DC Early Success
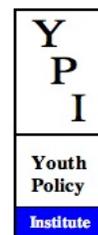# Early Reading First

Final (Year 3) Implementation Report

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Introduction

The Early Reading First (ERF) program was established in response to a growing awareness and concern among educators and researchers that many young children in the United States were starting kindergarten without a strong foundation in early literacy skills. Created under the *No Child Left Behind Act of 2001*, the goals of ERF are to create early childhood "centers of excellence" that would assist pre-school children in developing strong linguistic and cognitive skills. Promoting the acquisition of these early literacy skills would foster the age-appropriate development of reading and writing among school-age children, which, in turn, would support students' academic development

Early Reading First supports a research-based approach to early literacy for children from low-income families. It is designed to foster the ongoing professional development of teachers, inculcating scientifically-based reading research (SBRR) principles, promoting the development of high-quality, skill-based instruction for children in early childhood settings.

ERF's focus on early literacy skills comes at a pivotal moment. The National Assessment of Educational Progress recently reported that 37% of U.S. fourth graders have not achieved a basic skill level in reading, noting that the problem is particularly acute in low-income and minority children.[1] These gaps in reading skills emerge as early as kindergarten and first grade, creating a critical need for the development of initiatives that successfully promote the development of pre-school literacy skills.[2]

In its meta-analysis of research in the field of early childhood education, the National Early Literacy Panel has identified core pre-literacy skills that are predictive of the normative development of school age literacy, regardless of differences in family background and income. These pre-literacy skills include:

- *Alphabet knowledge* (recognition of letter names and sounds);
- *Phonological awareness* (distinguishing word segments and syllables);
- *Rapid autonomic naming* (naming of random letters and pictures);
- *Writing and name writing* (writing letters and naming them when prompted); and
- *Phonological memory* (comprehending and remembering spoken information).[3]

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[1] National Assessment of Educational Progress and National Center for Education Statistics (2007). The nation's report card: Reading 2007. Washington, DC: National Center for Education Statistics.

[2] West, J., Denton, K., & Germino-Hausken, E. (2000). America's kindergarteners: Findings from the Early Childhood Longitudinal Study, kindergarten class of 1998-99, Fall 1998. Washington, DC: National Center for Education Statistics, U. S. Department of Education, Office of Educational Research and Improvement.

[3] *Developing Early Literacy: Report of the National Early Literacy Panel. A Scientific Synthesis of Early Literacy Development and Implications for Intervention.* National Institute for Literacy. Jessup, MD: 2008.

Each of these five skills was integrated into the ERF project under study – the District of Columbia Early Success Project. In keeping with ERF program design requirements, the DC Early Success Project also worked to promote a growing awareness and knowledge of concepts of print, skills that have also been linked to later literacy achievement.

By addressing these key early literacy areas in pre-school and pre-kindergarten classrooms, Early Reading First projects like the one in DC have the potential to significantly improve the opportunities for young students in high-need communities to develop strong and lasting reading and writing skills in kindergarten and beyond.

Project History and Context

Project Design

The DC Early Success project was initiated in 2008 through a $2.98 million grant from the federal ERF program. The grant was awarded to a consortium of three public charter schools (PCS) in the District of Columbia, led by Imagine Hope Community Public Charter School.

The three participating local education agencies (LEAs) – Imagine Hope Community, Ideal Academy, and the William E. Doar, Jr. School for the Performing Arts – currently serve 322 pre-school (PS) and pre-kindergarten (Pre-K) students through the DC Early Success project on five campuses in Northwest and Northeast Washington, DC. This represents an increase of over 50 students from the first year of the project. **Table 1**, below, details core characteristics of the participating LEAs.

The program also partners with the District's not-for-profit Student Support Center, which coordinates and manages project activities, provides key staffing (particularly the mentor-coaches), and offers a wide range of professional development supports.

Table 1: Characteristics of DC Early Success Public Charter Schools in Year 3			
	Imagine Hope Community	*Ideal Academy*	*William E. Doar Jr. (WEDJ)*
In Operation Since	2005	1998	2004
Campuses	2	1	2
PS/Pre-K Teachers Served by ERF	11	4	4
PS/Pre-K Students Served by ERF	216	32	74
PS/Pre-K Teachers Not in ERF	*3*	*2*	*2*
PS/Pre-K Students Not in ERF	*58*	*27*	*31*

Beginning in the first year, and in collaboration with the participating schools, DC Early Success implemented Curiosity Corner, a research-based curriculum developed by the Success For All Foundation (SFAF). Throughout the project, SFAF supported implementation of Curiosity Corner by providing training and coaching to instructional staff.

To help meet project goals, the DC Early Success mentor-coaches provided school-based support for teachers, offering ongoing professional development and direct, classroom-based support for curriculum and program implementation. In addition to the mentor-coaches, who supported instructional staff in implementing Curiosity Corner and provided hands-on professional development supports, the project was staffed by a full-time Project Director and a Parent Liaison, as well as a part-time School Leadership Coach.

Project Context: Working with Charter Schools

Unlike most urban ERF projects, the DC Early Success initiative worked exclusively with public charter schools. The structure, culture, and governance of each of the participating charter schools are distinct. Implementing one curriculum across such different sites poses challenges that are not typically found in ERF projects that work through one urban LEA. Each charter school in the District of Columbia operates as an independent LEA, with its own Board of Trustees, and each has autonomy over recruitment, professional development programs, the selection and adoption of curricula, and other core educational functions.

The three participating charter schools are, like most charter schools, easily distinguished from District of Columbia Public Schools (DCPS). They have been in operation for six, seven, and thirteen years, far less time than the average school in the DCPS system. The charters are smaller in size than their DCPS counterparts, and they have slightly lower student-teacher ratios than DCPS schools.[4] As with many public charter schools, the DC Early Success schools have some teachers who are uncertified, and the staff is not unionized. As a general matter, these rapidly developing schools often have limited resources and a relatively small administrative infrastructure to devote to teachers' professional development and the implementation of SBRR curricula.

To succeed in the charter school environment, successful curricular and professional development projects must tailor practical implementation matters to each school to account for a variety of differences, including organizational structure, school mission and culture, the experience and expertise of staff, available resources, and building size. This process of tailoring must be done while adhering closely to the well-articulated design and procedures of an SBRR curriculum such as Curiosity Corner.

These implementation challenges are compounded by a high average of annual teacher turnover. Annual teacher attrition rates in early childhood settings, estimated to be between 15 and 30%, are similar to the rate of annual teacher turnover in charter schools, which is between 20 and 25%. While there are no current data on the annual attrition rate of DCPS teachers, there is reason to believe that attrition rates in the District of Columbia are comparable for both public school and public charter school teachers.[5,6,7]

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[4]Furgeson, Joshua, Brian Gill, et al. (November 2011). "Charter-School Management Organizations: Diverse Strategies and Diverse Student Impacts." Mathematica Policy Research and Center on Reinventing Public Education.

[5]Whitebook, M. & Sakai, L. (2003). Turnover begets turnover: an examination of job and occupational instability among child care center staff. Early Childhood Research Quarterly, 18, 273-293.

[6]Miron, Gary, and Applegate, Brooks (May 2007). "Teacher Attrition in Charter Schools." Kalamazoo: Western Michigan University. Available online at: http://epsl.asu.edu/epru/documents/EPSL-0705-234-EPRU.pdf

[7]McKinney, S.E. et al. (2007). "Addressing urban high-poverty school teacher attrition by addressing urban high-poverty school teacher retention: why effective teachers persevere." *Educational Research and Review.* 3(1), 1-9; Boyd, D. et al. (2009). "Who Leaves? Teacher Attrition and Student Achievement," Urban Institute. http://www.urban.org/publications/1001270.html

Evaluation Structure and Methodology

Overview

The Youth Policy Institute (YPI), a not-for-profit research and evaluation organization, conducted the external evaluation of the DC Early Success Early Reading First project. YPI's evaluation included a *process* evaluation, which probed factors affecting implementation (such as school culture and curriculum training), and an *outcome* evaluation, which examined the project's impact on student pre-literacy skills and measured progress toward project objectives.

The YPI evaluation employed a research-based approach that systematically explored the context, inputs, and outcomes of the project.[8] YPI's conceptual framework for the evaluation is outlined in **Table 2**.

Table 2: Conceptual Framework for Evaluating DC Early Success	
Program Context	▪ School Culture and Ongoing Curricula ▪ Administrative Support ▪ Staff Qualifications
Instructional Staff Characteristics	▪ Education and Certification ▪ Background Knowledge ▪ Teaching Experience ▪ Classroom Environment (ELLCO Pre-K)
Student Characteristics	▪ Ethnic and Cultural Background ▪ Performance on PPVT-4 ▪ Performance on PALS Pre-K Subtasks
Program Activities	▪ Teacher Curriculum Training (Curiosity Corner) ▪ Fidelity of Curriculum Implementation ▪ Literacy Mentoring and Technical Assistance ▪ Ongoing Staff Development ▪ Parent Outreach
Core Outcomes	▪ Gains in Pre-Literacy Skills (PPVT-4 and PALS Pre-K) ▪ Age-appropriate Literacy Skills in Kindergarten ▪ Improvement in Classroom Environment and Early Childhood Instruction (ELLCO Pre-K)

Data for this evaluation were drawn from a wide variety of quantitative and qualitative data sources, including:

- Fall and Spring scores from administrations of the *Peabody Picture Vocabulary Test-4* (PPVT-4) for students in the ERF program;
- Fall and Spring scores on the *Phonological Awareness Literacy Screening* (PALS) Pre-K Uppercase Alphabet Knowledge, Lowercase Alphabet Knowledge, Letter Sounds, Print and Word Awareness, and Rhyme Awareness subtasks for students in the ERF program;
- Fall and Spring scores on the PPVT-4 and PALS Pre-K from pre-school students at participating schools who were not in the ERF program (comparison group);

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[8] Stufflebeam, D.L. (1983). The CIPP Model for Program Evaluation. In G.F. Madaus, M. Scriven, and D.L. Stufflebeam (Eds.), *Evaluation Models: Viewpoints on Educational and Human Services Evaluation*. Boston: Kluwer Nijhof.

