



## Evaluation of the SPARK Early Literacy Program – Interim Findings

SPARK provides one-on-one tutoring, after-school, and family engagement to kindergarten through 3rd grade students, and has been validated in studies of its impact on students in the Milwaukee Public Schools as having a significant positive impact on literacy.<sup>1</sup>

One-on-one tutoring is provided to students during the school day for 30 minutes, up to three times per week. A program manager, who is also a certified teacher, oversees the tutors. Each lesson plan begins with a familiar activity to briefly review a skill the student has already mastered. After this, the tutor administers a running record assessment (this occurs every third lesson). This is followed by phonics activities. Next, the student reads a book that is at his/her instructional level and then does a writing activity. Finally, the tutor reads a portion of a book aloud.

The after-school component is based on the KidzLit program, developed by the Developmental Studies Center. It is a reading enrichment program designed to increase students' motivation to read and build their literacy skills. The KidzLit program is built around using multicultural books and follows a five part process. The KidzLit curriculum contains books and guides that go along with each book. Each book has a series of listed vocabulary words called cool words.

The family engagement component involves a parent partner working with families to bridge the divide between school and home. They do this by translating literacy concepts, educating families about a variety of literacy activities, and validating the literacy practices already happening in the home. Parent partners help families see how they already are incorporating literacy into their children's lives and show parents how to promote literacy more effectively. Parent partners stay connected with families through a monthly newsletter, monthly family events at each site, and phone calls or emails.

In 2014, Boys & Girls Clubs of America (BGCA) received a grant from the Kellogg Foundation to expand SPARK to two additional clubs. Boys & Girls Clubs of the Pee Dee Area (BGCPDA) was chosen as one of the clubs. BGCA supported BGCPDA to implement SPARK in two Pee Dee area elementary schools.

This brief presents the findings from the evaluation of the SPARK Early Literacy Program in the two Pee Dee areas sites (Washington Street Elementary School and Thornwell School of the Arts). It focuses mostly on the implementation of SPARK during its first year (2013-2014) in these schools. The report is informed by participation, fidelity of implementation, achievement

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<sup>1</sup> <https://uwm.edu/education/research/socially-responsible-evaluation-in-education/milw-community-literacy-spark/>

data, and surveys of SPARK staff about their experiences implementing SPARK during the 2014-2015 school year.

Participation

Across both sites, 42 students were engaged in SPARK; this included 22 in Washington Street and 20 in Thornwell. The Thornwell program worked with 1<sup>st</sup> and 2<sup>nd</sup> grade students while the Washington St. program worked with 1<sup>st</sup>, 2<sup>nd</sup>, and 3<sup>rd</sup> grade students (Table 1). Across both sites, there were 23 male and 19 female students. Programming began in November of 2014, with 34 students receiving SPARK. Eight additional students were enrolled throughout the year. The data presented in this report about participation and impact focuses on the 34 students who participated for the majority of the school year and started SPARK in November.

Table 1: Students in SPARK by Grade Level

	Grade			Total
	1 <sup>st</sup>	2 <sup>nd</sup>	3 <sup>rd</sup>	
<b>Thornwell</b>	9	11	0	20
<b>Washington St.</b>	9	12	1	22
<b>Total</b>	18	23	1	42

Attendance

SPARK participants received an average of 52.7 tutoring sessions and 12.9 after-school sessions (Figure 1). Both Pee Dee sites provided roughly equal amount of after-school to their students but Washing St. students received more tutoring than did Thornwell students ( $F = 4.1, p = .05$ ). It is worth noting that only 13 of the 34 students (38%) participated in after-school. Thus, the average student engaged in after-school actually averaged attending about 34 sessions.

