



SANKOFA READING PROGRAM YEAR 4 (FINAL) IMPLEMENTATION AND IMPACT EVALUATION REPORT 2016-2017

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Research, Development and Engagement to Improve Education

Acknowledgements

The authors wish to acknowledge the leadership and staff at the Network for the Development of Children of African Descent (NdCAD) and the Saint Paul Promise Neighborhood (SPPN) involved with the Sankofa Reading Program. Thank you to the Department of Research, Evaluation, and Assessment at Saint Paul Public Schools and Saint Paul City School for their support. Thank you to Dr. Priscilla Gibson, Professor at the University of Minnesota School of Social Work for her collaboration on the qualitative study as part of the evaluation. Finally, thanks to the children and parents who participated in the Sankofa program and this evaluation.

The Social Innovation Fund (SIF) was a program that received funding from 2010 to 2016 from the Corporation for National and Community Service, a federal agency that engages millions of Americans in service through its AmeriCorps, Senior Corps, and Volunteer Generation Fund programs, and leads the nation's volunteer and service efforts. Using public and private resources to find and grow community-based nonprofits with evidence of results, SIF intermediaries received funding to award subgrants that focus on overcoming challenges in economic opportunity, healthy futures, and youth development. Although CNCS made its last SIF intermediary awards in fiscal year 2016, SIF intermediaries will continue to administer their subgrant programs until their federal funding is exhausted.

This report is based upon work supported by the Corporation for National and Community Service, Generation Next and Greater Twin Cities United Way through the Social Innovation Fund. Opinions or points of view expressed in this document are those of the authors and do not necessarily reflect the official position of, or a position that is endorsed by, the Corporation, Generation Next, United Way or the Social Innovation Fund Program.

How to Cite this Report

Desjardins, C. D., Dupuis, D., & Johnson, J. (2018). *Sankofa Reading Program year 4 (final) implementation and impact evaluation report.* St. Paul, MN: University of Minnesota, College of Education and Human Development, Center for Applied Research and Educational Improvement.

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About this Report	
This evaluation report is a Final Report for the Sankofa Reading Program, and is	
intended to fulfill the SIF requirements to determine at least a moderate level of	
evidence for funded projects. It includes implementation and impact studies focuse	d
on students who participated in the program in 2016-2017.	
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Executive Summary

Background

In September 2012, the Corporation for National & Community Service (CNCS), a federal agency, through its Social Innovation Fund (SIF), awarded the Greater Twin Cities United Way (GTCUW) and the Twin Cities STRIVE Alliance (now called Generation Next) funding to serve as a grant making intermediary for projects to address youth development, specifically, closing the achievement gap in the Twin Cities area of Minneapolis and Saint Paul. Six organizations were selected as subgrantees, and the Center for Applied Research and Educational Improvement (CAREI) at the University of Minnesota was contracted to provide external evaluation services.

Subsequently, the Saint Paul Promise Neighborhood (SPPN), a community initiative sponsored by the Amherst H. Wilder Foundation, was awarded subgrantee funding from GTCUW and Generation Next to partner with NdCAD to implement the Sankofa reading program at its partner schools.

The Sankofa reading program is a culturally-based literacy tutoring program for children of African descent provided by the Network for the Development of Children of African Descent (NdCAD), a non-profit family education center in Saint Paul, Minnesota. The program consists of intensive after-school tutoring that includes strong reading and cultural components. The specific goals are to increase reading skills, increase independent guided reading levels, and improve academic performance. SPPN partnered with NdCAD to deliver Sankofa to low performing African and African-descended readers that resided in its geographical area and that were enrolled in kindergarten through third grade from 2013-2017.

Evaluation Design Overview

This evaluation included an implementation evaluation and an impact evaluation of preliminary and moderate evidence. Rigorous assessment of implementation fidelity was carried out to ensure that the core components of Sankofa took place. The preliminary evidence evaluation utilized a one-group pre-post design, and descriptive analyses were carried out on pre- and post-program performance of participants on a standardized reading assessment. The designs for moderate evidence utilized an interrupted time series (ITS) design and matched comparison to assess the effect of Sankofa on reading ability using progress monitoring assessments developed by FastBridge Learning and a statewide standardized reading assessment.

Prior Research

Educational researchers who have investigated the impact of culturally relevant pedagogy have hypothesized that when children form a strong cultural identity and understand their community's cultural heritage, values, and contributions, they become intrinsically motivated to succeed (e.g., Barnes, 1991; Grills, Cooke, Douglas, Subica, Villanueva, & Hudson, 2015; Ladson-Billings, 1995). A basic belief underlying NdCAD programming is that reading is a

pragmatic, navigational tool for learning about one's roots and where one is going. Consequently, an overarching goal of the Sankofa program is to help children of African descent develop and build literacy skills within the context of their cultural heritage, thus giving them a firm foundation for academic achievement and life-long learning.

