

# Integrating Literacy Evaluation of the Milwaukee Community Literacy Project

Presented at the Annual Meeting of the Society for  
Research in Educational Effectiveness in Washington  
D.C.

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# The Need for Literacy Supports in Milwaukee

- According to the state test (WKCE), in 2011, when this study started, only 15% of MPS students were proficient in reading, compared to 35% statewide.
- 15% of 4th grade MPS students were rated as proficient in reading according to 2011 NAEP results.
- 14% of MPS 11th graders scored at least 21 on the ACT Reading Test, the benchmark identified for college readiness.
- NAEP results show there are significant achievement gaps for minority and low-income students:
  - 39% of 4th grade, White MPS students were proficient in reading, compared to 7% of Black and 15% of Hispanic students.
  - 7% of 4th grade low-income (free/reduced lunch participants) MPS students were proficient in reading, compared to 48% of non-low-income students.

## Timeline

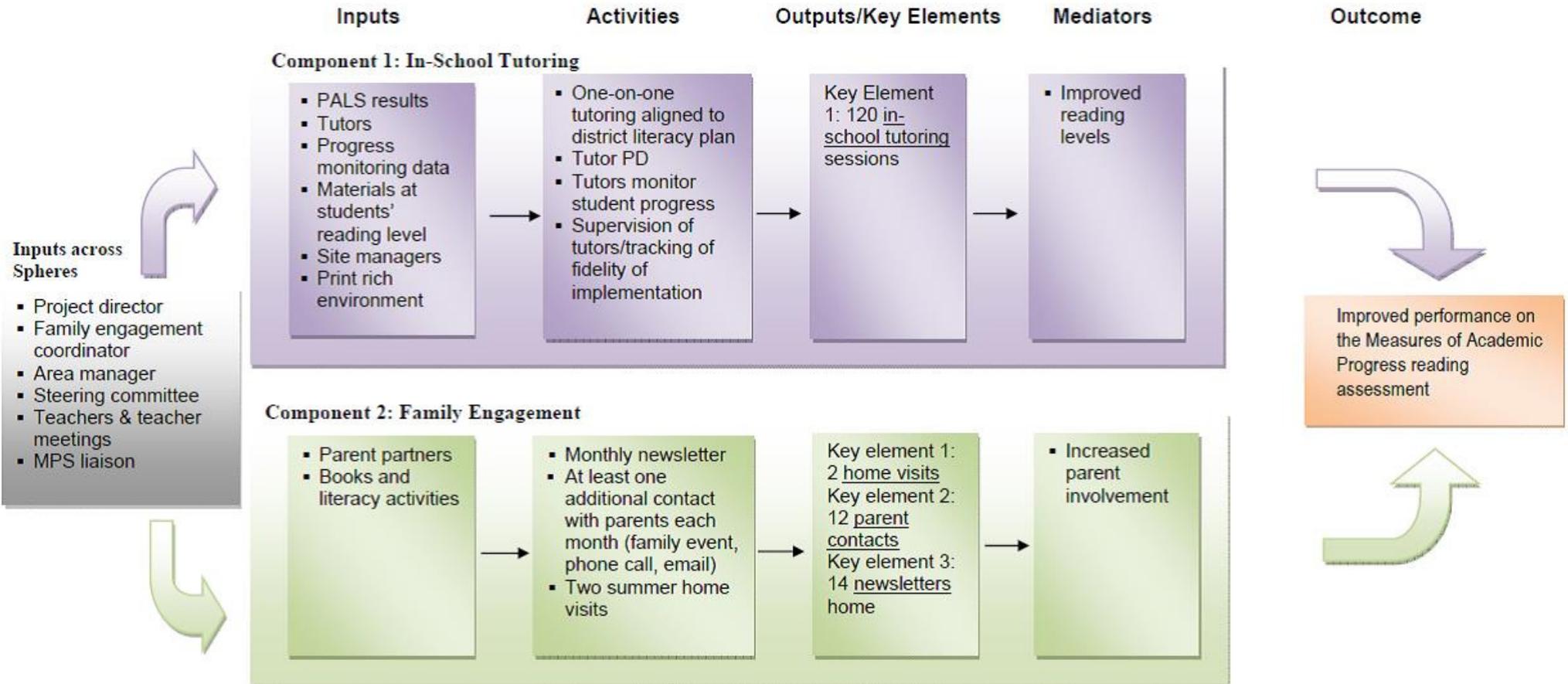
2005 - SPARK was created to address this need by The Boys & Girls Clubs of Greater Milwaukee and piloted at one site in Milwaukee Public Schools (MPS).

