting reports. Project Exc-EL evaluation activities have been reviewed and approved by UCLA’s Institutional Review Board (IRB). The interview will last approximately 60 minutes.

#### Participants

Project Exc-EL project development staff.

#### Method

Interviews are being conducted either in person as part of other project meetings or over the phone. Plus Alpha staff will take notes during the interview and will not audio record the interview. Analysts will synthesize notes from each interview and include the findings in project reports. The protocol below will be completed by the interviewer during the interview.

#### *Plus Alpha Staff Member(s) Conducting the Interview:*

#### *Date of the interview:*

*This interview was conducted:*  In person (list location/event): \_\_\_\_\_ or  Over the phone

*Start Time:* \_\_\_\_\_ *End Time:* \_\_\_\_\_

#### *Interview Participant(s) (affiliation, role):*

#### *Project Fidelity<sup>14</sup> Measures*

Indicator:	Definition:	Notes:
Developers provide training on best instructional practice for ELs to school-based teams <sup>15</sup> .	<input type="checkbox"/> Twenty (20) hours of instructional practice training are provided to each school-based team per year	

<sup>14</sup> Taken from the *Study Design Summary* submitted to the US Department of Education as part of the national evaluation of the i3 program.

<sup>15</sup> This measure is part of *Component 2. Teacher and staff training and technical assistance.*

Indicator:	Definition:	Notes:
School based teams receive training on establishing Professional Learning Communities focused on student data <sup>16</sup> .	<input type="checkbox"/> Five (5) teacher training sessions on Professional Learning Communities are provided at each school	

Discussion Notes:

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### *Project Activities<sup>17</sup>*

Strategy #1.1: Participants on school-based teams participate in training and coaching focused on best instructional practices for ELs and effectively incorporate these practices into classroom instruction (instructional practices training)

Activities:	Discussion Notes:
<input type="checkbox"/> <i>Activity 1.1.1</i> Identify participating schools and educator teams	
<input type="checkbox"/> <i>Activity 1.1.2</i> Roll out project at participating schools	
<input type="checkbox"/> <i>Activity 1.1.3</i> Conduct a readiness assessment for educators to determine state of current knowledge and practice	
<input type="checkbox"/> <i>Activity 1.1.4</i> Create a plan for training that includes content and logistics	
<input type="checkbox"/> <i>Activity 1.1.5</i> Conduct training	
<input type="checkbox"/> <i>Activity 1.1.6</i> Conduct site-based coaching 4 times per year	
<input type="checkbox"/> <i>Activity 1.1.7</i> Evaluate usefulness and impact of summer training	
<input type="checkbox"/> <i>Activity 1.1.8</i> Evaluate usefulness and impact of coaching	

Strategy #1.2: Participants on school-based teams participate in training and coaching focused on using data to personalize instruction and intervention (tiered intervention training)

Activities:	Discussion Notes:

<sup>16</sup> This measure is part of *Component 3. Data-driven systematic coaching*.

<sup>17</sup> Taken from the annual *Project Management Plan* submitted to the i3 grant funder, the US Department of Education.

*Project Activities*<sup>17</sup>

<input type="checkbox"/> <i>Activity 1.2.1</i> Conduct a readiness assessment for educators to determine state of current knowledge and practice (done in conjunction with Activity 1.1.3)	
<input type="checkbox"/> <i>Activity 1.2.2</i> Create a plan for training that includes content and logistics	
<input type="checkbox"/> <i>Activity 1.2.3</i> Conduct training	
<input type="checkbox"/> <i>Activity 1.2.4</i> Conduct site-based data team meetings 4 times per year	
<input type="checkbox"/> <i>Activity 1.2.5</i> Evaluate usefulness and impact of summer training	
<input type="checkbox"/> <i>Activity 1.2.6</i> Evaluate usefulness and impact of data team meetings	
Strategy #1.3: School based teams meet 4 times per year for coaching and data team discussion in order to ensure student progress is regularly monitored and data is used to provide students with appropriate supports and interventions (data team meetings)	
Activities:	Discussion Notes:
<input type="checkbox"/> <i>Activity 1.3.1</i> Create a schedule that allows site based teams to meet 4 times per year for at least 90 minutes per meeting	
<input type="checkbox"/> <i>Activity 1.3.2</i> Create a protocol that allows site based teams to effectively and efficiently use student data to identify student progress and create appropriate interventions	
<input type="checkbox"/> <i>Activity 1.3.3</i> Conduct site-based team meetings	
Strategy #1.4: School based teams participate in a year-end data fair designed to promote the sharing of best practices and lessons learned (dissemination)	
Activities:	Discussion Notes:
<input type="checkbox"/> <i>Activity 1.4.1</i> Create a plan for a year end data fair that includes logistics that allows all teams to participate	
<input type="checkbox"/> <i>Activity 1.4.2</i> Create a protocol that allows site based teams to share their lessons learned	
<input type="checkbox"/> <i>Activity 1.4.3</i> Conduct the year end data fair	