The links between Sankofa program elements and increased student achievement are supported by the findings of numerous research studies on successful learning in urban schools. Critical factors identified in previous research include careful monitoring of student progress, frequent communication with parents, a strong academic focus, a learning environment that is attractive and safe, dedicated and caring teachers, extensive scaffolding, an emphasis on understanding, and intentional efforts to motivate students (e.g., Pressley, Raphael, Gallagher, & DiBella, 2004). Similarly, investigations of effective primary-grade reading instruction in low-income schools have identified school factors and teacher factors that have a positive impact on the reading achievement of K – 3 students (e.g., Taylor, Pearson, Clark & Walpole, 2000). School factors included strong links to parents, systematic assessment of student progress, and a high level of school communication and collaboration. Teacher factors included small-group instruction, independent reading, student on-task behavior, home communication, and instructions for applying phonics to everyday reading.

In 2010, NdCAD worked with GrayHall, independent evaluation consultants, to conduct an evaluation of the Sankofa reading program (Hall & Gray, 2010). Students' reading levels were assessed pre- and post-intervention using the Developmental Reading Assessment: Second Edition (DRA II). The evaluation found that 75% of the 333 students who completed Sankofa in the period 2004 through 2010 increased their reading levels, with half of the students improved by two or more levels.

Targeted Level of Evidence

A previous evaluation of Sankofa provided preliminary evidence of program impact. The existing evaluation of the program (Hall & Gray, 2010) used a one-group pre-post design and found that program participants improved in reading performance as measured by level changes on the DRA II. The evaluation reported here was designed to obtain a moderate level of evidence of program impact employing a matched-comparison and ITS design. Strong evidence was not targeted because randomized controlled trials or other rigorous experimental designs were not feasible at this time, given the resources available for the evaluation, and the time frame of the grant.

Evaluation Findings

Implementation Evaluation Questions for Year 4. The following implementation evaluation questions were addressed in Year 4, school year 2016 - 2017:

- 1. Is the Sankofa program being implemented as intended?
- 2. Is the Sankofa program delivery consistent with the intended program structure?
- 3. Has the Sankofa program achieved its intended implementation output and goals?

- 4. What program services are received by the comparison groups?
- 5. What are reasons why participants do not complete Sankofa?
- 6. What is the average number of follow-ups (by NdCAD tutors and/or SPPN School Partnership Coordinators) before participants discontinue the program?

Implementation Findings for Year 4. The target population of the Sankofa reading program was made up of kindergarten through third-grade African or children of African-descent enrolled in elementary schools or living in the SPPN boundaries with low reading scores based on the Measures of Academic Progress (Northwest Evaluation Association, 2018) or Mondo Bookshop Assessment. The implementation evaluation found that all of the student participants lived in the SPPN, identified as African American, and 88% of student participants were enrolled in an elementary school located in the SPPN.

For Year 4 of the Sankofa program, the participation goal was an enrollment of 144 K - 3 students. The enrollment of SIF-supported students was 143, which was 99% of the target. Across the four years of the evaluation, 311 participants enrolled in Sankofa.

The program completion goal was for 80% of student participants to complete the program in Year 4. The actual completion rate of 83% was above this goal. This is a large increase from Year 3, where the completion rate was only 37%. The program structure presented in the Sankofa logic model (see Figure 3) states that the program offers each cohort 40.5 hours of tutoring. The implementation evaluation found that actual programming ranged from 39 to 40.5 hours with individual student dosage ranging from 9.1 to 35.6 hours. In Year 4, no student received the full 40.5 hours of dosage. The student-tutor ratio ranged from 3:1 to 8:1 (with a goal of 5:1).

The Sankofa reading program was designed to have a strong emphasis on African culture. The implementation analysis on program fidelity found that all Sankofa tutors were African or of African descent and all the lesson plans included African cultural teachings, rituals, and activities.

An examination of the tutors' lesson plans found that all plans included content specified in the logic model. More specifically, in addition to culturally related activities, all plans included academic activities, cognitive skill building, individual and small group tutoring, and group dialogue and interactions. This was further corroborated by observations made by the NdCAD staff.

The parent engagement goal for Year 4 was for 100% of Sankofa students' parents to receive weekly communications. This goal was completely met. One-thousand, three-hundred and five notes were sent to parents of children attending cohorts in Year 4. This resulted in an average of nine notes per Sankofa participant. This is right on the target of one note per child per week or a total of nine communications during Sankofa. Therefore, parent communication appeared to be implemented with a high degree of fidelity.

Based on the **implementation evaluation**, the following recommendations are provided:

- 1. Consider developing new, or utilizing a diversity of, strategies to keep attendance high. Because no participant received the full dosage of 40.5 hours, this likely reduced the impact of Sankofa on its participants. If the full dosage of 40.5 hours is not necessary, then modifying the logic model is recommended.
- 2. Given the range of reading abilities of participants entering Sankofa, additional tutor trainings that focus on working with readers with varied skills might be beneficial.
- 3. As the number of participants that Sankofa serves that are homeless or highly mobile increases, it might be useful to develop a tutoring training module focused on supporting students facing housing mobility, as they may have special reading, social, emotional, and behavioral needs.