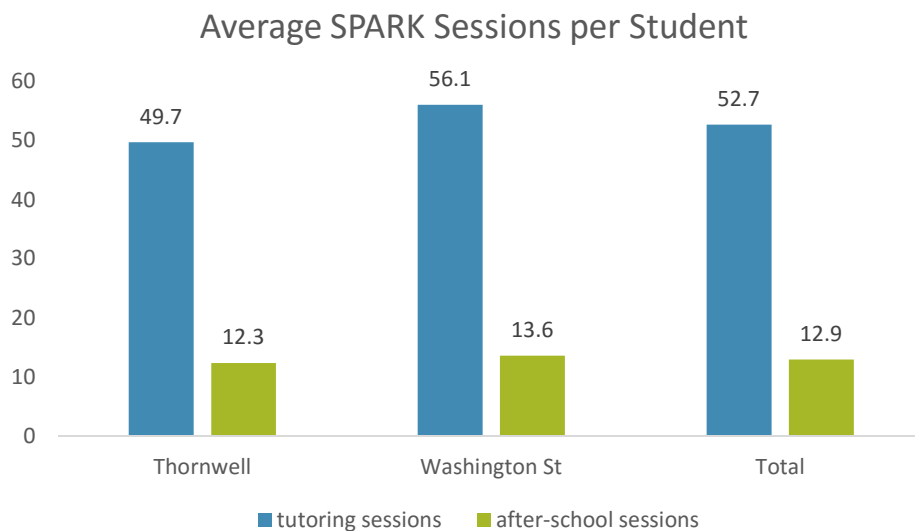


Figure 1: Average SPARK sessions per student by site

The Milwaukee SPARK program has established standards for tutoring participation dosage that define low, medium, and high intensity of tutoring. Specifically, across two years, students receiving less than 90 sessions are considered to have received a low intensity program, between 90 and 120 sessions are considered to have received a moderate intensity program, and over 120 sessions are considered to have received a high intensity program. Since the current evaluation only covers one year of SPARK, half of these thresholds were used to categorize the intensity of programming provided to students. The results suggest that the great majority of students (28 out of 34) received at least a medium intensity of SPARK tutoring (Table 2). Although no standards for after-school participation have been established, that 38% of students were engaged in after-school is somewhat less than what was found across the 14 sites participating in the Innovative Approaches to Literacy (IAL) grant (60%). However, the roughly 34 after-school sessions per after-school participant is somewhat higher than what has been observed in other SPARK programs.

Table 2: Number of students receiving different levels of SPARK tutoring

	Intensity			Total
	Low	Medium	High	
<b>Thornwell</b>	4	14	0	18
<b>Washington St.</b>	2	8	6	16
<b>Total</b>	6	22	6	34

Table 3 presents participation data broken down by grade level. There were no statistically significant differences found between the amounts of tutoring or after-school students in different grade levels received.

Table 3: Tutoring and after-school sessions by grade level

		Tutoring			After-school		
		Mean	Standard Deviation	n	Mean	Standard Deviation	n
<b>Thornwell</b>	2 <sup>nd</sup>	51.1	3.9	8	13.5	20.8	8
	3 <sup>rd</sup>	48.6	7.5	10	11.4	16.0	10
	<b>Total</b>	49.7	6.1	18	12.3	17.7	18
<b>Washington St.</b>	1 <sup>st</sup>	52.4	20.1	5	21.2	26.6	5
	2 <sup>nd</sup>	57.6	6.0	10	11.1	22.4	10
	3 <sup>rd</sup>	59.0		1	0.0		1
	<b>Total</b>	56.1	11.7	16	13.6	22.9	16
<b>Total</b>	1 <sup>st</sup>	51.6	12.0	13	16.5	22.4	13
	2 <sup>nd</sup>	53.1	8.1	20	11.3	18.9	20
	3 <sup>rd</sup>	59.0		1	0.0		1
	<b>Total</b>	52.7	9.6	34	12.9	20.0	34

## Fidelity of Implementation Monitoring Results

As part of the in-school tutoring component, program managers observe tutors and fill out the fidelity of observation tracking form to ensure that tutors are following the prescribed lesson plan. This process is a critical way for program managers to provide feedback to tutors on the quality of their instruction. The program manager first reviews the tutor’s lesson plan to make sure it is completed and to find out information about the lesson regarding the familiar activity, running record, word play, instructional reading book, and writing activity. Then the program manager observes the lesson to note that all activities are included, are in the right order, and take the appropriate amount of time. The program manager also notes whether the lesson plan elements are aligned to each other and to the students’ needs. The final section of the observation form collects information about the students’ transition to the tutoring session, the tutor’s preparation level, and the students’ engagement level. It is recommended that each SPARK tutor be observed at least once each month.