- Student and class reports from the Waterford Early Learning program;
- Dynamic Indicators of Basic Early Literacy Skills (DIBELS) scores from kindergarten students at four campuses who experienced at least one year of ERF;
- Classroom scores from the *Early Language & Literacy Classroom Observation* (ELLCO) Pre-K Tool;
- Classroom observation checklists from project mentor-coaches;
- Surveys of DC Early Success instructional staff (teachers and assistants);
- Focus groups and interviews with DC Early Success teachers and assistants;
- Interviews with project mentor-coaches;
- Interview with the Parent Liaison;
- Interviews with the curriculum coach (Success For All Foundation);
- Interviews with DC Early Success campus principals;
- Conversations with the Project Director and staff;
- Review of the literacy curriculum, Curiosity Corner; and
- Review of project documents.

Assessing Pre-Literacy Skills

To assess pre-literacy skill acquisition, the DC Early Success project used two validated assessment tools required by the ERF program. All PS and Pre-K students were administered the PPVT-4, which assesses receptive vocabulary skills.

Students were also administered subtasks from the PALS Pre-K tool, which has been validated for students aged 4 years and older and is widely used with students under age 3. After field-testing the assessments with a comparable population, YPI selected five PALS Pre-K subtasks for the DC Early Success students aged 4 and older, and three subtasks for 3-year-old students. **Table 3** indicates the selected literacy assessments and their uses.

Table 3: Literacy Assessments Administered by Age of Student, Years 1-3			
Assessment	*Focus*	*3-Year-Olds*	*4-Year-Olds+*
PPVT-4	Receptive Vocabulary	√	√
PALS Pre-K Uppercase Alphabet Knowledge	Letter Knowledge	√	√
PALS Pre-K Lowercase Alphabet Knowledge	Letter Knowledge	No	√ if scored 16+ on Uppercase
PALS Pre-K Letter Sounds	Phonological Awareness	No	√ if scored 9+ on Lowercase
PALS Pre-K Print and Word Awareness	Concepts of Print	√	√
PALS Pre-K Rhyme Awareness	Phonological Awareness	√	√

To ensure valid administration of the selected evaluation instruments, YPI staff trained assessors to administer the instruments only to students who: were age-eligible for a given task; understood the oral instructions; and could complete the task without undue stress. Students absent during the scheduled assessment period were not assessed.

Table 4: Percentage of DC Early Success PS/Pre-K Students Assessed at Year-End with PPVT-4 and PALS Pre-K: Years 1-3			
	Year 1 (N=265)	Year 2 (N=314)	Year 3 (N=322)
PPVT-4	85.7%	86.6%	88.8%
PALS Pre-K	80.8%	85.0%	89.1%

The project aims to complete assessments for at least 80% of DC Early Success students during each assessment period. As seen in **Table 4**, between 80% and 90% of DC Early Success students each year have completed all assessments for which they were eligible.

Comparison Classrooms

In Year 3, the project was able to gather pre- and post-assessment scores on the PPVT-4 and PALS Pre-K for pre-school and Pre-K students at four of the five participating campuses who were in classrooms that did not participate in the DC Early Success project. These five additional classrooms served as a comparison group for the effects of the project in Year 3 on gains in literacy skills. Children in these comparison classrooms were assessed by the same assessment team as the project classrooms. Each of the five classrooms had access to a range of supports for early literacy instruction, which help inform the analysis of their students' scores.

DIBELS

The project also used Dynamic Indicators of Basic Literacy Skills (DIBELS) scores to compare levels of literacy skills among kindergarteners who had completed a year of the DC Early Success program with those who had not participated in the program. DIBELS is validated for grades K-6 and measures phonological awareness, alphabet knowledge, and text fluency.

The two DIBELS tests used were: (1) the Letter Naming Fluency (LNF) test, which measures the ability to quickly name upper and lowercase letters; and (2) the Initial Sounds Fluency (ISF) test, which measures the ability to understand and produce beginning sounds of words.

ELLCO Pre-K

In addition to the required literacy assessments listed above, the evaluation also used the ELLCO Pre-K Tool. The ELLCO is a research-based instrument that uses independent observers to assess the quality of both the pre-school classroom environment and the teaching practiced in that classroom. Its 19 items address five key literacy elements: classroom structure; curriculum; language environment; books and book reading opportunities; and print and early writing supports. The ELLCO was administered in all 17 DC Early Success PS and Pre-K classrooms at the end of Year 1 and Year 2.

Project Implementation Findings

Project Staffing

Project Staff

During the first and second years of the project (2008-2010), the DC Early Success project experienced unanticipated turnover among key staff, including the Project Director, mentor-coaches, and the Parent Liaison. This impeded implementation of several planned project activities, disrupted the emerging relationships between project and instructional staff, and, in particular, delayed efforts in the areas of parent outreach and education.

- Prior to the second year of the project, DC Early Success hired a Project Director with previous experience administering an Early Reading First grant. This Director remained in place through the end of the third year of the project, providing an element of continuity in the leadership and management of the project.

- Throughout the duration of the project, DC Early Success faced challenges hiring, retaining, and assigning three mentor-coaches with appropriate credentials and expertise in early childhood education and teacher coaching and mentoring. Each of the three project years was marked by turnover in the mentor-coach positions, as well as reassignments among the five participating campuses. By the middle of the third year of implementation, however, three dedicated and experienced mentor-coaches were in place, and this team continued to support instructional staff at their assigned campuses through the end of Year 3:

    o One mentor-coach worked with 5 teachers and their assistants at Imagine Hope's Tolson Campus.

    o The second mentor-coach worked with 6 teachers and their assistants at Imagine Hope's Lamond campus.

    o The third mentor-coach also worked with 6 teachers and their assistants: 4 teachers at WEDJ PCS (2 at each campus) and 2 teachers at Ideal Academy PCS.

- Over 94% of teachers surveyed in Year 3 rated the availability and responsiveness of the mentor-coaches as "good" or "excellent." They also reported that a mentor-coach visited them in their classrooms an average of 3 days a week, an increase from the 1-2 days reported in Year 2.

- Throughout the project, principals and teachers indicated in interviews that discontinuity in project staffing was their main concern about the DC Early Success project. In particular, they reported that some planned projects with teachers were not completed because of mentor-coach transitions and re-assignments. However, most principals indicated that staffing transitions, when they occurred, were handled well at their campuses.

- Interviews with the SFA Coach revealed that the mentor-coaches were integral to building teacher understanding of Curiosity Corner. The SFA Coach reported that the mentor-coaches formed productive relationships with their teachers and had a solid understanding of the core facets of Curiosity Corner.

- After a lengthy search process, the project hired a full-time Parent Liaison with experience in parent relations and school settings in the spring of Year 2. The Liaison worked with all three schools and their five campuses through the end of the project, providing monthly workshops and facilitating the distribution of books at each school.

Key Finding: Despite persistent difficulties hiring and retaining appropriate staff, school principals and teachers report being very satisfied with current project staffing and the support for teachers and parents.

Classroom Instructional Staff

In contrast to project staff positions, staffing in the 17 DC Early Success classrooms was stable during the first year of the project. In Years 2 and 3, however, there was turnover in four lead teacher positions at two campuses each year.

Table 5: Characteristics of DC Early Success Instructional Staff: Year 1 and Year 2		
	Project	
Staffing	*Year 2*	*Year 3*
Number of Classroom Teachers	17	17
Number of Classroom Assistants	16	16
Experience		
Average years in Early Childhood field	4.9	4.8
Average years teaching Early Childhood	4.3	4.8
Average years in current classroom	2.7	2.5
Education		
High School Diploma	3 (10%)	4 (20%)
Associate's Degree	6 (21%)	3 (15%)
Bachelor's Degree	17 (59%)	12 (60%)
Master's Degree or Above	2 (11%)	1 (5%)

- As shown in **Table 5** above, the classroom instructional staff in the second and third years of the DC Early Success project was experienced, with an average of nearly five years in the field of Early Childhood, over four years teaching in Early Childhood, and at least two years in their current classroom.

  o As noted above, the short tenure of the lead teachers in their classrooms is not unusual for charter schools, which are generally newer and experience higher teacher turnover than public schools.

Administrative Support

Administrative support for project activities is key to the success of any school-based project. Principals can support effective implementation of early literacy programs by: educating themselves about early literacy and early childhood development; promoting key goals and features of the program and the early literacy curriculum; and providing a supportive environment for teachers, students, and staff.

Table 6: Instructional Staff Perceptions of Administrative Support, Year 2 (2009-2010; N=29) and Year 3 (2010-2011; N=21)				
% of Instructional Staff Agreeing with the Statement		*Disagree*	*Agree*	*Strongly Agree*
Administrators' behavior toward staff is supportive and encouraging.	*Year 2*	4%	63%	33%
	Year 3	5%	48%	48%
The administration provides leadership that clearly addresses program goals.	*Year 2*	7%	69%	24%
	Year 3	5%	65%	33%
The administration effectively manages the day-to-day affairs of the pre-school program.	*Year 2*	7%	71%	21%
	Year 3	5%	62%	33%
This pre-school is a good place to work.	*Year 2*	3%	38%	58%
	Year 3	0%	19%	81%

- Over the past two years, the majority of DC Early Success teachers believed that school administrators were moderately effective at supporting DC Early Success and somewhat engaged in providing programmatic leadership and managing daily pre-school programming (**Table 6**).

  o From the second to the third year of the project, the percentage of instructional staff who reported that their administrators were highly supportive of the program increased from one-third to nearly one half of survey respondents.

  o More instructional staff also indicated they were very satisfied with their pre-school as a place of work, from 6 in 10 in 2010 to 8 in 10 in 2011.

Training and Professional Development

Curriculum Training and Support

To support the implementation of the Curiosity Corner curriculum, each year the Success for All Foundation (SFAF) provided the project with a curriculum coach, an experienced teacher and trainer with extensive knowledge of SFAF curricula. In the first year of the project, the coach provided foundational training in the curriculum.