Impact Evaluation Questions for Years 3 and 4. The impact evaluation for Years 3 and 4, school years 2015 - 2016 and 2016 - 2017, were separated into confirmatory and exploratory impact questions. The following confirmatory questions were addressed in Years 3 and 4:

- 1. Do children who participate in Sankofa exhibit increased reading performance as identified by pre-post program scores on the Developmental Reading Assessment (DRA)?
- 2. Do children who participate in Sankofa exhibit greater levels of social emotional development such as confidence in reading after the nine-week program?
- 3. Do children who participate in Sankofa exhibit greater rates of literacy growth after completing Sankofa, compared with their growth before program participation, according to FastBridge Learning reading measures?

The following exploratory questions were addressed in Years 3 and 4:

- 1. How do children who complete Sankofa perform on third-grade reading proficiency measures?
- 2. Do children who complete Sankofa perform better on third-grade reading proficiency measures than similar children in Saint Paul Public Schools?
- 3. Do African-centered and African-theme texts change participants' attitudes about reading?
- 4. How does having (African/African American) tutors change parent involvement in improving child's literacy?

The confirmatory evaluation included a pre/post design without a comparison group using the DRA II and an ITS design using measures developed by FastBridge Learning, where students were measured weekly for six weeks prior to Sankofa and six weeks immediately following Sankofa. The DRA II design was capable of providing preliminary evidence, while the ITS was capable of providing a moderate level of evidence (the evidence targeted by the SIF) provided internal validity was high. In addition, a parent survey was administered to provide preliminary evidence about changes in Sankofa participants' behaviors.

Impact Findings for Years 3 and 4.

The **confirmatory impact evaluation** for Years 3 and 4 found the following:

- Evidence of an effect of Sankofa using a pre/post design with the DRA II as the outcome
 - o 90% of Sankofa participants increased by at least one reading level (preliminary level of evidence design).
- Parents reported an increase in positive behavior or attitude in their children
 - o 80% of parents reported that their children had stronger connections to their family and community since participating in Sankofa.
- For the ITS design, evidence of an effect of Sankofa based on FastBridge Learning's
 Decodable Words assessment such that the expected growth for Sankofa participants was
 0.978 words read correctly per minute more per week than prior to Sankofa (moderate
 level of evidence design). However, this effect was not significant after correcting for
 multiple comparisons and it was not corroborated by the pooled multiple imputation
 analysis.
- No evidence of an effect of Sankofa using an ITS design with FastBridge Learning's Letter Words and Sight Words assessments (moderate level of evidence design).

The exploratory impact evaluation included a matched comparison with the MCA reading as the outcome and a qualitative study. Unlike the confirmatory evaluation questions, these questions were intended to inform research not policy and there were no direct links between these questions and the Sankofa logic model.

The **exploratory impact evaluation** for Years 3 and 4 found the following:

- On the MCA, 27% of Sankofa participants partially met MCA proficiency and 5% met MCA proficiency. Sankofa participants ranged from the 1st to the 68th percentile on the MCA scale score.
- A statistically significant effect on the MCA found that Sankofa participants were expected to score 7.25 points lower on the MCA than the non-Sankofa Saint Paul Public School (SPPS) comparison students.
 - Given that it was unclear that Sankofa and comparison students were balanced on a valid prior achievement measure, there may be limited statistical validity to this finding.
 - o This finding was not corroborated by the unmatched analysis.

The qualitative study results showed that parents' and staff's perceptions were positive with regards to the African-centered approach used by NdCAD; that parents found it meaningful to read about Africans and one's culture; and that parents expressed a range of opinions regarding the importance of reading African-centered text relative to texts on other races. Finally, parents expressed mixed views regarding who the best tutor for their child was.

Based on the **impact evaluation** for Years 3 and 4, the following recommendations are provided:

- 1. Continue to address logistical barriers that hinder data collection that make the use of an ITS design difficult. The ITS approach was welcomed by NdCAD and SPPN staff and the ITS design, when combined with robust data collection and a valid outcome measure (such as the FBL measures), represents the best opportunity to observe a moderate-level of evidence.
- 2. NdCAD staff may consider using the FBL measures in lieu of the DRA II to track progress before, during, and/or after Sankofa. While this approach would not necessarily need to be as involved as the ITS design utilized for the SIF, it would allow NdCAD to collect data that goes beyond the DRA II and would allow them to measure growth. Using the FBL measures during Sankofa could allow NdCAD to understand for which participants Sankofa is having the strongest effects and which participants continue to struggle. This, when coupled with individualized learning plans, could make the impact of Sankofa larger.
- 3. If the ITS proves to be too logistically difficult to implement, future considerations could involve regression discontinuity, where if prospective participants fall below a certain reading threshold they are assigned to Sankofa and if they are above it they are not. However, this would involve working closely with SPPS and Saint Paul City School to ensure that this approach would be feasible and that the outcome measure used to estimate the treatment effect is appropriate and available.
- 4. The qualitative study provided the following recommendations for Sankofa regarding the two exploratory questions:
 - a. Allow Sankofa staff to conduct all aspects of recruiting, screening, and enrolling children into Sankofa. Parents may be getting mixed information about it.
 - b. Continue using the African-centered approach. Parents appreciate that their children were learning about their race, history, and culture. The African-centered approach is working well for the majority of the parents.
 - c. Consider allowing tutors to make home visits. The benefits may result from tutors having a built-in contact with a parent(s).
 - d. Conduct an annual evaluation of all aspects of Sankofa and develop a method to share the findings with parents.
 - e. Develop a strategy for former students/graduates of Sankofa and their parents to remain connected to the program.