*Project Activities*<sup>17</sup>

<input type="checkbox"/> <i>Activity 1.4.4</i> Develop an electronic platform that will store and facilitate sharing of best practices, lessons and lessons learned	
<input type="checkbox"/> <i>Activity 1.4.5</i> Populate electronic platform with materials developed by site-based teams	
<input type="checkbox"/> <i>Activity 1.4.6</i> Create a strategy for widely sharing and promoting the use of the electronic platform materials	
<input type="checkbox"/> <i>Activity 1.4.7</i> Disseminate lessons learned	

Strategy #2.1: School based teams are formed that include core content area teachers, ESL, guidance, social worker, and administrative support. Each team works with a common set of EL students assigned to their team. Teams are inclusive of mainstream and special needs students, and are the same teams identified for professional development under Objective #1.

Activities:	Discussion Notes:
<input type="checkbox"/> <i>Activity 2.1.1</i> Plan for a school readiness assessment	
<input type="checkbox"/> <i>Activity 2.1.2</i> Conduct school readiness assessment	
<input type="checkbox"/> <i>Activity 2.1.3</i> EL students are scheduled and assigned to teams	
<input type="checkbox"/> <i>Activity 2.1.4</i> Evaluate the ability to create effective teams	

Strategy #2.2: School-based teams meet together and focus on student progress during regularly scheduled common planning time

Activities:	Discussion Notes:
<input type="checkbox"/> <i>Activity 2.2.1</i> Coaches meet with administrators, school leadership teams and others to review the schedule and revise as necessary.	
<input type="checkbox"/> <i>Activity 2.2.2</i> Evaluate the implementation and impact of common planning time	

Strategy #2.3: A regular time and process for individualized student advising (career, academic and personal) is structured and implemented

Activities:	Discussion Notes:
<input type="checkbox"/> <i>Activity 2.3.1</i> Coaches meet with administrators, school leadership teams and others to develop needed structures and processes	

*Project Activities<sup>17</sup>*

<input type="checkbox"/> <i>Activity 2.3.2</i> Evaluate the development of a student advisory model	
<p>Strategy #2.4: A process for Personal Learning Plan (PLP) development and regular use by EL students is developed and implemented. A critical feature of this PLP will be the incorporation of student-led conferencing. The use of digital portfolios will be explored as an adjunct use of technology</p>	
<p>Activities:</p>	<p>Discussion Notes:</p>
<input type="checkbox"/> <i>Activity 2.4.1</i> Coaches meet with administrators, school leadership teams and others to develop needed structures and processes	
<input type="checkbox"/> <i>Activity 2.4.2</i> Evaluate the development of a PLP model	
<p>Strategy #3.1: An inter-agency, inter-district team will be formed (Project Exc-EL Team) to leverage resources and provide wrap around supports for at-risk EL students and their families</p>	
<p>Activities:</p>	<p>Discussion Notes:</p>
<input type="checkbox"/> <i>Activity 3.1.1</i> Catalog of available resources and supports developed	
<input type="checkbox"/> <i>Activity 3.1.2</i> Project Exc-EL team is formed and meets quarterly to purposefully match students with services	
<input type="checkbox"/> <i>Activity 3.1.3</i> EL students identified as at-risk are offered identified services (i.e., tutoring, summer boot camps, family ESL classes)	
<input type="checkbox"/> <i>Activity 3.1.4</i> Participation and outcomes for all services are monitored	
<input type="checkbox"/> <i>Activity 3.1.5</i> Evaluate effectiveness of community support programs	
<p>Strategy #3.2: Interagency partners will host community meetings to engage families (topics may include: immigration law, assistance with FAFSA, college applications, etc.).</p>	
<input type="checkbox"/> <i>Activity 3.2.1</i> Catalog of available topics, dates, and sites developed.	