During the second and third year of the project, the SFA Coach held a total of six curriculum trainings (three each year) for project staff and teachers and conducted four coaching-focused site visits to selected campuses.

- To maximize the time scheduled for curriculum coaching, during site visits the SFA Coach observed and met with groups of teachers located at the same campus, with a different campus highlighted on each visit. However, while this strategy maximized the SFA Coach's contact with teachers over the course of the project, it also limited follow-up with teachers observed during prior visits. This follow-up is normally critical for ensuring that teachers understand highly articulated curricula like Curiosity Corner.

- During scheduled site visits in Years 2 and 3, the SFA Coach was frequently unable to meet with administrators at the targeted campuses, and a planned training with administrators was not held because of a scheduling conflict. Interviews with the SFA Coach indicate that the administrators received limited training in the Curiosity Corner curriculum. School administrator understanding of new curricula is a critical component of effective implementation, and the DC Early Success project would likely have benefited from school leaders who were more knowledgeable about Curiosity Corner.

Literacy Workshops

In addition to the annual trainings in the Curiosity Corner curriculum, the DC Early Success project also offered regular professional development workshops for teachers and assistants in the program. These workshops were offered approximately monthly during the school year, and they highlighted instructional strategies, supplemental materials, and teaching techniques to enhance literacy instruction. The workshops were planned and led jointly by the mentor-coaches and the Project Director, and with the assistance of the Parent Liaison in Year 3.

- As seen in **Table 7**, below, from Year 2 to Year 3 there was a significant increase in the percentage of teachers and assistants who rated the monthly workshops as "excellent" in the areas of organization, responsiveness to their needs, utility, and relevance to their day-to-day activities.

- o This positive assessment of the project's professional development programming was reinforced in interviews with classroom teachers. These educators noted the high quality and focus of the workshops and singled out the ability to apply the skills learned directly to their classroom. Teachers cited the emergent writing and phonological awareness workshops as particularly helpful.

Table 7: Instructional Staff Ratings of DC Early Success ERF Professional Development, Year 2 (2009-2010; N=29) and Year 3 (2010-2011; N=18)				
% of Instructional Staff Rating Aspects of Professional Development		Poor/Fair	Good	Excellent
Organization and sequencing of workshop topics	Year 2	7%	75%	18%
	Year 3	17%	39%	44%
Responsiveness to staff needs and questions	Year 2	14%	66%	21%
	Year 3	11%	28%	61%
Usefulness of handouts and print materials	Year 2	14%	62%	24%
	Year 3	11%	22%	67%
Relevance of knowledge and activities to application in the classroom	Year 2	4%	79%	18%
	Year 3	12%	35%	53%

Curriculum Implementation

Overview of Curriculum

Curiosity Corner is an instructional literacy program for 3- and 4-year-olds that was developed by the Success for All Foundation (SFAF) with support from The Johns Hopkins University. It is a research-based curriculum that promotes early literacy skills, language skills, and social and self-help skills through daily activities and content-rich themes.

Table 8: Curiosity Corner Daily Literacy Activities and Purposes	
Activity	Purpose
Greetings and Readings	Oral Language, Print Awareness, Social Skills
Clues and Questions	Oral Language, Print Awareness, Alphabet Knowledge, Emergent Writing, Social Skills
Rhyme Time	Phonological Awareness, Vocabulary, Oral Language, Social Skills
Learning Labs	Print Awareness, Emergent Writing, Oral Language, Social Skills
Story Tree	Print Awareness, Vocabulary, Oral Language
Outside/Gross Motor Play	Oral Language, Social Skills
Snack Time	Oral Language, Social Skills
Question/Reflection	Oral Language, Emergent Writing, Social Skills

The daily literacy activities listed above in **Table 8** are designed to provide a predictable sequence of events that includes: individual, small group, and whole group learning; active play and quiet activities; and self-selected as well as teacher-directed activities.

Fully-functioning Curiosity Corner classrooms also contain up to eight distinct Learning Labs incorporating activities related to sand/water, science, use of blocks, dramatic play, art, math and manipulatives, library and listening, and writing.

Each month of the school year focuses on one thematic concept within which multiple subjects and concepts are covered (**Table 9**).

Table 9: Examples of Curiosity Corner Themes and Units			
Month	*Theme*	*Sample Units*	*Letter Focus*
September	Creating a Classroom Community	Marvelous Me; Fun with Friends	F
October	Seasons – Fall	Senses; Apples and Pumpkins	A, S
November	Life in Our Community	To Market, To Market; Many Thanks	B, G, P

The Curiosity Corner curriculum for 3-year-olds is generally similar in structure and function to the curriculum for 4-year-olds, although for 4-year-old students there is a greater focus on letters, print literacy, and numeracy. The curriculum for 4-year-olds also focuses on one letter each month to increase alphabet knowledge, with all 26 letters highlighted over the course of a year.

For both 3- and 4-year-olds, the thematic units of the curriculum are accompanied by age-appropriate teacher's manuals, which contain explicit scripts and marginal notes to help teachers maximize learning opportunities and link literacy activities to the physical environment of the classroom. Materials accompanying the curriculum – including the books for Story Time and the rhymes for Rhyme Time – align with the thematic concepts.

School Curricula

In addition to using Curiosity Corner in the targeted pre-school classrooms, each of the DC Early Success schools had a school curriculum that was already established at the onset of the project.

- At the Imagine Hope PCS campuses, the primary curriculum at all grade levels, including pre-school, is the *Core Knowledge* curriculum, which provides a sequenced approach to general knowledge acquisition with integrated, periodic assessments.

- At WEDJ PCS, students from kindergarten on receive instruction in *America's Choice*, a standards-based curriculum that focuses particularly on literacy and mathematics.

- Finally, instructional staff in grades Pre-K4 and above at Ideal Academy PCS use the *Houghton Mifflin Curriculum*, a comprehensive instructional program with a focus on language arts.

The presence of competing curricula in the project schools required project staff to work on aligning Curiosity Corner with existing curricula and to develop and use methods for effectively integrating Curiosity Corner activities with other curricula in the pre-school classrooms.

Curriculum Implementation

Although the project's initial implementation of Curiosity Corner was hampered in Year 1 by a schedule that required mid-year implementation, staff turnover, and delays in scheduling trainings and procuring materials, in Years 2 and 3, most teachers were able to effectively implement the core Curiosity Corner components.

Table 10: Instructional Staff Perceptions of Support for Curriculum Implementation, Year 2 (2009-2010; N=29) and Year 3 (2010-2011; N=21)				
% of Instructional Staff Rating Support for Curriculum Implementation		*Disagree/ Strongly Disagree*	*Agree*	*Strongly Agree*
Ensured you had the materials you needed to implement the Curiosity Corner curriculum.	*Year 2*	10%	55%	35%
	Year 3	5%	29%	67%
Provided enough resources to establish a print-rich environment in your classroom.	*Year 2*	8%	59%	33%
	Year 3	0%	33%	67%
Provided you with enough time to integrate Curiosity Corner into the pre-school curriculum.	*Year 2*	3%	55%	41%
	Year 3	0%	43%	57%

- In both Years 2 and 3, a majority of teachers and assistants either "agreed" or "strongly agreed" that they had the necessary materials, resources, and time to implement Curiosity Corner components; by Year 3, most instructional staff "strongly agreed" (**Table 10**, above). In the third year of the project, only a very small minority (5%) still reported that materials were insufficient.

Table 11: Instructional Staff Reports of Literacy Curriculum Adaptation, Year 2 (2009-2010; N=29) and Year 3 (2010-2011; N=21)				
% of Instructional Staff Reporting Adaptations Made to Curiosity Corner		*No Adaptations*	*Minor Adaptations*	*Major Adaptations*
Greeting and Readings	*Year 2*	18%	46%	36%
	Year 3	5%	38%	57%
Clues and Questions	*Year 2*	19%	44%	37%
	Year 3	14%	38%	48%
Rhyme Time	*Year 2*	25%	32%	43%
	Year 3	10%	40%	50%
Story Tree	*Year 2*	28%	41%	31%
	Year 3	24%	29%	48%
Learning Labs	*Year 2*	21%	45%	34%
	Year 3	10%	29%	62%

- An increasing percentage of instructional staff (**Table 11** above) reported in Year 3 that they were making major adaptations to Curiosity Corner components, particularly during Learning Labs. Interviews with teachers reveal that it proved challenging for them to keep their students engaged in the curriculum. They noted that certain themes are allotted too much time, that on occasion the information shared is too basic for older students, and that the recommended lab activities are often not sufficient to keep students engaged.

Key Finding: DC Early Success teachers have implemented the core components of Curiosity Corner, albeit with substantial modifications.

Table 12: Instructional Staff Ratings of Curiosity Corner Curriculum, Year 2 (2009-2010; N=29) and Year 3 (2010-2011; N=21)				
Instructional Staff Ratings of the Curriculum		*Poor/Fair*	*Good*	*Excellent*
Appropriate for students of all abilities.	*Year 2*	31%	45%	24%
	Year 3	24%	59%	18%
Sequences emergent literacy skills and strategies in a logical, coherent manner.	*Year 2*	25%	54%	21%
	Year 3	22%	39%	39%
Focuses on activities that relate directly to Early Reading First goals/objectives.	*Year 2*	20%	66%	14%
	Year 3	6%	56%	39%
Provides specific suggestions for learners with special needs.	*Year 2*	60%	30%	11%
	Year 3	47%	35%	18%
Supports the development of fundamental literacy skills leading to higher skills.	*Year 2*	24%	62%	14%
	Year 3	17%	56%	29%

- Teachers and assistants in Years 2 and 3 had mixed perceptions of the effectiveness of the Curiosity Corner curriculum. The great majority of teachers in Year 2 believed the curriculum activities related directly to project objectives, but opinions about other aspects of the curriculum varied widely. The area that instructional staff felt was *least effective* was guidance for adapting the curriculum to meet special needs (**Table 12**).
  - o However, most teachers surveyed in Year 3 indicated that any perceived problems with curriculum design and quality were either not a challenge to them (37%) or were only a minor challenge (58%). A very small minority of teachers (5%) found that shortcomings in the curriculum posed a significant challenge. In general, teachers reported increasing comfort working with Curiosity Corner and using its materials.