Introduction

Program Description

In September 2012, the Corporation for National & Community Service (CNCS), a federal agency, through its Social Innovation Fund (SIF), awarded the Greater Twin Cities United Way (GTCUW) and the Twin Cities STRIVE Alliance (now called Generation Next) funding to serve as a grant making intermediary for projects to address youth development, specifically, closing the achievement gap in the Twin Cities area of Minneapolis and Saint Paul. Six organizations were selected as subgrantees, and the Center for Applied Research and Educational Improvement (CAREI) at the University of Minnesota was contracted to provide external evaluation services.

Subsequently, the Saint Paul Promise Neighborhood (SPPN), a community initiative sponsored by the Amherst H. Wilder Foundation, was awarded subgrantee funding from GTCUW and Generation Next to partner with NdCAD to implement the Sankofa reading program at its partner schools.

Sankofa is a culturally based literacy tutoring program for children of African descent provided by NdCAD, a non-profit family education center in Saint Paul, Minnesota. The center offers a variety of literacy and cultural enrichment programs for children, youth, and adults residing in the Twin Cities metropolitan area (Figure 1). Through the SIF award, SPPN partnered with NdCAD to deliver the Sankofa Reading Program. This evaluation report focuses on implementation and impact information from the third and fourth years of the SIF grant. The subgrant period reported here covers school years 2013-2017¹ but focused on school years 2015 - 2017.



Figure 1. Map of the Saint Paul Promise Neighborhood in Saint Paul, Minnesota.

 $^{^{1}}$ For the interrupted time series design, data were also included for school year 2017 - 2018.

African culture is at the core of NdCAD's mission: "We exist to strengthen the cultural connections within communities of African descent that promote, sustain, and enhance the healthy development of our children."

The Sankofa reading program provides intensive and short-term after-school tutoring that includes strong reading and cultural components. The programming for the SIF targeted African or students of African-descent with the lowest reading scores, using the Measures of Academic Progress (Northwest Evaluation Association, 2018) or Mondo Bookshop Assessment, that were enrolled in elementary schools or lived in the SPPN boundaries. The specific goals were to increase reading skills, increase independent guided reading levels, and improve academic performance.

Educational researchers who have investigated culturally relevant pedagogy have hypothesized that when children form a strong cultural identity and understand their community's cultural heritage, values, and contributions, they become intrinsically motivated to succeed (e.g., Barnes, 1991; Grills, Cooke, Douglas, Subica, Villanueva, & Hudson, 2015; Ladson-Billings, 1995). A basic belief underlying NdCAD programming is that reading is a pragmatic, navigational tool for learning about one's roots and where one is going. Consequently, an overarching goal of the Sankofa program is to help children of African descent develop and build literacy skills within the context of their cultural heritage, thus giving them a firm foundation for academic achievement and life-long learning. The name, Sankofa, was selected for NdCAD's reading intervention because of its significance in African culture. Sankofa is an Adinkra symbol of the Akan people of West Africa. It symbolizes the importance of African people going back to their roots in order to move forward. Sankofa is represented by a mythical bird that flies forward while looking back with an egg (symbolizing the future) in its mouth (see Figure 2).



Figure 2. Sankofa symbol.

A unique feature of the Sankofa reading program is the integration of culturally responsive and culturally specific practices to holistically address students' learning needs and to engage the students in their own learning. To this end, the program employs a variety of cultural learning strategies to help students make critical connections between what they know about their cultural selves, their cognitive and skill development, and their academic achievement. For example, the opening and closing rituals of each reading intervention session incorporate reciting the seven

principles of Nguzo Saba. Culturally based call and response affirmations are used to help students become more present to African intellectual traditions and ancestors. Reading materials feature Africans or African Americans. All Sankofa tutors are from the cultural community of the students. These and other culturally based program practices help students see important relationships between themselves as learners and as persons of African descent.