***Additional Discussion Points and Notes:***

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## D.4 PROJECT SCHOOL ADMINISTRATOR OR SCHOOL DATA TEAM LEAD CHECK LIST PROTOCOL

### Introduction and Purpose

Plus Alpha Research & Consulting, LLC (Plus Alpha) is completing this interview as part of the implementation study of UCLA’s Center X i3 development grant in support of Project Exc-EL. Your responses will help us understand: whether or not the key components of Project Exc-EL have been implemented with fidelity and how the implementation has varied across the treatment schools in terms of the key project components, such as school climate and structures to support college and career readiness, teacher and staff training and technical assistance, and data-driven systemic coaching. Your participation is voluntary. You can stop the interview at any time. You will not be individually identified in resulting reports. Project Exc-EL evaluation activities have been reviewed and approved by UCLA’s Institutional Review Board (IRB). The interview will last approximately 60 minutes.

### Participants

Project Exc-EL school administrator or data team lead.

### Method

Interviews are being conducted either in person as part of other project meetings or over the phone. Plus Alpha staff will take notes during the interview and will not audio record the interview. Analysts will synthesize notes from each interview and include the findings in project reports. The protocol below will be completed by the interviewer during the interview.

### *Plus Alpha Staff Member(s) Conducting the Interview:*

*Date of the interview:*

*This interview was conducted:*  In person (list location/event): \_\_\_\_\_ or  Over the phone

*Start Time:* \_\_\_\_\_ *End Time:* \_\_\_\_\_

*Interview Participant(s) (affiliation, role):*

### *Project Fidelity<sup>18</sup> Measures*

Indicator:	Definition:	Notes:
School based teams receive training on establishing Professional Learning Communities focused on student data.	<input type="checkbox"/> Five (5) teacher training sessions on Professional Learning Communities are provided at each school	

<sup>18</sup> Taken from the *Study Design Summary* submitted to the US Department of Education as part of the national evaluation of the i3 program. This measure is part of *Component 3. Data-driven systematic coaching.*

Indicator:	Definition:	Notes:

Discussion Notes:

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*Project Activities*<sup>19</sup>

Strategy #1.1: Participants on school-based teams participate in training and coaching focused on best instructional practices for ELs and effectively incorporate these practices into classroom instruction (instructional practices training)

Activities:	Discussion Notes:
<input type="checkbox"/> <i>Activity 1.1.1</i> Identify participating schools and educator teams	
<input type="checkbox"/> <i>Activity 1.1.2</i> Roll out project at participating schools	
<input type="checkbox"/> <i>Activity 1.1.3</i> Conduct a readiness assessment for educators to determine state of current knowledge and practice	
<input type="checkbox"/> <i>Activity 1.1.6</i> Conduct site-based coaching 4 times per year	
<input type="checkbox"/> <i>Activity 1.1.7</i> Evaluate usefulness and impact of summer training	
<input type="checkbox"/> <i>Activity 1.1.8</i> Evaluate usefulness and impact of coaching	

Strategy #1.2: Participants on school-based teams participate in training and coaching focused on using data to personalize instruction and intervention (tiered intervention training)

Activities:	Discussion Notes:
<input type="checkbox"/> <i>Activity 1.2.1</i> Conduct a readiness assessment for educators to determine state of current knowledge and practice (done in conjunction with Activity 1.1.3)	R
<input type="checkbox"/> <i>Activity 1.2.4</i> Conduct site-based data team meetings 4 times per year	
<input type="checkbox"/> <i>Activity 1.2.5</i> Evaluate usefulness and impact of summer training	R
<input type="checkbox"/> <i>Activity 1.2.6</i> Evaluate usefulness and impact of data team meetings	

Strategy #1.3: School based teams meet 4 times per year for coaching and data team discussion in order to ensure student progress is regularly monitored and data is used to provide students with appropriate supports and interventions (data team meetings)

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<sup>19</sup> Taken from the annual *Project Management Plan* submitted to the i3 grant funder, the US Department of Education.