2006 - SPARK was expanded to three MPS schools with funding from the United Way and AmeriCorps.

2010 - SPARK received a Department of Education investing in innovation (i3) grant award to expand to seven more schools (10 total). This was called the Milwaukee Community Literacy Project (MCLP).

2012 - Boys & Girls Clubs of America was awarded a 2-year Department of Education Innovative Approaches to Literacy (IAL) award to expand SPARK to 14 schools across six states.

**MILWAUKEE COMMUNITY LITERACY PROJECT/ SPARK LOGIC MODEL**  
 A Randomized Control Trial of a Community-Based Early Grade Literacy Intervention



## 30 minute Lesson Plan

Students are pulled out of non-core classes and taken to SPARK room.

Start with familiar activity.

Running record assessment.

Word play - Students receive instruction using Word Sorts and Making Words. Word Sorts involve students sorting words into categories to increase their understanding of sounds and letters. Making Words involves students using letters to make words so students learn how the sounds of language are put together.

Reading a book at instructional level.

Writing sentences - Elkonin boxes are a central piece of SPARK writing and used to help students encode words.

End with tutor read aloud.

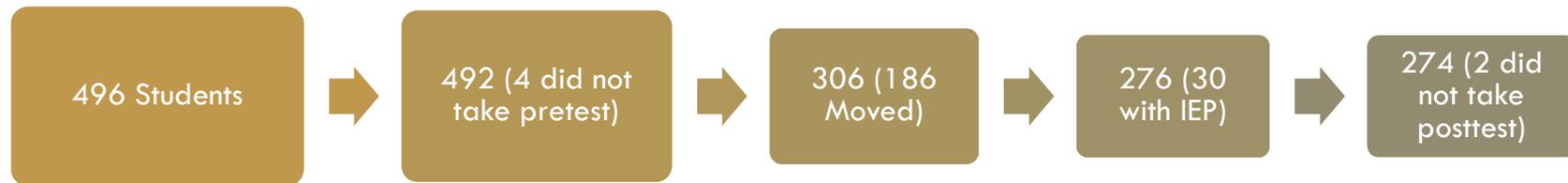


## Evaluating the MCLP/SPARK program

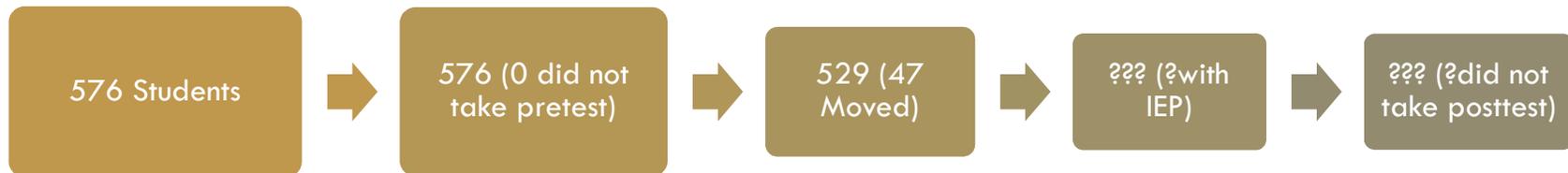
- The evaluation utilizes a randomized control selection framework, stratified by school and grade, to isolate the impact of the MCLP on Measures of Academic Progress (MAP) reading assessment and Phonological Awareness Literacy Screener (PALS) scores.
- Students with a reading-related IEP or who were English Language Learners, were not eligible for participation in the evaluation but were eligible to receive tutoring.
- A random selection of 245 out of 496 consented students across 6 schools were selected to participate in the Cohort 1 during the 2011-2012 school year.
- A random selection of 286 out of 576 consented students across 7 schools were selected to participate in the Cohort 2 during the 2013-2014 school year.