A total of 73 observations of 14 tutors were done by BGCPDA program managers. 49 were done in Thornwell and 24 in Washington St. These occurred between November of 2014 and April of 2015. Tutors should be observed at least once each month. Given that approximately nine tutors were working with students each month, and that SPARK covered six months, it is clear that BGCPDA program managers conducted enough observations and consistently monitored the fidelity of tutoring sessions. Further, the results of the observations provide evidence that tutors were completing the basic aspects of the SPARK tutoring model, following the lesson plan, and that students were engaged. All but five fidelity checks indicated that the tutor was fully prepared for the lesson. Further, all but eight students were rated as fully engaged in their lesson. More importantly though, there is clear evidence on the fidelity forms that the program managers successfully used fidelity checks to provide substantive feedback to tutors.

Looking at the specific components of the lessons (Appendix A summarizes these activities), nearly all observed lessons included all of the key activities that comprise SPARK tutoring, with the most time typically spent on the Reading at Instructional Level activity. (Table 4).

Table 4: Time (in Minutes) spent on each SPARK tutoring activity

	<b>N</b>	<b>Average Minutes</b>	<b>Standard Deviation</b>
<b>Familiar Activity</b>	72	2.2	1.5
<b>Running Records</b>	13	4.7	1.4
<b>Word Play</b>	73	6.0	2.9
<b>Writing</b>	70	8.0	2.5
<b>Reading at Instructional level</b>	70	9.6	3.4
<b>Tutor Read Aloud</b>	68	2.3	1.8

Within the Word Play activity, the specific instructional tools used are summarized in Table 5. Making Words, Flip Books, and Word Sorts were by far the most common strategies observed. Sound/symbol Books and Decodable Readers were rarely employed strategies used by tutors.

Within the Reading at Instructional Level, the majority of observed sessions included both a review of vocabulary/sight words (70%) and discussion questions (90%).

Within the Writing activity, more often the tutor had students write a sentence connected to the instructional book (44%) instead of a sentence connected to Word Play (22%).

Table 5: Word Play activities used each lesson

	n	%
<b>Assessment</b>	5	7%
<b>Making Words</b>	28	38%
<b>Flipbooks</b>	15	21%
<b>Sound/symbol Book</b>	4	5%
<b>Decodable Reader</b>	2	3%
<b>Word Sort</b>	34	47%
<b>Elkonin Boxes</b>	3	4%

### Staff Survey Results

Six SPARK staff across both sites participated in an anonymous, on-line survey about their impressions of SPARK. These included four tutors, one parent partner, and one program manager. The results from the surveys are presented across sites and roles so as to maintain the anonymity of respondents.

All respondents indicated that they understood what their role was in SPARK. Further, all four tutors indicated that they were very confident in their ability to tutor students.

Although respondents generally indicated that that they had positive interactions with other SPARK staff, two tutors did not feel supported by their program manager and there was some indication that the parent partner and program manager did not always work well together.

When asked how well the training they had been provided prepared them for their role, all but one person indicated “well” or “very well”.

Five respondents rated the effectiveness of the three SPARK components (tutoring, after-school, and parent engagement). Four out of five respondents felt that the tutoring components went well, while one two felt the after-school and the family engagement components went well. Generally, it was difficult both to get students engaged in after-school and to involve parents in SPARK.

### Running Records Results

SPARK tutors maintained a Running Records of student reading levels throughout the year.<sup>2</sup> Running records assigns a letter from A to Z, identifying the literacy level of each student. These letters roughly correspond to reading grade levels such that kindergarten reading is from A to C, first grade from D to J, second grade from K to P, and third from Q to T.

The results of Running Records assessments done at the start of SPARK and the end of SPARK are presented in Table 6. These results show that only 15% of students were reading books at their grade level when they started SPARK. By the end of their participation though, 68% were reading at grade level. The average 1<sup>st</sup> grade student improved 5.7 reading levels and the average 2<sup>nd</sup> grade student also improved 5.7 levels. Table 7 presents a breakdown of the number of students within each grade that improved two all the way up to nine reading levels. All students demonstrated some amount of growth during the course of their participation in SPARK.