*Project Activities<sup>19</sup>*

Activities:	Discussion Notes:
<input type="checkbox"/> <i>Activity 1.3.1</i> Create a schedule that allows site based teams to meet 4 times per year for at least 90 minutes per meeting	
<input type="checkbox"/> <i>Activity 1.3.2</i> Create a protocol that allows site based teams to effectively and efficiently use student data to identify student progress and create appropriate interventions	
<input type="checkbox"/> <i>Activity 1.3.3</i> Conduct site-based team meetings	R

Strategy #1.4: School based teams participate in a year-end data fair designed to promote the sharing of best practices and lessons learned (dissemination)

Activities:	Discussion Notes:
<input type="checkbox"/> <i>Activity 1.4.1</i> Create a plan for a year end data fair that includes logistics that allows all teams to participate	
<input type="checkbox"/> <i>Activity 1.4.2</i> Create a protocol that allows site based teams to share their lessons learned	
<input type="checkbox"/> <i>Activity 1.4.3</i> Conduct the year end data fair	
<input type="checkbox"/> <i>Activity 1.4.4</i> Develop an electronic platform that will store and facilitate sharing of best practices, lessons and lessons learned	
<input type="checkbox"/> <i>Activity 1.4.5</i> Populate electronic platform with materials developed by site-based teams	
<input type="checkbox"/> <i>Activity 1.4.6</i> Create a strategy for widely sharing and promoting the use of the electronic platform materials	
<input type="checkbox"/> <i>Activity 1.4.7</i> Disseminate lessons learned	

Strategy #2.1: School based teams are formed that include core content area teachers, ESL, guidance, social worker, and administrative support. Each team works with a common set of EL students assigned to their team. Teams are inclusive of mainstream and special needs students, and are the same teams identified for professional development under Objective #1.

Activities:	Discussion Notes:
<input type="checkbox"/> <i>Activity 2.1.1</i> Plan for a school readiness assessment	

*Project Activities*<sup>19</sup>

<input type="checkbox"/> <i>Activity 2.1.2</i> Conduct school readiness assessment	
<input type="checkbox"/> <i>Activity 2.1.3</i> EL students are scheduled and assigned to teams	
<input type="checkbox"/> <i>Activity 2.1.4</i> Evaluate the ability to create effective teams	
Strategy #2.2: School-based teams meet together and focus on student progress during regularly scheduled common planning time	
Activities:	Discussion Notes:
<input type="checkbox"/> <i>Activity 2.2.1</i> Coaches meet with administrators, school leadership teams and others to review the schedule and revise as necessary.	
<input type="checkbox"/> <i>Activity 2.2.2</i> Evaluate the implementation and impact of common planning time	
Strategy #2.3: A regular time and process for individualized student advising (career, academic and personal) is structured and implemented	
Activities:	Discussion Notes:
<input type="checkbox"/> <i>Activity 2.3.1</i> Coaches meet with administrators, school leadership teams and others to develop needed structures and processes	
<input type="checkbox"/> <i>Activity 2.3.2</i> Evaluate the development of a student advisory model	
Strategy #2.4: A process for Personal Learning Plan (PLP) development and regular use by EL students is developed and implemented. A critical feature of this PLP will be the incorporation of student-led conferencing. The use of digital portfolios will be explored as an adjunct use of technology	
Activities:	Discussion Notes:
<input type="checkbox"/> <i>Activity 2.4.1</i> Coaches meet with administrators, school leadership teams and others to develop needed structures and processes	
<input type="checkbox"/> <i>Activity 2.4.2</i> Evaluate the development of a PLP model	
Strategy #3.1: An inter-agency, inter-district team will be formed (Project Exc-EL Team) to leverage resources and provide wrap around supports for at-risk EL students and their families	
Activities:	Discussion Notes:
<input type="checkbox"/> <i>Activity 3.1.1</i> Catalog of available resources and supports developed	
<input type="checkbox"/> <i>Activity 3.1.2</i> Project Exc-EL team is formed and meets quarterly to purposefully match students with services	