The Sankofa reading intervention is scheduled for a nine-week period with three 90-minute sessions per week, providing a total of 40.5 hours of tutoring. The tutoring includes a combination of individual and small group lessons. The student-to-tutor ratio is 5:1. The program has a pool of tutors who have extensive experience working with children and families from the primary cultural community of the students served and who receive training in the implementation requirements of Sankofa. The tutoring program utilizes a combination of methods that are carried out within five interrelated program design elements. The design elements are: a) assessment of independent guided reading levels, alphabet knowledge, and reading skills across the five dimensions of reading; b) diagnosis of skill gaps and instructional needs, and development of individual learning plans; c) use of culturally congruent leveled texts from a wide genre; d) guided reading lessons in a reading workshop model; and e) integration of culturally responsive ritual, routines, and practices to intrinsically motivate students to read and learn.

The Sankofa Logic Model

The logic model for Sankofa is displayed in Figure 3. The logic model includes resources/inputs, activities/operations, outputs/goals, short-term outcomes, and long-term impacts. Table 1 presents a description of the direct link between program elements and increased student achievement, including research that supports program elements.

Resources/inputs. The resources/inputs include the following program characteristics: Culturally relevant pedagogy and critical inquiry/investigation, a balanced literacy approach, an academic focus, high expectations, positive youth/adult connections, highly qualified/trained tutors who reflect the students' cultural background, a low student-to-tutor ratio, and a program aligned with the organization's mission. Resources/inputs also include the approach of countering self-doubt, deconstructing myths, and parental/community engagement. Instructional methods utilized in Sankofa are consistent with the mission and include counter-narratives and exposure to African knowledge, history, heritage, and literature.

Activities/operations. The activities/operations component of the logic model describes the program content, delivery, and structure. Program content and delivery are comprised of cultural teachings, rituals, and activities; academic activities; cognitive skill building; Africancentered, leveled texts; instructional links with school day/standards; individual and small group tutoring; group dialogue, interactions, storytelling, and free books. Program structure consists of 40.5 hours of tutoring, three 90-minute tutoring sessions per week for 9 weeks, individual and small group instruction, pre/post assessment, individual learning, and a student-to-tutor ratio of 5:1.

Outputs/goals. Outputs/goals are established for student participation and student performance. The participation goal for Years 1 and 2 were for 120 kindergarten to third-grade students to enroll in Sankofa with an 80% or greater completion rate. The student performance goal was for at least 80% of participating students to improve their program assessment scores. For Year 3 the participation goal was for 90 students to enroll in Sankofa with an 80% or greater completion rate. For Year 4 the participation goal was for 144 students to enroll in Sankofa with an 80% or greater completion rate. Of these 144 students, the goal was to have 87 students participate in the interrupted time series (ITS) design that was implemented in Year 4. Across the four years, 311 participants enrolled in Sankofa.

Academic/cognitive short-term outcomes. The academic/cognitive short-term outcomes address two broad areas, academic/cognitive and social/cultural/emotional. Academic/cognitive outcomes concern reading levels, reading skills, homework completion, study skills, independent reading, classroom behavior, school attendance, attitude toward reading. Social/cultural/emotional outcomes concern confidence in reading and learning, peer interactions, problem-solving, knowledge and respect for culture and heritage, and connections with family and community.

Long-term outcomes. The long-term outcomes are outcomes that the program is designed to impact throughout the students' education and beyond. The long-term academic/cognitive outcomes are higher grades and test scores, on-time promotion, return to regular track for special education students, high school graduation, postsecondary plans, and increased parent involvement in schools. The social/cultural/emotional long-term outcomes are increased self-efficacy and confidence in learning, increased critical thinking and problem-solving, increased knowledge of self and respect for one's culture and heritage, stronger connections with family and community, and higher aspirations and goal setting.

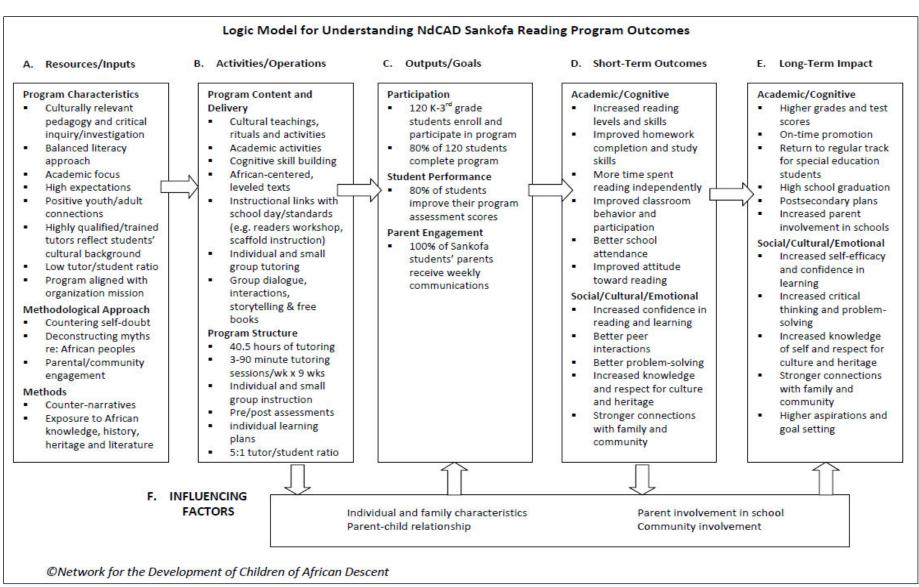


Figure 3. Sankofa logic model.