# Attrition Results

## 45 % Attrition Rate in Cohort 1



## 8 % Attrition Rate in Cohort 2 at end of first year



# Differential Attrition Results

## Cohort 1 - 2.9% Differential Attrition Rate

### Participants



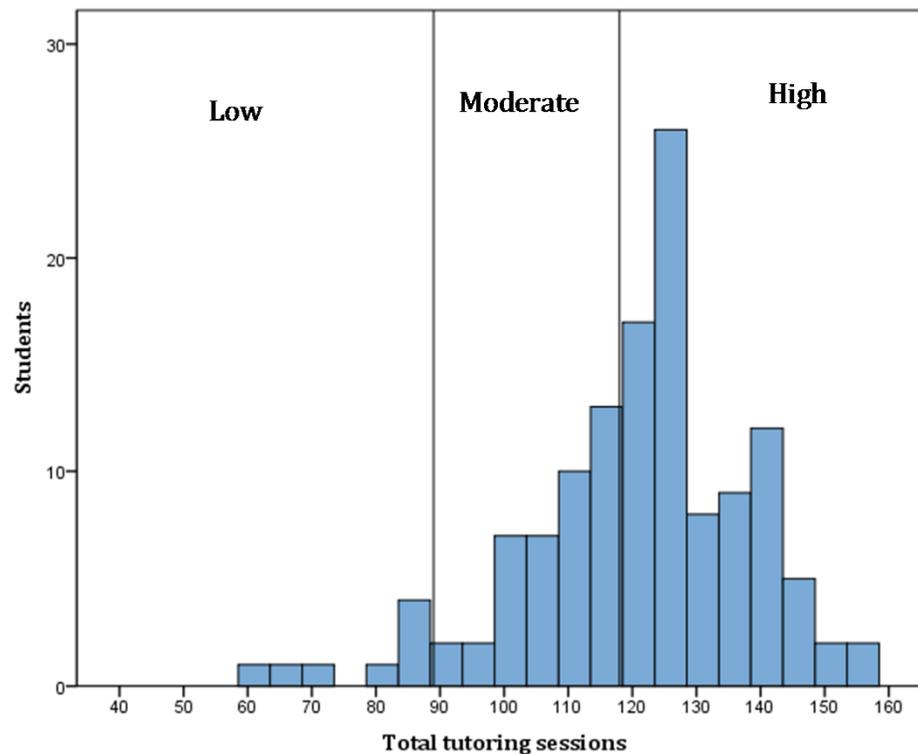
### Controls



## Cohort 1 Implementation Results

Descriptive Statistics of Tutoring by Grade Level

	Mean	SD	Min	Max	N
K to 1st	124.2	14.7	87	155	45
1st to 2nd	119.7	20.6	61	151	44
2nd to 3rd	118.0	16.9	72	155	41
Total	120.7	17.6	61	155	130



Most Cohort 1 completing participants received a High intensity of tutoring, with more than 120 sessions across the two years.