*Project Activities<sup>19</sup>*

<input type="checkbox"/> <i>Activity 3.1.3</i> EL students identified as at-risk are offered identified services (i.e., tutoring, summer boot camps, family ESL classes)	
<input type="checkbox"/> <i>Activity 3.1.4</i> Participation and outcomes for all services are monitored	
<input type="checkbox"/> <i>Activity 3.1.5</i> Evaluate effectiveness of community support programs	
<p>Strategy #3.2: Interagency partners will host community meetings to engage families (topics may include: immigration law, assistance with FAFSA, college applications, etc.).</p>	
<input type="checkbox"/> <i>Activity 3.2.1</i> Catalog of available topics, dates, and sites developed.	

***Additional Discussion Points and Notes:***



## D.5 SCHOOL COACH INTERVIEW CHECK LIST PROTOCOL

### Introduction and Purpose

Plus Alpha Research & Consulting, LLC (Plus Alpha) is completing this interview as part of the implementation study of UCLA’s Center X i3 development grant in support of Project Exc-EL. Your responses will help us understand: whether or not the key components of Project Exc-EL have been implemented with fidelity and how the implementation has varied across the treatment schools in terms of the key project components, such as school climate and structures to support college and career readiness, teacher and staff training and technical assistance, and data-driven systemic coaching. Your participation is voluntary. You can stop the interview at any time. You will not be individually identified in resulting reports. Project Exc-EL evaluation activities have been reviewed and approved by UCLA’s Institutional Review Board (IRB). The interview will last approximately 60 minutes.

### Participants

Project Exc-EL school coaching staff.

### Method

Interviews are being conducted either in person as part of other project meetings or over the phone. Plus Alpha staff will take notes during the interview and will not audio record the interview. Analysts will synthesize notes from each interview and include the findings in project reports. The protocol below will be completed by the interviewer during the interview.

***Plus Alpha Staff Member(s) Conducting the Interview:***

***Date of the interview:***

***This interview was conducted:***  In person (list location/event): \_\_\_\_\_ or  Over the phone

***Start Time:*** \_\_\_\_\_ ***End Time:*** \_\_\_\_\_

***Interview Participant(s) (affiliation, role):***

### ***Project Fidelity<sup>20</sup> Measures***

Indicator:	Definition:	Notes:
School coach conducts needs assessment	<input type="checkbox"/> School coach conducts one needs assessment at each school	
School coach provides coaching sessions to the school	<input type="checkbox"/> Five (5) coaching sessions are provided at each school per year	

<sup>20</sup>Taken from the *Study Design Summary* submitted to the US Department of Education as part of the national evaluation of the i3 program. These measures are part of project *Component 1. School climate and structures to support college and career readiness.*

Indicator:	Definition:	Notes:
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Discussion Notes:

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*Project Activities*<sup>21</sup>

Strategy #1.1: Participants on school-based teams participate in training and coaching focused on best instructional practices for ELs and effectively incorporate these practices into classroom instruction (instructional practices training)

Activities:	Discussion Notes:
<input type="checkbox"/> <i>Activity 1.1.1</i> Identify participating schools and educator teams	
<input type="checkbox"/> <i>Activity 1.1.2</i> Roll out project at participating schools	
<input type="checkbox"/> <i>Activity 1.1.3</i> Conduct a readiness assessment for educators to determine state of current knowledge and practice	
<input type="checkbox"/> <i>Activity 1.1.4</i> Create a plan for training that includes content and logistics	
<input type="checkbox"/> <i>Activity 1.1.5</i> Conduct training	
<input type="checkbox"/> <i>Activity 1.1.6</i> Conduct site-based coaching 4 times per year	
<input type="checkbox"/> <i>Activity 1.1.7</i> Evaluate usefulness and impact of summer training	
<input type="checkbox"/> <i>Activity 1.1.8</i> Evaluate usefulness and impact of coaching	