Teacher Mastery of Core Curricular Activities

In addition to external observers rating teacher skills in pre-literacy areas using the ELLCO Pre-K Assessment Tool, the DC Early Success project also asked teachers and assistants to complete a self-assessment of their competence in core literacy curriculum activities as part of the Instructional Staff Survey. To help the project obtain the perspective of the professionals who work most closely with the teachers on curriculum implementation, each year mentor-coaches at each campus completed a Classroom Observation Checklist addressing the same core curriculum activities included in the teacher self-assessments.[9]

Both lead teachers and mentor-coaches rated each curricular activity on a scale of 1 (not using activity at all) to 5 (mastery of activity).

Table 13: Lead Teacher and Mentor-Coach Ratings of Implementation of Select Core Curricular Activities, Year 2 (2009-2010; N=10) and Year 3 (2010-2011; N=14)			
Curriculum Activities Where Teachers Rate Themselves <u>Most</u> Competent			
Scale of 1 (Not Using) to 5 (Mastery)		Avg. Teacher Self-Ratings	Avg. Mentor-Coach Ratings
Engaging children with voice, expression, and enjoyment of books (Story Tree).	*Year 2*	4.6	4.3
	Year 3	4.5	4.3
Using the Daily Message to introduce thematic concepts (Greetings & Readings).	*Year 2*	4.4	4.5
	Year 3	4.6	4.7
Implementing songs, chants, rhymes, and thematic activities during transitions (Curiosity Corner).	*Year 2*	3.7	3.9
	Year 3	4.6	3.9

- In the areas where teachers felt the most competent, they gave themselves an average rating of 4, indicating that they use those skills regularly, consistently, and confidently (**Table 13**). Although mentor-coach ratings of teacher competence in those same areas varied – in Year 3, they rated two of the three areas lower than the teachers rated themselves, and one area higher – their average rating was also a 4.

Table 14: Lead Teacher and Mentor-Coach Ratings of Implementation of Select Core Curricular Activities, Year 2 (2009-2010; N=10) and Year 3 (2010-2011; N=14)			
Curriculum Activities Where Teachers Rate Themselves <u>Least</u> Competent			
Scale of 1 (Not Using) to 5 (Mastery)		Avg. Teacher Self-Ratings	Avg. Mentor-Coach Ratings
Discussing the Home Link activity from the previous day with children (Greetings & Readings).	*Year 2*	3.0	3.0
	Year 3	3.6	3.8
Actively engaging all children using Curiosity Corner techniques such as Buddy Buzz and Think-Pair-Share (Clues & Questions).	*Year 2*	3.3	3.4
	Year 3	3.6	4.1
Using tour strategies to introduce new materials and thematic activities (Learning Labs).	*Year 2*	3.4	3.9
	Year 3	3.9	4.2

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[9] Only four of the five campuses are included in this analysis. The fifth campus did not have a mentor-coach for the Spring semester.

- Teachers rate themselves as most competent in the Curiosity Corner components "Story Time" and "Learning Labs". However, there were isolated activities where they felt they could significantly improve their use and mastery (**Table 14**).
  - o Even though teachers still report deficiencies in consistency and confidence in these activities, mentor-coaches felt they had greatly improved in these areas in Year 3.

Key Finding: By Year 3, DC Early Success teachers consider themselves competent in most curriculum components, but have identified several strategies they wish to improve.

Classroom Environments

Environmental Assessment

As noted above in the discussion of Evaluation Structure and Methodology, the DC Early Success project used the ELLCO Pre-K Tool to assess the quality of the literacy environment and teacher instructional practices. Research indicates that the quality of the learning environment is critical for children's growth and success, particularly in the area of language and literacy acquisition.[10]

Table 15 shows the average classroom score for DC Early Success teachers for the five key areas of literacy environment and instruction measured by the ELLCO Pre-K.

Table 15: DC Early Success Average ELLCO Pre-K Scores by Section, Year 1 (2008-2009) and Year 3 (2010-2011) (N=17)		Year 1		Year 3	
	Maximum Possible Score	Project Average	% Max. Score	Project Average	% Max. Score
Section I: Classroom Structure	20	17.1	86%	18.0	90%
Section II: Curriculum	15	12.1	81%	13.4	89%
General Classroom Environment (GCE) Subscale (Sections I + II)	*35*	*29.2*	*83%*	*31.4*	*90%*
Average GCE Subscale Score	*5.0*	*4.2*	*84%*	*4.5*	*90%*
Section III: The Language Environment	20	15.6	78%	17.8	89%
Section IV: Books and Book Reading	25	19.0	76%	23.0	92%
Section V: Print and Early Writing	15	10.5	70%	13.4	89%
Language and Literacy (L&L) Subscale (Sections III – V)	*60*	*45.1*	*75%*	*54.2*	*90%*
Average L&L Subscale Score	*5.0*	*3.8*	*76%*	*4.5*	*90%*

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[10] Early, D. M., Maxwell, K. L., Burchinal, M., Alva, S., Bender, R., Bryant, D., Cai, K., Clifford, R., Ebanks, C., Griffin, J., Henry, G., Howes, C., Iriondo-Perez, J., Jeon, H. J., Mashburn, A., Peisner-Feinberg, E., Pianta, R., Vandergrift, N., Zill, N., (2007). Teachers' education, classroom quality, and young children's academic skills: Results from seven studies of preschool programs. *Child Development, 78* (2), 558-580.

- With the exception of one section, average scores on the ELLCO Pre-K in Year 3 were approximately 90% of the possible maximum score, indicating a relatively high quality of project classrooms at the end of the project's last year. The average scores increased from Year 1 to Year 3 across all areas.

  o The most dramatic improvement was in the Print and Early Writing section (environmental print, writing materials, support for early writing), which received the lowest scores in Year 1.

- The average Year 3 General Classroom Environment (GCE) score, which includes classroom structure and curriculum, was quite high (4.5). However, there was a notable variation among rooms, with GCE scores ranging from 3.6 to 5.0. Likewise, while the average Language and Literacy (L&L) Subscale Score was also 4.5, three classrooms had scores of 3.9 or lower, indicating a basic level of achievement in this area.

- While scores for individual classrooms varied notably, the average Year 3 scores for each ELLCO Pre-K section varied only minimally by campus. This suggests that classroom environments across the project are becoming increasingly aligned with early literacy standards.

Key Finding: DC Early Success classrooms became increasingly aligned with early literacy standards, according to the ELLCO Pre-K. Substantial improvements in the Print and Early Writing area still leave room for growth in Year 3.

Waterford Early Learning Program

In Year 2, as part of an effort to establish sustainable literacy supports at each school, the project provided each classroom with training and equipment to implement the Waterford Early Learning program. Waterford is a self-paced software program that provides scaffolded pre-literacy instruction, integrates nursery rhymes and songs, and focuses on exposure and exploration of nursery rhymes and songs. Full implementation of the Waterford program was accomplished in Year 3.

As a supplement to Curiosity Corner, students each received 15 minutes per day with the Waterford program, practicing their Letter Recognition and Letter Sounds skills and building familiarity with rhyming and content vocabulary.

- Teachers and assistants reported that students had embraced the Waterford program and were able to easily transition between computer use and classroom activities at their scheduled time. They also noted that use of the software was building computer skills and rhyme memorization.

- The Waterford program provides a summary of student and classroom performance in early literacy and content skills based on student performance on program assessments. Performance in most areas varied considerably by classroom.
  - o The exception was the Language Concepts component, which includes letter knowledge and concepts of print such as directionality; every DC Early Success classroom had between 87% and 97% of students scoring at the target level in Language Concepts, well above the goal of 80% proficiency in this area. This may have contributed to the achievement of the project objectives in Letter Naming and Print and Word Awareness in Year 3 (pp. 24-25).

Family Literacy and Perceptions of Parents and Caregivers

Parents and caregivers are an essential source of support for a child's early literacy growth and development. In Year 2, the DC Early Success project hired a designated Parent Liaison, who worked with the partner schools in Years 2 and 3 to improve parents' knowledge about early literacy skills and to support their involvement in reading. The Parent Liaison worked to achieve these tasks by offering at least one topical parent workshop or book distribution at each of the three schools each month.

Table 16: Parent/Caregiver Ratings of DC Early Success Project: Year 2 (2009-2010; N=42) and Year 3 (2010-2011; N=63)				
% of Parents/Caregivers Agreeing with Statements about DC Early Success		*Disagree/ Strongly Disagree*	*Agree*	*Strongly Agree*
School and program staff create a welcoming environment for children and their families.	*Year 2*	0%	50%	50%
	Year 3	2%	35%	63%
School and program staff model respect, cooperation and honesty.	*Year 2*	0%	53%	47%
	Year 3	2%	34%	65%
The school regularly sends home books and ideas for stimulating language at home.	*Year 2*	18%	50%	33%
	Year 3	20%	48%	31%
The school program offers parent and community workshops on a broad variety of relevant and useful topics.	*Year 2*	15%	58%	28%
	Year 3	9%	46%	45%
Parent and community workshops are held at convenient times and locations.	*Year 2*	5%	74%	21%
	Year 3	15%	40%	45%
The program Parent Liaison provides helpful information and reading strategies to use at home with my child.	*Year 2*	14%	50%	37%
	Year 3	3%	48%	49%
Parents and family members are encouraged to visit and/or volunteer in the school and program.	*Year 2*	0%	44%	56%
	Year 3	5%	48%	48%

- As seen in **Table 16**, parents and caregivers held generally favorable views about the DC Early Success program. During the last two years, nearly all parents reported that the program was welcoming to them and their children; furthermore, those that "strongly agreed" with this increased substantially from Years 2 to 3.

- o Parents also overwhelmingly concurred with the proposition that the program modeled positive values and behaviors such as respect and honesty, and, again, those that "strongly agreed" increased markedly over time.