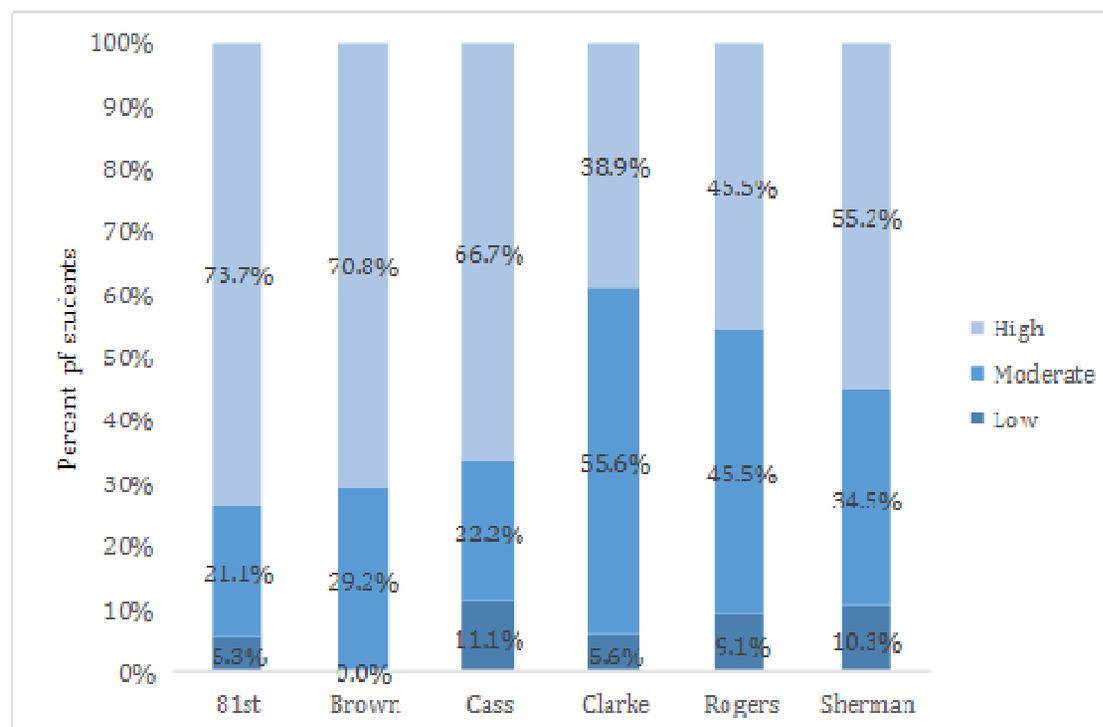
Very few received a low amount of tutoring (fewer than 90)

## Cohort 1 School Implementation Results

Descriptive Statistics of Tutoring by School

	Mean	SD	Min	Max	N
81st	125.1	15.1	88	146	19
Brown	129.3	15.1	102	155	24
Cass	118.6	20.4	65	140	18
Clarke	114.3	15.7	83	147	18
Rogers	116.7	19.2	61	144	22
Sherman	119.2	17.0	84	151	29

There were differences between schools in the probability of students receiving a high dosage of SPARK.



## Measuring the Impact of the MCLP/SPARK program

- Generalized linear statistical models with robust standard error estimators were used to compare the reading achievement growth of participants and controls in each grade separately.
- Grade results were pooled to estimate the overall impact of the MCLP for each cohort.
- Post reading achievement scores were standardized to improve interpretability.
- Models controlled for the separate fixed interactions of school with baseline MAP/MPG results.
- Fixed effects of gender, race, disability status, and free/reduced lunch eligibility were tested but only included if found to uniquely predict MAP/MPG reading results.

## Cohort 1 Results (MPS/MPG)

The MCLP was found to have a small impact on MAP scores.

	Standardized Impact	Robust Standard Errors	p-value
MCLP Kindergarten	0.012	0.123	
MCLP First	0.118	0.143	
MCLP Second	0.288	0.138	
Overall Impact (Weighted Pooled Results)	0.122	0.061	<.05

## Cohort 2 Interim Results (MAP/MPG)

The MCLP seems to have been more effective in Cohort 2, with the same effect size after just one year.