Strategy #1.2: Participants on school-based teams participate in training and coaching focused on using data to personalize instruction and intervention (tiered intervention training)

Activities:	Discussion Notes:
<input type="checkbox"/> <i>Activity 1.2.1</i> Conduct a readiness assessment for educators to determine state of current knowledge and practice (done in conjunction with Activity 1.1.3)	
<input type="checkbox"/> <i>Activity 1.2.2</i> Create a plan for training that includes content and logistics	
<input type="checkbox"/> <i>Activity 1.2.3</i> Conduct training	
<input type="checkbox"/> <i>Activity 1.2.4</i> Conduct site-based data team meetings 4 times per year	

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<sup>21</sup> Taken from the annual *Project Management Plan* submitted to the i3 grant funder, the US Department of Education.

*Project Activities<sup>21</sup>*

<input type="checkbox"/> <i>Activity 1.2.5</i> Evaluate usefulness and impact of summer training	
<input type="checkbox"/> <i>Activity 1.2.6</i> Evaluate usefulness and impact of data team meetings	
Strategy #1.3: School based teams meet 4 times per year for coaching and data team discussion in order to ensure student progress is regularly monitored and data is used to provide students with appropriate supports and interventions (data team meetings)	
<b>Activities:</b>	<b>Discussion Notes:</b>
<input type="checkbox"/> <i>Activity 1.3.1</i> Create a schedule that allows site based teams to meet 4 times per year for at least 90 minutes per meeting	
<input type="checkbox"/> <i>Activity 1.3.2</i> Create a protocol that allows site based teams to effectively and efficiently use student data to identify student progress and create appropriate interventions	
<input type="checkbox"/> <i>Activity 1.3.3</i> Conduct site-based team meetings	
Strategy #1.4: School based teams participate in a year-end data fair designed to promote the sharing of best practices and lessons learned (dissemination)	
<b>Activities:</b>	<b>Discussion Notes:</b>
<input type="checkbox"/> <i>Activity 1.4.1</i> Create a plan for a year end data fair that includes logistics that allows all teams to participate	
<input type="checkbox"/> <i>Activity 1.4.2</i> Create a protocol that allows site based teams to share their lessons learned	
<input type="checkbox"/> <i>Activity 1.4.3</i> Conduct the year end data fair	
<input type="checkbox"/> <i>Activity 1.4.4</i> Develop an electronic platform that will store and facilitate sharing of best practices, lessons and lessons learned	
<input type="checkbox"/> <i>Activity 1.4.5</i> Populate electronic platform with materials developed by site-based teams	
<input type="checkbox"/> <i>Activity 1.4.6</i> Create a strategy for widely sharing and promoting the use of the electronic platform materials	
<input type="checkbox"/> <i>Activity 1.4.7</i> Disseminate lessons learned	

*Project Activities<sup>21</sup>*

Strategy #2.1: School based teams are formed that include core content area teachers, ESL, guidance, social worker, and administrative support. Each team works with a common set of EL students assigned to their team. Teams are inclusive of mainstream and special needs students, and are the same teams identified for professional development under Objective #1.

Activities:	Discussion Notes:
<input type="checkbox"/> <i>Activity 2.1.1</i> Plan for a school readiness assessment	
<input type="checkbox"/> <i>Activity 2.1.2</i> Conduct school readiness assessment	
<input type="checkbox"/> <i>Activity 2.1.3</i> EL students are scheduled and assigned to teams	
<input type="checkbox"/> <i>Activity 2.1.4</i> Evaluate the ability to create effective teams	

Strategy #2.2: School-based teams meet together and focus on student progress during regularly scheduled common planning time

Activities:	Discussion Notes:
<input type="checkbox"/> <i>Activity 2.2.1</i> Coaches meet with administrators, school leadership teams and others to review the schedule and revise as necessary.	
<input type="checkbox"/> <i>Activity 2.2.2</i> Evaluate the implementation and impact of common planning time	

Strategy #2.3: A regular time and process for individualized student advising (career, academic and personal) is structured and implemented