- While there is no data available to compare the behaviors of pre-school parents in other charters in the District of Columbia, it is apparent that parent respondents in the DC Early Success project were, by Year 3, *extraordinarily engaged* in supporting their children's acquisition of early literacy skills. Responses also reveal that the schools and Parent Liaison played an important role in encouraging that engagement.

- For example, by Year 3:
  - o 79% of parents and caregivers "often" did an early literacy activity suggested by the school or Parent Liaison (such as name writing with alphabet magnets);
  - o 75% often read books to their child that were sent home by the school; and
  - o 68% supported phonemic awareness by reciting rhymes or singing songs that were sent home with their child.

- In interviews, principals reported that the Parent Liaison helped raise parent awareness of the Early Reading First project, and provided parents and caregivers with a wealth of resources through parent meetings.

- In Year 3, parents and caregivers were asked about the benefits of the DC Early Success program for their children. At least 7 in 10 respondents indicated that their children improved a "moderate" or "great" amount in the following early literacy skills and interests:
  - o Interest in learning about new things (98%);
  - o Interest in reading (94%);
  - o Knowledge of letters (92%);
  - o Vocabulary (91%);
  - o Ability to sound out words (74%);
  - o Improved attitude toward school (75%).

Key Finding: Parents and caregivers are highly supportive of the DC Early Success program, and see benefits for their children in early reading skills and interest.
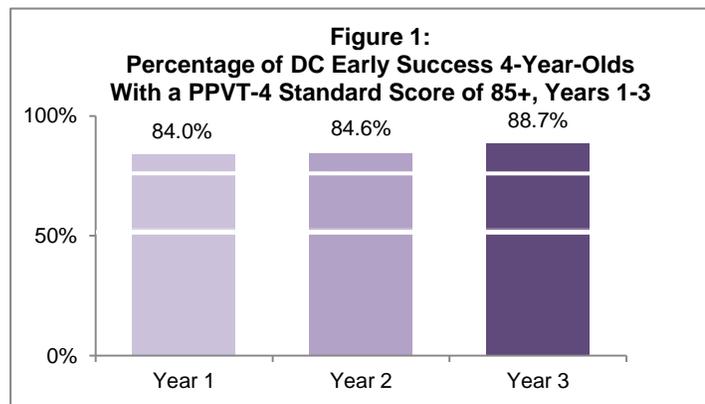
Student Literacy Skills

Performance on GPRA Measures

The federal Early Reading First Program has established three Government Performance and Results Act (GPRA) measures to assess the impact of the program (**Table 17**).

| Table 17: DC Early Success Year-End Project GPRA Measures, by Year				
	Assessment	Year 1	Year 2	Year 3
GPRA 1: Age-appropriate Oral Language skills (SS of 85+)	PPVT-4	50% of all PS/Pre-K	80% of all PS/Pre-K	80% of all PS/Pre-K
GPRA 2: Significant Gains in Oral Language Skills (4+ points)	PPVT-4	50% of all PS/Pre-K	50% of all PS/Pre-K	50% of all PS/Pre-K
GPRA 3: Recognize 19+ Uppercase Letters	PALS Pre-K Uppercase Letters	50% of 4-year-olds	80% of 4-year-olds	50% of 4's will recognize all 26 letters

GPRA 1. <u>The number of 4-year-old students (age-eligible for kindergarten the following year) who demonstrate age-appropriate oral language skills as measured by a standard score of 85 or above on the PPVT-4.</u> As discussed earlier, the PPVT-4 assesses receptive (hearing) language abilities of people aged 2 years, 6 months and above. Children are asked to look at four pictures on a page and point to the picture that corresponds to the word given orally by the assessor. Children's performance is calculated first into a raw score and then into a standard score (SS).

- Nearly 85% of students at the end of both Year 1 and Year 2 met this GPRA target, and 88% in Year 3 (**Figure 1**). DC Early Success has met and exceeded its objectives for this measure all three years (**Table 17**).

Figure 1: Percentage of DC Early Success 4-Year-Olds With a PPVT-4 Standard Score of 85+, Years 1-3

Year 1: 84.0%
Year 2: 84.6%
Year 3: 88.7%

GPRA 2. *The percentage of 4-year-old students who achieve significant gains in oral language skills as measured by an increase of 4 or more standard score points on the PPVT-4 from pre-test to post-test.* The Early Reading First program has established a threshold of 4 or more Standard Score points to measure student growth in receptive vocabulary (as measured by the PPVT-4) over the course of a year.

o Each year, the project has approached its target of 50% of 4-year-olds achieving significant gains in receptive vocabulary (**Figure 2**). In Year 2, the project met and exceeded the target objective, and in Year 3 it achieved 98% of its target goal.

Figure 2:
Percentage of DC Early Success 4-Year-Olds Advancing 4+ Standard Score Points on the PPVT-4, Years 1-3
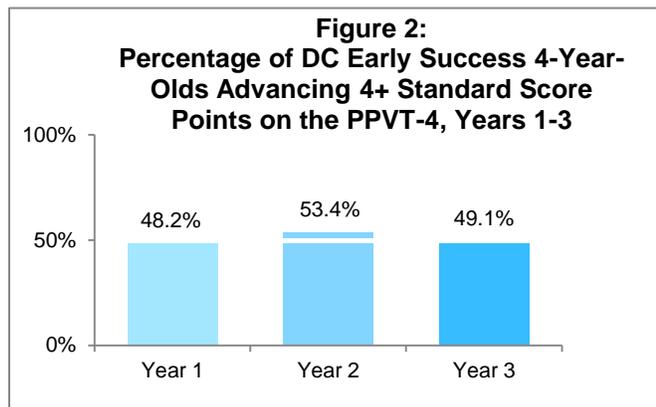
GPRA 3. *The percentage of DC Early Success 4-year-olds that can name 19 or more Uppercase Letters on the PALS Pre-K Alphabet Knowledge Task.*

▪ As indicated in **Figure 3**, 80% or more of DC Early Success 4-year-olds were able to recognize 19 or more uppercase letters at the end of all three project years, meeting and exceeding project objectives (**Table 17**).

Figure 3:
Percentage of DC Early Success 4-Year-Olds Recognizing 19+ Uppercase Letters, Years 1-3
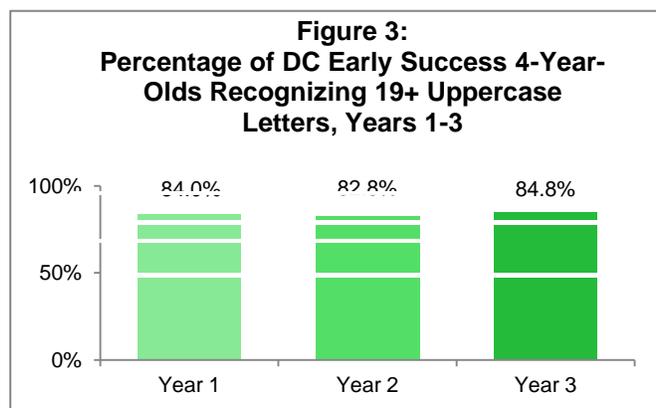
Key Finding: DC Early Success met project objectives for PPVT-4 performance and uppercase letter recognition all three years. It met the objective for receptive vocabulary growth in Year 2 and was very close to meeting the objective in Years 1 and 3.

Performance on Project Measures

DC Early Success has also established three project measures to gauge progress towards objectives (**Table 18**).

	Assessment	Year 1	Year 2	Year 3
Table 18: DC Early Success Year-End Project Measures for Student Pre-Literacy Skills, by Year				
Project Measure 1: Recognize 16+ Uppercase Letters	PALS Pre-K Uppercase Letters	50% of 4-year-olds	80% of 4-year-olds	50% of 4's recognize all 26 letters
Project Measure 2. Age-appropriate Phonological Awareness (4+ score for age 3; 6+ score for age 4)	PALS Pre-K Rhyme Awareness	50% of all PS/Pre-K	80% of all PS/Pre-K	80% of all PS/Pre-K
Project Measure 3. Age-appropriate Print Awareness (4+ score for age 3; 8+ score for age 4)	PALS Pre-K Print and Word Awareness	50% of all PS/Pre-K	80% of all PS/Pre-K	80% of all PS/Pre-K

Project Measure 1. _The percentage of DC Early Success 4-year-olds that can name 16 or more Uppercase Letters on the PALS Pre-K Alphabet Knowledge Task._
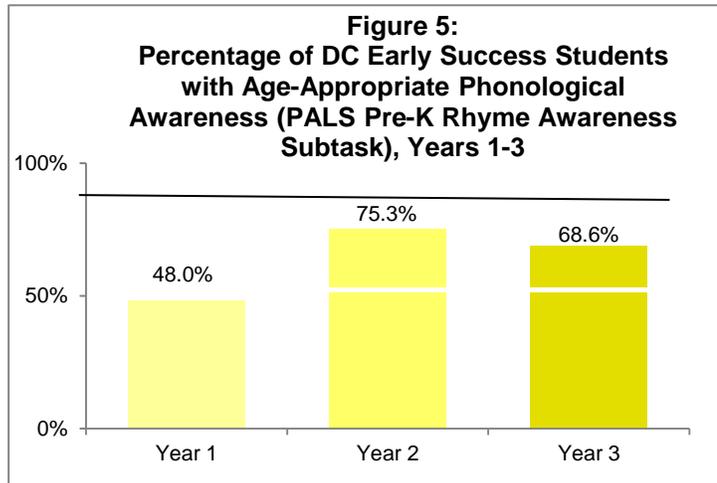
- Each year more than 80% of DC Early Success 4-year-olds could recognize 16 or more uppercase letters with the PALS Pre-K tool (**Figure 4**). The project met and exceeded its objectives in this area in all three years.