Table 1

Description of the Direct Link between Sankofa Reading Program Elements and Student Achievement and Supporting Research.

Achievement and Supporting Research. Key Research							
Program Elements	Link to Student Achievement	Literature					
Reading skill development, assessment, and curriculum: Phonogram cards Phonics activities Culturally congruent leveled texts Comprehension strategies Self-selected free books for building a home library	 Diagnosis of skill gaps informs instruction Individualized learning plans are developed and learning goals set Mastery and use of automatic sound/letter correspondence with 70 phonograms Practice phoneme manipulation Practice word formation and independent reading Progress is monitored 	 Key components of a successful reading program include phonological awareness, phonics, cognitive strategies, and considerable independent reading (McEwan, 2002) Reading assessment and instruction work together to benefit students (Afterbath, 2012) Student interest impacts reading comprehension (Asher, 1979) 					
Culturally relevant pedagogy: Culturally specific learning strategies Cultural rituals/routines Culturally specific texts Counter-narratives Tutors reflective of students' cultural community Tutors and parents work together as community educators to develop youth	 Provides real world contextual learning, application, and relevance Builds self-efficacy and motivation as well as prosocial personal and cultural identity to combat self-doubt Community and cultural connections support educational success Tutors and parents support student learning and communicate high expectations 	A sociocultural approach supports literacy develop- mint and learning (Barnes, 1991; Compton-Lilly, 2009; Harbor, 2012; Hassett, 2008; Lozenski & Ford, 2014; Matsuda, 1995; Richardson & Eccles, 2007)					
Instructional method links with school day/standards: • Guided reading/reading workshop • Balanced literacy approach • Instructional scaffolding	 Learn and apply seven comprehension strategies Scaffolding promotes independent, self-directed reading and comprehension Demands are matched to student level and expectations are clear 	 Scaffolding instruction supports learning (Lauer, Akiba, Wilderson, Apthorp, Snow, & Martin-Glenn, 2006) A balanced approach that includes leveled books and leveled phonics and trained instructors is effective for struggling readers (Morris, 2015) 					
Frequent and regular tutoring sessions	• Three 90-minute sessions per week for 9 weeks (40.5 hours of instruction)	Length of a reading intervention is positively related to reading outcomes (Elbaum, Vaughn, Hughes, & Moody, 2000)					

The links between program elements and increased student achievement are supported by the findings of numerous research studies on successful learning in urban schools. One such study was carried out by Pressley, Raphael, Gallagher, and DiBella (2004) who conducted a qualitative investigation of a high achieving K-12 school serving urban, African American students. Pressley and his colleagues identified several critical factors that contributed to the school's effectiveness. These factors included careful monitoring of student progress, frequent communication with parents, a strong academic focus, a learning environment that is attractive and safe, dedicated and caring teachers, extensive scaffolding, an emphasis on understanding, and intentional efforts to motivate students.

Investigations of effective primary-grade reading instruction have identified similar factors that are essential for high levels of reading achievement in low-income schools. Taylor, Pearson, Clark, and Walpole (2000) found several school factors and several teacher factors that had a positive impact on the reading achievement of K through 3 students. School factors included strong links to parents, systematic assessment of student progress, and a high level of school communication and collaboration. Teacher factors included small-group instruction, independent reading, student on-task behavior, home communication, and instructions for applying phonics to everyday reading.

The culturally relevant pedagogical elements are supported by the work of Gloria Ladson-Billings who has investigated culturally responsive instruction and successful learning of African American students (Ladson-Billings, 1995, 2000, 2011, 2012). Ladson-Billings' theory of culturally relevant pedagogy emphasizes the importance of ". . . a teacher who believes deeply in the intellectual capability of the student and his or her own efficacious abilities" (Ladson-Billings, 2012, p. 118). Accordingly, the Sankofa model includes student outcomes such as increased reading performance, improved classroom behavior and participation, and enhanced self-confidence.

In 2010, NdCAD worked with GrayHall, independent evaluation consultants, to conduct an evaluation of the literacy outcomes of students participating in Sankofa (Hall & Gray, 2010). Students' reading levels were assessed pre- and post-intervention using the Developmental Reading Assessment (DRA II). Over the study period, 38 Sankofa cohorts were held at 28 locations in Minneapolis and Saint Paul; students from 31 schools (15 in St. Paul and 16 in Minneapolis) participated. The evaluation found that 75% of the 333 students who completed Sankofa in the period 2004 through 2010 increased their reading levels, with half of the students improving by two or more levels.

Focus of the Evaluation

This report presents an evaluation of NdCAD's Sankofa program implemented in the SPPN from spring 2013 through fall 2017, with a particular focus on the third and fourth years, school years 2015 - 2016 and 2016 - 2017, of the SIF.