Activities:	Discussion Notes:
<input type="checkbox"/> <i>Activity 2.3.1</i> Coaches meet with administrators, school leadership teams and others to develop needed structures and processes	
<input type="checkbox"/> <i>Activity 2.3.2</i> Evaluate the development of a student advisory model	

Strategy #2.4: A process for Personal Learning Plan (PLP) development and regular use by EL students is developed and implemented. A critical feature of this PLP will be the incorporation of student-led conferencing. The use of digital portfolios will be explored as an adjunct use of technology

Activities:	Discussion Notes:
<input type="checkbox"/> <i>Activity 2.4.1</i> Coaches meet with administrators, school leadership teams and others to develop needed structures and processes	
<input type="checkbox"/> <i>Activity 2.4.2</i> Evaluate the development of a PLP model	



*Additional Discussion Points and Notes:*

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## D.6 SCHOOL COACHING ACTIVITY FORM

Project Exc-EL School Coaching Form	1) <i>School:</i> _____	2) <i>Length of Coaching Session:</i> _____
3) <i>Coach:</i> _____	4) <i>Coach's Affiliation:</i> _____	5) <i>Date:</i> _____
6) <i>Participants in Coaching Session (list staff member names and roles):</i> _____ _____		
7) <i>Coaching Topic(s) (check all that apply):</i> <input type="checkbox"/> Advising for Success: -- <input type="checkbox"/> Individual Student Focus -- <input type="checkbox"/> Small Group Focus <input type="checkbox"/> Personalized Learning Plans (PLPs) <input type="checkbox"/> Response to Intervention (RtI) <input type="checkbox"/> School schedule <input type="checkbox"/> Sheltered Instruction Observation Protocol (SIOP) <input type="checkbox"/> Supporting EL students <input type="checkbox"/> Teacher Data Team <input type="checkbox"/> Other (describe): _____	8) <i>Coaching Session Frequency (with this specific individual or group):</i> <input type="checkbox"/> Weekly <input type="checkbox"/> Monthly <input type="checkbox"/> Each Semester <input type="checkbox"/> Annually <input type="checkbox"/> Other (describe): _____ _____  9) <i>When did your last coaching session with this individual or group occur?</i> _____ _____	10) <i>This coaching session occurred (check all that apply):</i> <input type="checkbox"/> In person / face-to-face <input type="checkbox"/> Over the phone / via conference call <input type="checkbox"/> Virtually—via a webinars, etc. <input type="checkbox"/> In conjunction with another event (i.e. a conference, another meeting, etc.) <input type="checkbox"/> Other (describe): _____  11) <i>When is your next coaching session scheduled to occur with this individual or group?</i> _____ _____
12) <i>Briefly outline the coaching session (list activities, topics, and approximate time spent on each):</i> _____ _____ _____		
13) <i>Coaching Session Goal(s):</i> _____ _____ _____		
14) <i>Coaching Session Outcome(s):</i> _____ _____ _____		
15) <i>Question(s) / Concern(s):</i> _____ _____ _____		
16) <i>Rate the effectiveness of the coaching session (group consensus):</i> ____ 1 = Little or no learning/effectiveness ____ 2 = Partial learning or effectiveness ____ 3 = Adequate group learning or effectiveness		



## D.7 MISCELLANEOUS PROJECT EVENT PROTOCOL

This protocol is a catch all for activities and events not already covered by other project protocols or data collection efforts. As such, this protocol **should not** be used to record the proceedings of a Community Partnership Activity (this data is collected by the developer using the Community Partnership Activity form), School Coaching, (this data is collected by the coaches using the School Coaching form), School (Team) Meetings (this data is collected by the school team using the Scholl Meeting form), or a Quarterly Project Partnership Activity (this data is collected by partners using the Quarterly Activity Summary Report). This protocol **should be** used to record school observations, impromptu conversations, impromptu project events, etc.

Please attach or include supporting documents or related resources when sending this completed protocol.