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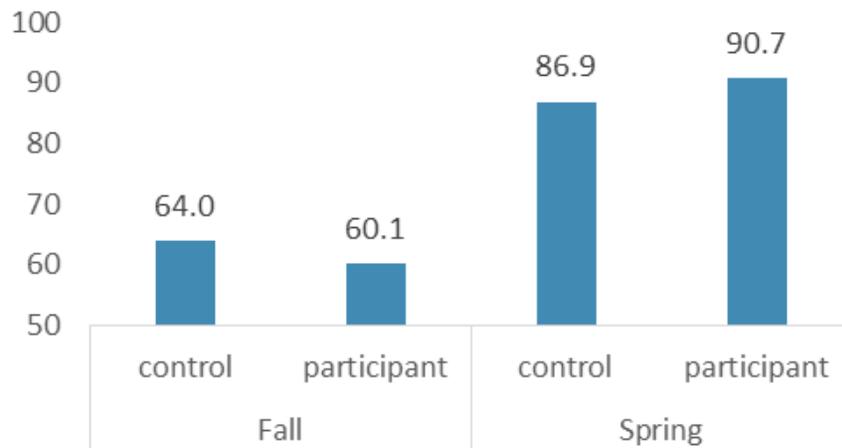
	Standardized Impact	Robust Standard Errors	p- value
MCLP Kindergarten	0.117	0.0968	0.227
MCLP First	0.177	0.0641	0.006
MCLP Second	-0.047	0.1114	0.664
Overall Impact (Weighted Pooled Results)	0.120	0.0482	<.01

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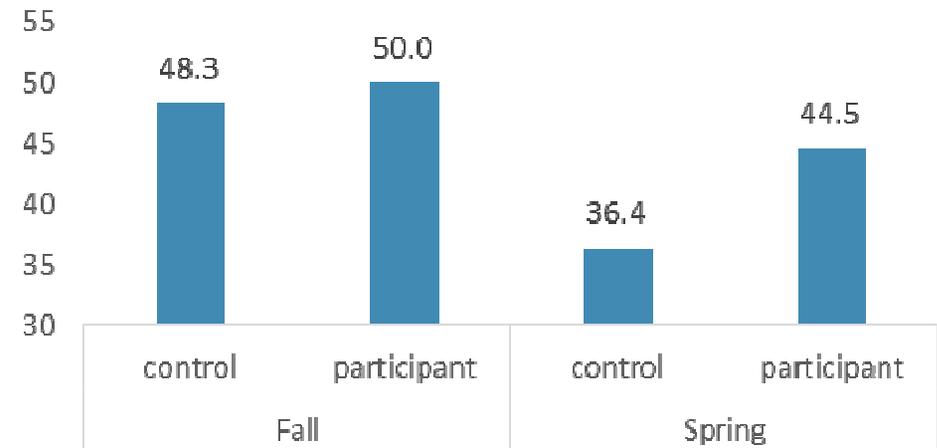
## Cohort 2 Interim Results (PALS)

The state of Wisconsin mandated all schools to administer the PALS to K and 1<sup>st</sup> grade students starting in 2013.

Average Kindergarten PALS Summed Scores



Average First Grade PALS Summed Scores\*



## Cohort 2 Interim Results (PALS)

The MCLP/SPARK was found to have a large impact on the PALS.

	Standardized Impact	Robust Standard Errors	p-value
MCLP Kindergarten	0.438	0.0895	<0.0001
MCLP First	0.372	0.0775	<0.0001
Overall Impact (Weighted Pooled Results)	0.400	0.0443	<.0001

In 2014, all K, 1<sup>st</sup>, and 2<sup>nd</sup> grade students are assessed with the PALS, with 3<sup>rd</sup> grade optional. Schools in the evaluation have agreed to administer the PALS to their students.

## Conclusions

- The results of the MCLP are promising. The combination of intensive and prolonged in-school tutoring with targeted parent engagement resulted in significant improvements in student literacy and reading achievement.
- Implementation data suggest that most students received a high intensity of SPARK but that there were differences between how well schools were able to engage students.
- Attrition continues to be an unavoidable problem given the two-year student participation commitment. Steps taken during the selection process for the second cohort may mitigate this problem somewhat.
- There is some indication that SPARK has been more effective with the second cohort. Boys & Girls Clubs of Greater Milwaukee continue to improve the quality of their design and implementation based on feedback from the evaluation.