Table 6: Reading grade level of student by grade level

Beg of year RR						
	K	1 <sup>st</sup>	2 <sup>nd</sup>	3 <sup>rd</sup>	Total	% reading at grade level
1 <sup>st</sup>	8	5	0	0	13	38%
2 <sup>nd</sup>	2	18	0	0	20	0%
3 <sup>rd</sup>	0	1	0	0	1	0%
<b>Total</b>	10	24	0	0	34	15%
End of year RR						
	K	1 <sup>st</sup>	2 <sup>nd</sup>	3 <sup>rd</sup>	Total	
1 <sup>st</sup>	0	8	5	0	13	100%
2 <sup>nd</sup>	0	10	9	1	20	50%
3 <sup>rd</sup>	0	1	0	0	1	0%
<b>Total</b>	0	19	14	1	34	68%

Table 7: Number of students improving their Running Records Levels

	2	3	4	5	6	7	8	10	Total
1 <sup>st</sup>	1	0	3	2	3	2	1	1	13
2 <sup>nd</sup>	0	0	4	5	8	2	0	1	20
3 <sup>rd</sup>	0	1	0	0	0	0	0	0	1
<b>Total</b>	1	1	7	7	11	4	1	2	34

Finally, a cross-tabulation of beginning and end of year Running Records, grade level equivalencies, are presented in Table 8. These results show that there were a number of students who improved their reading grade levels. Specifically, all ten students that started the year reading books at a kindergarten level, ended the year reading at least at a first grade level. Additionally, 14 students who started SPARK reading at a 1<sup>st</sup> grade level, ended reading at least at a 2<sup>nd</sup> grade level.

<sup>2</sup> <https://www.readinga-z.com/helpful-tools/about-running-records/>

Table 8: Beginning and end of year reading levels

Beg of year RR	End of year RR				Total
	K	1 <sup>st</sup>	2 <sup>nd</sup>	3 <sup>rd</sup>	
<b>K</b>	0	9	1	0	10
<b>1<sup>st</sup></b>	0	10	13	1	24
<b>Total</b>	0	19	14	1	34

### Summary Findings

The overall results from the first year of SPARK at BGCPDA are positive. There is strong evidence that SPARK was implemented well and with fidelity to the model. Further, many SPARK participants demonstrated significant literacy growth from the beginning to end of the year. Some of the highlights from the evaluation include:

- Nearly all students (28 out of 34) received at least a medium intensity of SPARK tutoring. This is especially noteworthy considering the SPARK program did not start until November. Students who participated in SPARK throughout the school year averaged 53 tutoring sessions. The roughly 38% of students who participated in after-school averaged 34 sessions.
- The results of 73 fidelity of implementation observations suggest that tutors were completing the basic aspects of the SPARK tutoring model, following the lesson plan, and that students were engaged. Nearly all tutors were fully prepared for the lesson. Further,
- Although the tutoring component of SPARK was generally viewed by staff as having gone well, BGCPDA did experience difficulties in engaging students in after-school and families in family events.
- Many SPARK students demonstrated significant literacy growth. **While only 15% of students were reading books at their grade level when they started SPARK, by the end of their participation 68% were reading at books at their grade level.**

## Appendix A

Each tutoring session includes five activities:

- The *Familiar Activity* is a brief element that gets the student ready for learning by reviewing a skill they have recently learned.
- *Word play* is a key element in the lesson where students receive targeted, differentiated instruction on foundational reading skills including phonics and phonemic awareness. Word play is individualized to focus on students' needs. It is centered on two main activities: Word Sorts and Making Words. These activities combine both constructivist learning and structured instruction. Each of these activities focus on specific skills and tutors are explicit with students about the lesson's foci. Word Sorts involve students sorting words into various categories to increase their understanding of the structure of sounds and letters. Making Words involves students using different letters to make words and provides a structured way for students to learn how the sounds of language are put together. Students also read phonics-based books during Word Play time and do enrichment activities to cement their understanding of the focus skills.
- During every SPARK lesson, students spend time *Reading a book at their instructional level*. Before reading the book, they do a book walk to familiarize themselves with the content and vocabulary of the book. Students read both fiction and non-fiction books. As students read, tutors use a variety of strategies to help students decode and make meaning of text. Students use graphic organizers to build comprehension skills.
- Students spend time each lesson *Writing* sentences connected to their Word Play skill or their instructional reading book. Tutors help students correctly spell the words in their sentence(s). Elkonin boxes are a central piece of SPARK writing and used to help students encode words. Elkonin boxes are an instructional method used in early elementary grades to build phonological awareness by segmenting words into individual sounds/boxes.
- The lesson ends with a brief opportunity for students to hear their tutor *read a book*.