Figure 4:
Percentage of DC Early Success 4-Year-Olds Recognizing 16+ Uppercase Letters, Years 1-3

Year 1: 84.2% Year 2: 83.3% Year 3: 85.7%

- The project also established a target for Year 3 of 50% of all 4-year-olds being able to name all 26 letters on their Spring PALS Pre-K Uppercase Letter Knowledge Task. 56.2% of 4-year-olds in Year 3 succeeded at this task, exceeding the target level.
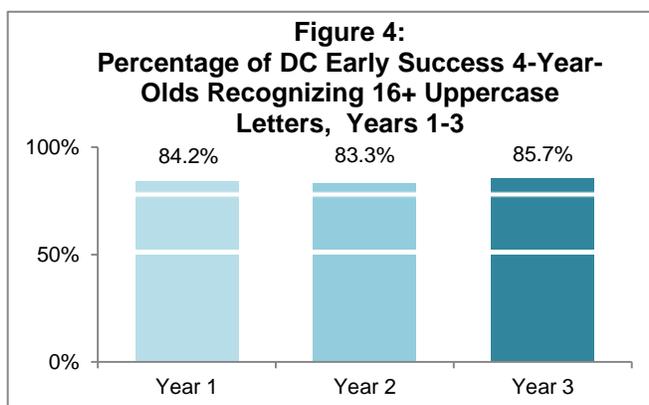
Project Measure 2. _The percentage of DC Early Success students demonstrating age-appropriate Phonological Awareness, as measured by the PALS Pre-K Rhyme Awareness subtask_ (score of 4 or more for age 3; score of 6 or more for age 4).

- As shown in **Figure 5** below, Rhyme Awareness was an area in which the project struggled to inculcate age-appropriate skills in students. Although the percentage of students performing at or above the targeted level in Year 3 represents a significant increase from the first year, DC Early Success did not succeed in meeting its goal of 80% proficiency during the course of the project.

o Interviews with school and project staff over the three years of the project suggest that rhyme awareness has consistently been one of the areas in which DC Early Success students need the most support.

Figure 5:
Percentage of DC Early Success Students with Age-Appropriate Phonological Awareness (PALS Pre-K Rhyme Awareness Subtask), Years 1-3

Year 1: 48.0%
Year 2: 75.3%
Year 3: 68.6%

Project Measure 3. The percentage of DC Early Success students demonstrating age-appropriate awareness of concepts of print, as measured by the PALS Pre-K Print and Word Awareness subtask (score of 4 or more for age 3; score of 8 or more for age 4).

- In Year 2 and Year 3, more than 80% of all DC Early Success students (both Pre-K3 and Pre-K4) met the target end-of-year score for the PALS Print and Word Awareness subtask (**Figure 6**). The project met and exceeded its goals in this area in the last two years of the project.

Figure 6:
Percentage of DC Early Success Students with Age-Appropriate Awareness of Concepts of Print (PALS Pre-K Print and Word Awareness), Years 1-3

Year 1: 45.0%
Year 2: 83.7%
Year 3: 86.1%
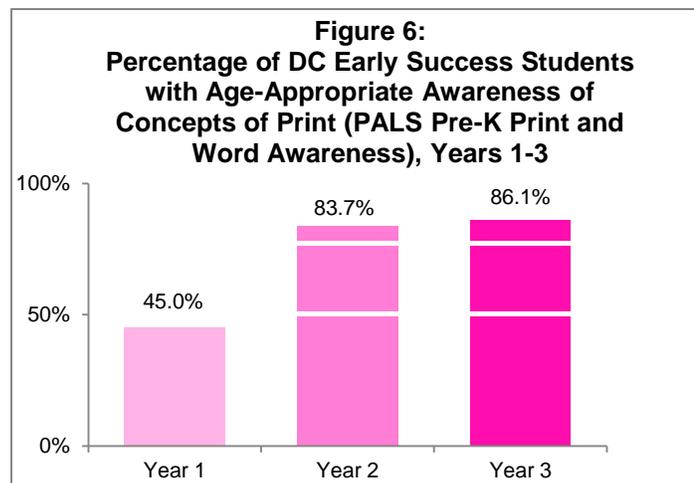
Key Finding: DC Early Success met Year 3 project objectives for two of the three project measures (Letter Naming and Print and Word Awareness).

Performance on Project Assessments

In addition to the GPRA and overall Project Objectives discussed above, the DC Early Success ERF project established year-end targets for each age group (**Table 19**, below), based on expected development of pre-literacy skills. Year 1 and Year 3 performance on these targets is discussed below.

Table 19: DC Early Success ERF Assessment Targets by Age Group		
	Year-End Targets	
Assessment	3-Year-Olds	4-Year-Olds
PPVT-4 (Standard Score)	85+	85+
PALS Pre-K Uppercase Letters	9 Letters	16 Letters
PALS Pre-K Lowercase Letters	N/A	13 Letters
PALS Pre-K Letter Sounds	N/A	7 Letters
PALS Pre-K Print and Word Awareness	4 Items	8 Items
PALS Pre-K Rhyme Awareness	4 Items	6 Items

Performance on PPVT-4. The PPVT-4, which assesses receptive vocabulary, provides a validated, reliable measure of a child's exposure to different English words, and measures the breadth and precision of his/her vocabulary.

Table 20: DC Early Success Average Performance on PPVT-4 by Age Group, Year 1 and Year 3						
	3-Year-Olds		4-Year-Olds		All Students	
PPVT-4	Year 1	Year 3	Year 1	Year 3	Year 1	Year 3
Average Standard Score	98.5	100.8	97.9	100.5	98.2	100.7
Average Percentile Ranking	47.4	51.1	45.9	51.3	46.7	51.2
Average Normal Curve Equivalent (NCE)	48.1	50.2	47.0	49.5	47.6	49.9

- The average standard score for each age group has increased at least 2 points from Year 1 to Year 3, indicating that students' average receptive vocabulary skills improved over the course of the project (**Table 20**).
  - o Likewise, in the same period, average percentile rankings for all groups rose to above the 50th percentile. This means that, on average, students in the DC Early Success project have higher levels of receptive vocabulary than expected.

It is important to mention that the intervals between percentiles are not always equal. For example, it can take a much greater improvement for a child to move from the 35th to the 36th percentile than for he or she to move from the 95th to the 96th percentile. The Normal Curve Equivalent (NCE) converts percentile ranks to an equal-interval scale – e.g., NCE scores remain the same if, in six months, students make six months of progress. Students who make more than six months' progress in that time will have a net (positive) gain in the NCE score. For the PPVT-4, students who have made greater gains in receptive vocabulary skills than others in their age group will have a net gain in their NCE scores.

- **Table 20** shows an increase in average NCE scores for the project and for each age group. This indicates that the receptive vocabulary skills of DC Early Success students are continuing to improve at a rate faster than normal development – a clear indication that the project is having an effect in this area.

Key Finding: Average PPVT-4 scores and percentile rankings have improved from Year 1 to Year 3, and the project is having a positive effect on students' receptive vocabulary.

Performance on PALS Pre-K. As noted above in the discussion of the Evaluation Methodology, the PALS Pre-K assesses letter and letter sound recognition, awareness of concepts of print, and rhyme awareness (phonological awareness). **Table 21**, below, presents the average end-of-year scores for Year 1 and Year 3 for each PALS Pre-K subtask by age group.

Table 21: DC Early Success Average Performance on PALS Pre-K Subtasks by Age Group, Years 1-3						
	3-Year-Olds		*4-Year-Olds*		*All Students*	
PALS Subtask	*Year 1*	*Year 3*	*Year 1*	*Year 3*	*Year 1*	*Year 3*
Average Correct Letters/Sounds						
Uppercase Letters	14.4	20.8	20.4	22.7	20.6	21.7
Lowercase Letters	N/A	N/A	22.7	23.9	22.7	23.9
Letter Sounds	N/A	N/A	20.0	18.3	20.0	18.3
Print and Word Awareness	5.2	7.1	6.1	8.7	6.7	7.9
Rhyme Awareness	3.7	5.3	5.4	6.9	6.2	6.1

- *Uppercase Letter Knowledge and Print and Rhyme Awareness Increased.* For the three PALS Pre-K subtasks provided to both Pre-K3 and Pre-K4 students (Uppercase Knowledge, Print and Word Awareness, and Rhyme Awareness), the average scores for each age group increased from Year 1 to Year 3.

  o At the end of Year 3, the average number of uppercase letters (21.7) was age-appropriate for both 3- and 4-year-olds.

- *Lowercase Letter Scores and Eligibility Increased.* The PALS Pre-K letter tests require a child to meet the given threshold (16 uppercase letters or 9 lowercase letters) to continue on to the next letter test. In DC Early Success, only 4-year-olds are eligible to continue past the Uppercase Letter Test. Since the average score for the Lowercase Letters and Letter Sounds subtasks reflects only the students who were eligible to take the test, it is important to measure the percentage of students who were eligible to take each test.

  o 47% of 4-year-olds were eligible to take the Lowercase Letter test in the Spring of Year 1;
  o 88% were eligible for the test in the Spring of Year 2; and
  o 90% were eligible for the test in the Spring of Year 3.

- *Letter Sounds Scores Declined Slightly, while Eligibility Increased.* Approximately the same number of students were eligible in Year 3 for the Letter Sounds test as for the Lowercase Letter test a significant increase from Year 1. However, average scores declined slightly over the same period, most likely due to the increased numbers of students eligible to take the test.

Key Finding: From Year 1 to Year 3, DC Early Success PALS Pre-K scores improved for four of five subtasks overall, and average scores are appropriate for each age group.

Benchmark Analysis

To facilitate reporting and instructional planning for teachers, the evaluators, in consultation with the DC Early Success project, developed a series of color-coded benchmarks for each child literacy assessment. These benchmarks are based on a review of the literature, field research, recommendations from assessment developers, and statistical analysis of baseline data. **Table 22**, below, describes the benchmarks.

Table 22: Description of DC Early Success Benchmarks	
Challenge (85-100%)	The child has exceeded benchmark goals in this early literacy area and may require other instructional strategies to maintain development.
Benchmark (50-85%)	The child has established age-appropriate skills in this early literacy area.
Emergent (15-50%)	The child is approaching benchmark goals in this literacy area and may need additional instructional supports to meet those goals.
Intensive (0-15%)	The child may need targeted educational services and possibly other support services to meet benchmark goals.
Not Tested	The child withdrew, was absent, could not complete the test, or was not administered the test.
Not Eligible	The child did not meet the threshold necessary to complete the test, or was not age-eligible to take the test.