Research Questions

This evaluation was designed to answer questions about Sankofa's impact and implementation, based on the logic model presented in Figure 3. For both the impact and implementation evaluation, confirmatory and exploratory questions were co-developed with the SPPN and NdCAD staff.

Impact Evaluation

Confirmatory. The confirmatory questions were the primary research questions of our evaluation. They were developed based on the logic model and they were intended to inform policy (Corporation for National & Community Service, 2013). Based on initial power analyses, we were statistically powered to answer them and they contained fewer validity concerns. There were four confirmatory impact questions proposed in the original and revised SEPs. They were:

- 1. Do children who participate in Sankofa exhibit increased reading performance as identified by pre-post program scores on the Developmental Reading Assessment (DRA)?
- 2. Do children who participate in Sankofa exhibit greater levels of social emotional development such as confidence in reading after the nine-week program?
- 3. Do children who participate in Sankofa exhibit greater reading proficiency as identified by Mondo Bookshop Assessments after the nine-week program than similar children who do not participate in any literacy development program or similar children who participate in a non-culturally-specific literacy development program?
- 4. Do children who participate in Sankofa exhibit greater rates of literacy growth after completing Sankofa, compared with their growth before program participation, according to FastBridge Learning reading measures?

Question 1 was examined each year; question 3 was addressed only in Years 1 and 2; question 4 was addressed in Year 4; and finally, question 2 was addressed in Years 1, 2, and Year 4. When the SEP was revised and approved on March 3, 2017, a new quasi-experimental design was implemented. This design was used in place of the matched comparison that used the Mondo and proposed using an interrupted time series (ITS) design with reading measures developed by FastBridge Learning (FBL) (see Methods section). Question 3 was only partially addressed as a critical, original partner in the evaluation was unable to share information about the specific reading interventions students were receiving as well as students' reading assessment data. Therefore, a non-culturally-specific literacy comparison group could not be created.

Exploratory. The exploratory questions were not intended to inform policy but instead future research (Corporation for National & Community Service, 2013). They addressed longer-term outcomes that were implied by the logic model but that lacked any strong *a priori* evidence. These questions had less statistical certainty and contained many more validity concerns. These questions could result in future evidence that could inform practice or research but not necessarily (see Interpretations and Limitations section). There were five exploratory impact questions proposed in the original and revised SEPs. They were:

- 1. How do children who complete Sankofa perform on third-grade reading proficiency measures?
- 2. Do children who complete Sankofa perform better on third-grade reading proficiency measures than similar children who do not participate in any literacy development program or similar children who participate in a non-culturally-specific literacy development program?
- 3. Do children who complete Sankofa perform better on third-grade reading proficiency measures than similar children in St. Paul Public Schools?
- 4. Do African-centered and African-theme texts change participants' attitudes about reading?
- 5. How does having (African/African American) tutors change parent involvement in improving child's literacy?

Questions 1 and 3 were examined for all four years; questions 4 and 5 were addressed only in Year 4; and question 2 was never addressed. Questions 4 and 5 were added after the SEP was revised and could only be examined in Year 4. Question 2 was never addressed as a critical, original partner in the evaluation was unable to share information about specific reading interventions students were receiving and students' reading assessment data. Therefore, we were unable to develop comparable control groups.

Implementation Evaluation

There were six implementation evaluation questions proposed in the original and revised SEPs. They were:

- 1. Is the Sankofa program being implemented as intended? Does program content include the following elements?
 - a. Cultural teachings, rituals, and activities
 - b. Academic activities
 - c. Cognitive skill building
 - d. African-centered, leveled texts
 - e. Instructional links with school day/standards (e.g., readers workshop, scaffold instruction)
 - f. Individual and small group tutoring
 - g. Group dialogue, interactions, storytelling, and free books

- 2. Is the Sankofa program delivery consistent with the intended program structure?
 - a. 40.5 total hours of tutoring per student
 - b. Three 90-minute tutoring sessions per week for a period of 9 weeks
 - c. Individual and small group instruction
 - d. Pre and post reading outcome assessments
 - e. Individual learning plans
 - f. 5:1 student/tutor ratio
- 3. Has the Sankofa program achieved its intended implementation output and goals?
 - a. How many students participated in Sankofa?
 - b. What percent of enrolled students completed the Sankofa program?
 - c. What percent of parents received weekly communications?
- 4. What program services are received by the comparison groups?
 - a. What is the content of the tutoring program received by the comparison groups?
 - b. How are program services delivered to the comparison groups?
 - c. What is the duration of program services received by the comparison groups?
- 5. What are reasons why participants do not complete Sankofa?
- 6. What is the average number of follow-ups (by NdCAD tutors and/or SPPN School Partnership Coordinators) before participants discontinue the program?

Questions 5 and 6 were added after the SEP was revised and were examined only in Year 4. Question 4 was not examined because comparable reading comparison groups could not be created.

Methods

Impact Evaluation

Several research designs were utilized to answer the eight impact questions examined during the evaluation. The questions, data sources, and data analytic plans associated with each design are presented by design.