***Role of the person completing this form:***

- Evaluation Team Member                       Development Team Member  
 Other role, briefly describe:

***Date of the activity:***

***How did you attend this event?***  In person,  By phone,  Via Webinar,  As part of another event

***Location of the Activity, briefly describe:***

***Start Time:*** \_\_\_\_\_ ***End Time:*** \_\_\_\_\_

***Event Frequency:***  Recurring Event or  One-Time Event

***Activity Participants (Please list name, role, and affiliation):***

***Activity Topic(s) (Please check all that apply and describe briefly below):***

- |  |   |
|--|---|
| <input type="checkbox"/> Academic Tutoring                   | <input type="checkbox"/> Adult English language instruction |
| <input type="checkbox"/> Assisting with college applications | <input type="checkbox"/> Assisting with FAFSA completion    |
| <input type="checkbox"/> Assisting with immigration law      | <input type="checkbox"/> Career awareness                   |
| <input type="checkbox"/> College awareness                   | <input type="checkbox"/> Field trip                         |
| <input type="checkbox"/> Job shadowing                       | <input type="checkbox"/> Life skills training               |
| <input type="checkbox"/> Meeting                             | <input type="checkbox"/> Mentoring                          |
| <input type="checkbox"/> Observing a classroom               | <input type="checkbox"/> Observing a presentation           |

***Activity Description (a brief paragraph):***

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***Activity Goals and Outcomes (if applicable):***

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### D.8 QUARTERLY MANAGEMENT TEAM ACTIVITY FORM

[redundant with the Program Officer updates and superseded as such in year 2]

**School or Partner Name:** \_\_\_\_\_

Date	Activity	Summary Sheet Attached?	Value/Action
		<input type="checkbox"/> Yes <input type="checkbox"/> No	\$ <input type="checkbox"/> Paid <input type="checkbox"/> To be invoiced <input type="checkbox"/> In Kind
		<input type="checkbox"/> Yes <input type="checkbox"/> No	\$ <input type="checkbox"/> Paid <input type="checkbox"/> To be invoiced <input type="checkbox"/> In Kind
		<input type="checkbox"/> Yes <input type="checkbox"/> No	\$ <input type="checkbox"/> Paid <input type="checkbox"/> To be invoiced <input type="checkbox"/> In Kind
		<input type="checkbox"/> Yes <input type="checkbox"/> No	\$ <input type="checkbox"/> Paid <input type="checkbox"/> To be invoiced <input type="checkbox"/> In Kind
		<input type="checkbox"/> Yes <input type="checkbox"/> No	\$ <input type="checkbox"/> Paid <input type="checkbox"/> To be invoiced <input type="checkbox"/> In Kind
		<input type="checkbox"/> Yes <input type="checkbox"/> No	\$ <input type="checkbox"/> Paid <input type="checkbox"/> To be invoiced <input type="checkbox"/> In Kind
<p><b>Briefly summarize the activities for the period covered and why you believe they were successful:</b> _____            _____            _____</p>			
<p><b>Briefly summarize any challenges or barriers you encountered, including suggestions for mitigation:</b> _____            _____            _____</p>			
<p><b>Other comments or suggestions:</b> _____            _____            _____</p>			

## REFERENCES

- Becker, S.O. & Ichino, A. (2002). Estimation of Average Treatment Effects Based on Propensity Scores. *The Stata Journal*, 2(4), 358-377.
- Bloom, H. S. (2003). Using "short" interrupted time series analysis to measure the impacts of whole school reforms: With applications to a study of Accelerated Schools. *Evaluation Review*, 27(1), 3-49.
- Dehejia, R., & Wahba, S. (2002). Propensity score matching methods for non-experimental causal studies. *Review of Economics and Statistics*, 84, 151-161.
- Nelson, M.C., Cordray, D.S., Hulleman, C.S., Darrow, C.L., & Sommer, E.C. (2012). A procedure for assessing intervention fidelity in experiments testing educational and behavioral interventions. *Journal of Behavioral Health Services & Research*, 39 (4), 374-396.
- Rosenbaum, P.R. and Rubin, D.B. (1984). Reducing Bias in Observational Studies Using Subclassification on the Propensity Score. *Journal of the American Statistical Association*, 79, 516-523.
- Shadish, W. R., Cook, T. D., & Campbell, D. T. (2002). *Experimental and Quasi-experimental Designs for Generalized Causal Inference*. New York: Houghton Mifflin Company.