▪ According to the project benchmarks, a normal distribution of year-end assessment scores would include 15% of students in the Intensive group, and an equal percentage in the Challenge benchmark. At the end of Year 3, 10% of DC Early Success students were in the Challenge category for the PPVT-4, and 11% in the Intensive category (**Table 23**).

   o Overall, the distribution of students has remained fairly constant over the three years of the project, with the significant exception of receptive vocabulary, where fewer students in Year 3 scored in the highest ("Challenge") category.

Table 23: Percentage of DC Early Success Students at Benchmark Levels for PPVT-4 at Year-End Assessment, Years 1-3			
	Year 1	Year 2	Year 3
Challenge (85-100%)	15%	13%	10%
Benchmark (50-85%)	39%	44%	43%
Emergent (15-50%)	35%	33%	37%
Intensive (0-15%)	11%	10%	11%

▪ For the PALS Pre-K Uppercase Letter Knowledge subtask (required for all Early Reading First projects), DC Early Success students performed substantially above average. A growing percentage of students each year, rising to 7 in 10 students in Year 3, had scores that placed them in the highest ("Challenge") benchmark grouping (**Table 24**, below).

- In Year 3, DC Early Success students were also significantly less at-risk than average in the area of alphabet knowledge. Only 12% of students were in the two higher risk categories – Intensive (most at-risk) and Emergent (somewhat at-risk) – compared to the expected 50% of students (**Table 24**).

Table 24: Percentage of DC Early Success Students at Benchmark Levels for PALS Pre-K Uppercase at Year-End Assessment, Years 1-3			
	Year 1	Year 2	Year 3
Challenge (85-100%)	54%	61%	71%
Benchmark (50-85%)	26%	17%	16%
Emergent (15-50%)	9%	8%	5%
Intensive (0-15%)	12%	14%	7%

- For the two required assessments (PPVT-4 and PALS Pre-K Uppercase), the impact of the DC Early Success program on within-year student advancement varied. For PPVT-4, in both Year 1 and Year 3, similar percentages of students regressed to a lower benchmark level, advanced to a higher benchmark level, or stayed at the same benchmark level from Fall to Spring (**Table 25**).

- However, for the PALS Uppercase Test, *considerably more* students in Year 3 advanced one or two benchmark levels during the year than in Year 1. *Even more remarkable, by the end of Year 3 only one student had regressed in letter knowledge compared to the beginning of the year* (**Table 25**).

Table 25: DC Early Success Student Movement Between Benchmark Levels, Years 1-3				
Assessment	PPVT-4		PALS Uppercase	
	Year 1	Year 3	Year 1	Year 3
Advanced 2+ Benchmark Levels	2%	<1%	11%	30%
Advanced 1+ Benchmark Level	23%	27%	31%	49%
Maintained Same Benchmark Level	62%	57%	65%	51%
Regressed 1+ Benchmark Level	15%	16%	5%	<1%

Key Finding: DC Early Success students acquired uppercase letter knowledge at an accelerated pace in Year 3 compared to Year 1.

Reports from School Staff

- Teachers and assistants in Years 2 and 3 reported that their students were engaged by the Curiosity Corner curriculum and particularly enjoyed the Learning Labs, Story Tree, and Rhyme Time. Students were moreover actively engaged in making connections between the curriculum and their own experiences. In Learning Labs, according to instructional staff, students were consistently drawn to the Dramatic Play and Art labs.

- Teachers noted positive changes in their students' ability to write and form letters and words, and reported an increased use of vocabulary and investigative questions. Several teachers reported that several students were reading at a kindergarten level by year's end. They indicated, as they had in prior years, that students needed additional support in the areas of rhyming, sound blending and segmentation, and writing.

Comparison Group Analysis

As mentioned in the Overview of Evaluation Structure and Methodology, in Year 3 the project was able to gather pre- and post-data from 5 non-participating pre-school and Pre-K classrooms at two of the project schools (for a total of four campuses). YPI analyzed the assessment scores of these comparison students and compared them to the performance of DC Early Success students during Year 3 (**Table 26**).

Table 26: Performance of DC Early Success and Comparison 3-Year-Olds on PPVT-4 and PALS Pre-K, Pre-Post Year 3				
	DC Early Success Students (N=223)		Comparison Students (N=73)	
Assessment	Fall	Spring	Fall	Spring
PPVT-4 (Avg. Standard Score)	98.5	100.7	96.9	96.9
PALS Uppercase Letters (Avg. Letters)	13.9	21.7	13.7	21.0
PALS Print and Word (Avg. Items)	5.0	7.9	4.8	7.5
PALS Rhyme Awareness (Avg. Items)	4.6	6.1	5.0	6.1

Receptive Vocabulary Scores Improved among Project Students, but Not for Students in the Comparison Group. As noted earlier in this report, average scores on the PPVT-4 increased over 2 Standard Score points for DC Early Success students. The same increase was not seen in the comparison group, where average scores were exactly the same in the Spring and the Fall.

Performance and Growth on PALS Assessments Comparable for Both Project and Comparison Groups. Overall, both groups began the year with comparable knowledge of letters, print concepts, and rhyming. Pre/post gains among DC Early Success students were slightly but not significantly larger for Uppercase Letter and Print and Word Knowledge than for comparison students. Average Spring scores for Rhyme Awareness were identical.

Table 27: Performance of DC Early Success and Comparison on PPVT-4 and PALS Pre-K, Pre/Post Year 3					
		DC Early Success N for 3's=118 N for 4's=105		Comparison N for 3's=46 N for 4's=27	
Assessment		Fall	Spring	Fall	Spring
PPVT-4 (Avg. Standard Score)	3-Year-Olds	99.0	100.8	96.4	96.8
	4-Year-Olds	97.8	100.5	97.9	97.1
PALS Uppercase Letters (Avg. Letters)	3-Year-Olds	11.4	20.8	10.1	18.7
	4-Year-Olds	16.9	22.7	19.8	25.0

Receptive Vocabulary Growth Greatest Among 4-Year-Olds, with Letter Knowledge Growth Greater Among 3-Year-Olds. On the two required project assessments, PPVT-4 and PALS Uppercase Letters, DC Early Success students out-performed their peers in comparison classrooms. Gains in receptive vocabulary among 4-year-olds who participated in the project significantly outpaced both project 3-year-olds and comparison group students in both age groups. The reverse was true for letter knowledge, where 3-year-old students served by DC Early Success had the greatest gains in Uppercase Letter recognition (**Table 27**, above).

Variation by Classroom. The five comparison classrooms differed widely in their use of the Curiosity Corner curriculum and materials, and in their access to professional development and support for literacy instruction. With the help of project staff, who completed Level of Implementation questionnaires for each comparison classroom, YPI was able to rank each classroom as having a low, medium, or high level of implementation of the DC Early Success model as compared to the ERF classrooms.

- For the four comparison classrooms ranked as low- or medium-level implementers of the DC Early Success model (with limited use of the curriculum and infrequent access to project training and services), there was no pattern evident in student growth or achievement.
- However, for the single comparison classroom that was at a high level of implementation, average receptive vocabulary scores were notably higher than the other four classrooms as well as the average project scores in both the Fall (102.7 SS points) and the Spring (101.8). This classroom also had an average Uppercase Letter Knowledge score (25.1) that ranked among the top three classrooms (both ERF and non-ERF) across the five campuses.
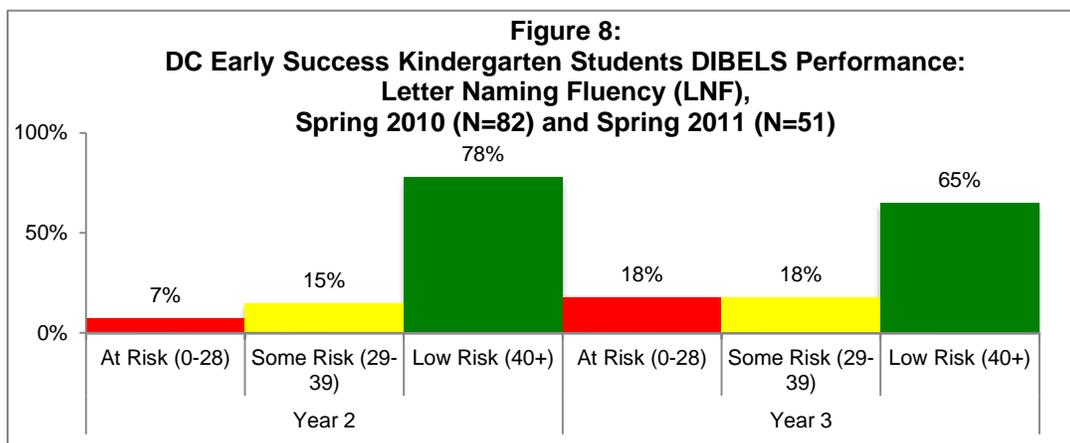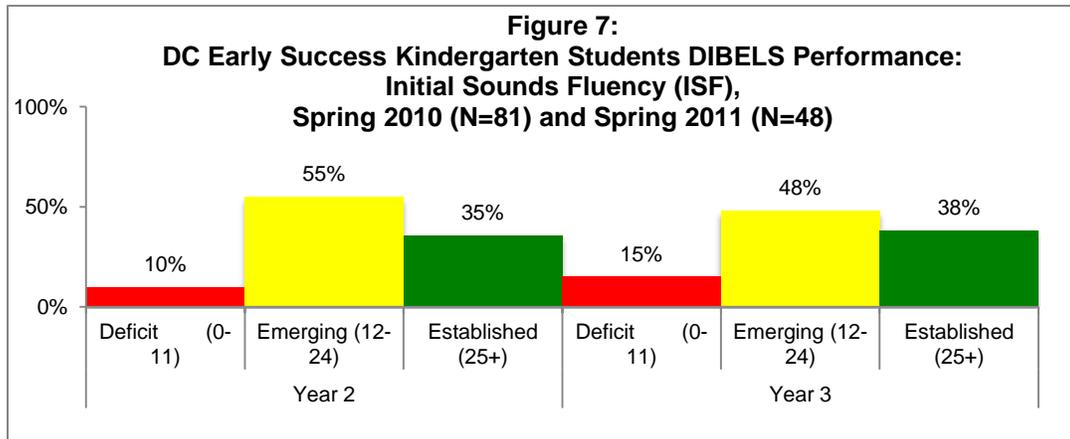
Key Finding: In general, DC Early Success students are performing at a higher level than their peers in comparison classrooms, most notably in receptive vocabulary.

Long-Term Effects of DC Early Success

In the Spring of Years 2 and 3, the DC Early Success project gathered results from literacy skills assessments of kindergarteners at four of the five project campuses.[11] These kindergarten students all received the Curiosity Corner curriculum as Pre-K students at a DC Early Success campus during the prior year. The purpose of the assessments was to see if these students had continued to progress in their literacy skills in kindergarten.

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[11] At the fifth campus, only Pre-K3 students participate in DC Early Success. They advance to Pre-K4 after finishing the program, rather than kindergarten.

Performance on DIBELS. As indicated earlier in this report, the DC Early Success project uses two DIBELS tests to track literacy skills in kindergarten: the Initial Sounds Fluency (ISF) test, which assesses phonological skills, including understanding and producing initial sounds of words; and the Letter Naming Fluency (LNF) test, which assesses upper and lowercase letter recognition.

Figure 7:
DC Early Success Kindergarten Students DIBELS Performance:
Initial Sounds Fluency (ISF),
Spring 2010 (N=81) and Spring 2011 (N=48)

Figure 8:
DC Early Success Kindergarten Students DIBELS Performance:
Letter Naming Fluency (LNF),
Spring 2010 (N=82) and Spring 2011 (N=51)

DIBELS has established benchmarks to determine whether students are deficient or at-risk in certain literacy skill areas compared to expectations for the end of the kindergarten year.[12]

- *Initial Sounds Fluency (ISF).* As seen above in **Figure 7**, slightly more than one-third of DC Early Success students who were tracked into kindergarten tested at the "established" level (i.e., at or above the level expected) in initial sounds recognition (35% in 2010 and 38% in 2011).
  - o A small but growing minority of students tested at the "deficit" level (i.e. at risk) on the ISF scale, increasing from 10% in 2010 to 15% in 2011.

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[12] In 2010 kindergarten DIBELS scores were obtained for former DC Early Success students from all four Hope and WEDJ campuses. In 2011, scores were obtained for students from one Hope campus and both WEDJ campuses.

- o In both years, the most common testing level of these former DC Early Success students was at a moderate level of risk ("emerging") in initial sounds recognition, with a majority in 2010 (55%) and a plurality in 2011 (48%).

- *Letter Naming Fluency (LNF).* In contrast to performance on the sound recognition test, a significant (but declining) majority of kindergarten students tested at or above normative level ("low risk") in letter naming (78% in 2010 and 65% in 2011). Similar to the results in the ISF test, a small but growing minority of students tested "at risk" in the LNF test, more than doubling from 7% in 2010 to 18% in 2011 (**Figure 8**, above).

Table 28: DC Early Success Kindergarten Student Average DIBELS Scores, Spring 2010 and Spring 2011		
Average Score	Initial Sounds Fluency	Letter Naming Fluency
All Students (2010)	21.7	51.2
All Students (2011)	23.8	43.9
Males (2010)	21.6	48.6
Males (2011)	26.4	45.6
Females (2010)	21.8	54.8
Females (2011)	21.9	42.6

- *Average ISF Scores.* Both in 2010 and 2011, DC Early Success students who were tracked into kindergarten had average scores in Initial Sounds Fluency that fell into the higher end of the "emerging" category, indicating that these students were, on average, near the benchmark for this literacy skill (**Table 28**).

  - o *By Gender.* The average ISF level for female students did not change over the course of the two years, but *average sound recognition levels for male kindergarteners increased significantly from 21.6 in 2010 to 26.4 in 2011.* In 2011, the average ISF score was in the "established" category for males.

- *Average LNF Scores.* The average letter recognition scores *declined significantly* from 2010 to 2011 (a decrease of over 14%).

  - o *By Gender.* Letter naming scores declined significantly among females and slightly among males. By 2011, there was a nominal difference in LNF scores by gender (**Table 28**).

  - o 82% of girls scored in the highest LNF category (40+) in 2010 and 62% in 2011; 75% of boys scored in that category in 2010 and 68% in 2011.

- In both years, the average DIBELS scores for the two schools examined were nearly equal in both the ISF and the LNF test scores.

Key Finding: Overall, DIBELS scores for kindergarteners who attended DC Early Success generally did not improve from Year 2 to 3. However, Initial Sound Fluency scores for male students increased markedly.

What Factors Affect Emergent Literacy Outcomes?

YPI explored the reasons why some students in Year 3 might have benefited more than others from the efforts of the DC Early Success ERF project. Five variables were analyzed that could affect student performance in early literacy skills, as measured by: (a) Spring scores on the PALS Pre-K Uppercase Letter, Print and Word, and Rhyme Awareness assessments; (b) Spring scores on the PPVT-4 assessment; and (c) Change in PPVT-4 scores from Fall to Spring.

Gender. According to YPI's analysis, there was no significant difference in performance by gender on most assessments. The exception was Print and Word Awareness, where the average score of female students (8.4) was a full point higher than for male students (7.3). With this exception, boys and girls generally appear to be benefiting equally from the DC Early Success program and progressing at the same rate.

Age. The age of a student during Year 2 (either 3 or 4 years old) did not affect Spring PPVT-4 scores or the change in the PPVT-4 standard score from Fall to Spring.

However, age *did* significantly affect Spring performance on the PALS Pre-K Uppercase Letter, Print and Word Awareness, and Rhyme Awareness subtasks in both Years 2 and 3. The older the student, the higher the Spring score on these subtasks, indicating that students are acquiring pre-literacy skills according to developmental expectations.

Initial Level of Emergent Literacy. YPI examined whether students' initial level of literacy skills affected their growth in skills during the school year. Students who began the year with a relatively low PPVT-4 standard score tended to experience greater improvements over the course of the year than those who began the year with a relatively high PPVT-4 score. This is a strong indication that the students who had the greatest need in this literacy area received the support they needed. The same pattern was observed for PALS Pre-K assessments.

Classes (Teacher Effect). YPI examined whether the class in which a child was placed had any effect on end-of-year literacy skills. In both Year 2 and Year 3, there was significant variability in student performance among different classes. This variability occurred for Uppercase Letter Knowledge, Print and Word Awareness, and Rhyme Awareness, as measured by the PALS Pre-K subtasks, suggesting that in this project, the teachers and their classroom environment were a key factor in literacy skill acquisition.

End-of-year PPVT-4 scores were strongly linked to individual teachers. A review of spring assessment scores in Years 2 and 3 revealed several high-performing classes, and the difference between these high-performing classes and others in the project was statistically significant. However, the *amount of change* in PPVT-4 scores from Fall to Spring does not appear to be linked to teacher efficacy.

YPI also examined teacher performance on the ELLCO Pre-K classroom environment and pedagogical skills tool. An elevated ELLCO rating was positively associated with higher scores on the Print and Word and Rhyme Awareness in the Spring assessments.

School and Campus. During both Year 2 and Year 3, there were substantial differences among the five DC Early Success campuses in Uppercase Letter Knowledge, Print and Word Awareness, and Rhyme Awareness. There were also significant differences in performance among the three participating charter schools, which is unsurprising given the variations in effects among the campuses and teachers. Within-year growth in PPVT-4 did vary by charter school, but not by campus.

Conclusions and Recommendations

In Year 1, the DC Early Success project made significant progress towards meeting its project goals and objectives, despite multiple implementation setbacks beginning early in the first year. In the two following years, while discontinuity in project staffing remained an ongoing concern for project stakeholders, the DC Early Success project was able to continue its positive momentum. During the third year of implementation, the project successfully:

A. Assembled and sustained a skilled and experienced core team, including the Project Director, campus mentor-coaches, and a Parent Liaison;

B. Provided professional development and coaching which continued the alignment of classroom environments and instruction with early literacy standards;

C. Implemented the Waterford Early Reading Program, ensuring a measure of sustainability in targeted literacy support;

D. Increased parental support for the project and their participation in early literacy activities;

E. Met or exceeded Year 3 project objectives for two of the three GPRA measures (PPVT-4 performance and Uppercase Letter Knowledge), and for two of the three established Project Measures (Letter Awareness and Print and Word Concepts).

F. Increased, compared to the beginning of the project, average student scores and percentile rankings for the PPVT-4 for all age groups, and increased average student scores for all age groups in four of five PALS Pre-K subtasks.

G. Continued to accelerate Uppercase Letter Knowledge acquisition as measured by project benchmark scores;

H. Engendered outcomes demonstrating that, in general, DC Early Success students performed at a higher level than their peers in comparison classrooms, most notably in receptive vocabulary;

I. Promoted kindergarten literacy skills, with more than 8 in 10 DC Early Success students who were tracked into kindergarten showing little or no risk in the areas of letter recognition and fluency in initial sounds, with nearly two-thirds of these students advancing in letter recognition skills.

As the project enters its no-cost extension year and prepares to sustain literacy growth at the schools beyond the duration of the program, there are several areas that YPI recommend be addressed. In particular, YPI suggests that DC Early Success focus on:

I. Strengthening instruction and support at the schools in the areas of print and early writing and in rhyming instruction, which have consistently been areas where students and teachers alike have required targeted support.

II. Addressing, with the help of the participating schools, any remaining deficiencies in materials or supplies that will support implementation of the Curiosity Corner curriculum and the Waterford Early Learning program.

III. Continue working with teachers and administrators to address differences in environment and instruction between schools and campuses, with the goal of achieving equivalent levels of student achievement across the entire project.

IV. Assisting each campus to implement planned elements for sustainability, including training for assessments and data use, ongoing connections with the curriculum developers, and supplemental reading programs.