Pretest-posttest design without a comparison. This design was used to answer confirmatory question 1, "Do children who participate in Sankofa exhibit increased reading performance as identified by pre-post program scores on the Developmental Reading Assessment (DRA)?", and is capable of providing a preliminary level of evidence. The assessment associated with this design was the Development Reading Assessment: Second Edition (DRA II).² The DRA II has been administered to Sankofa participants as a pre-post assessment for several years and, consequently, Sankofa staff have been able to monitor the effectiveness of the Sankofa reading intervention in a consistent manner over time. Additionally, prior preliminary evidence based on the DRA II for the Sankofa program exists (Hall & Gray, 2010).

The DRA II is an individually administered standardized reading test which measures five dimensions of reading: phonemic awareness, phonics/decoding, comprehension, fluency, and vocabulary (*DRA II K-8 Technical Manual*, 2011). It is used to identify a child's reading level, accuracy, fluency, and comprehension. Preliminary evidence outcomes also included the Saint Paul Public School (SPPS) soft target reading goals and scores on a reading attitude instrument developed by McKenna and Kear (1990). The soft target reading goals were to be interpreted as goals for expected reading levels for grades K through 6 within a designated time period of the school year.

DRA II performance, attainment of soft target reading goals, and reading attitude outcomes were considered preliminary evidence because reading outcome measures were only obtained from Sankofa participants and not from a comparison group of similar students who did not participate in the Sankofa program. The DRA II data came from a database maintained by the SPPN.

The preliminary evidence measures were:

- DRA II reading levels
- Attainment of SPPS soft target reading goals

The DRA II data were analyzed descriptively. In Years 1 & 2, 99 Sankofa participants in K (n = 26), grade 1 (n = 36), grade 2 (n = 22), and grade 3 (n = 15) provided data. For Years 3 & 4, 202 Sankofa participants in K (n = 36), grade 1 (n = 56), grade 2 (n = 48), and grade 3 (n = 62) provided data. Eleven students (grade K: 2; grade 1: 3; grade 2: 1; and grade 3: 4) were missing pre-Sankofa DRA data (approximately 5.5% of the students) and 56 students (grade K: 6; grade

² Information about all the assessments is available in Appendix A.

1: 15; grade 2: 13; and grade 3: 22) were missing post-Sankofa DRA data (approximately 27% of the students).

Parent survey. To answer confirmatory question 2, "Do children who participate in Sankofa exhibit greater levels of social emotional development such as confidence in reading after the nine-week program?", a survey was administered to parents/relatives/guardians of Sankofa participants. At the end of the Sankofa program, family and friends of the Sankofa participants were invited to attend the graduation ceremony that takes place on the last day of each cohort. The celebration includes a shared meal and the awarding of certificates and other commendations to the Sankofa students. Near the conclusion of the event, all adult members of the Sankofa students' families in attendance are invited to complete a survey about the Sankofa program. The "parent survey" completed by a parent, a grandparent, other relative, and/or a guardian attending the graduation ceremony, provides an opportunity for the respondent to provide feedback to the Sankofa staff and provided preliminary evidence about changes in child behaviors observed since attending Sankofa.

Matched comparison. This design was used to answer confirmatory question 3, "Do children who participate in Sankofa exhibit greater reading proficiency as identified by Mondo Bookshop Assessments after the nine-week program than similar children who do not participate in any literacy development program or similar children who participate in a non-culturally-specific literacy development program?", and exploratory question 3, "Do children who complete Sankofa perform better on third-grade reading proficiency measures than similar children in Saint Paul Public Schools?", and is capable of providing a moderate level of evidence. The assessments associated with this design were the Mondo Bookshop Assessments and the MCA III - Reading.

Mondo Bookshop Assessments. The Mondo Bookshop Assessments measures aspects of reading such as Text Level (overall reading ability), Print Concepts (understanding how books work), Letter-Sound Correspondence (ability to read nonsense words), and Oral Language (productive vocabulary). The Mondo tests are intended to be used for curriculum development rather than as a summative reading achievement measure. However, the only reading assessment that was administered district-wide to SPPS children in grades K – 3 was the Mondo and it was the only extant assessment available that would allow a comparison between Sankofa participants and non-participants.

The data file provided by SPPS included scores on three Mondo subtests: Oral Language, Benchmark Text Level/Comprehension, and Letter/Sound Correspondence. These subtests were individually administered by the teachers to students in grades K – 3 at SPPS only to provide literacy assessments at the beginning, middle, and end of a school year. All three administrations were not required for all students, and all subtests were not required. SPPS guidelines stipulate which students are to be given which subtests based on their grade level and their previous performance. To minimize the time spent testing, the SPPS guidelines explicitly state that teachers should only administer the subtests that are required. Therefore, many students in the SPPS data file had incomplete data on the Mondo subtests because they did not require the assessment. Students were more likely to have beginning- and end-of-school-year scores than mid-year scores, and beginning- versus end-of-school-year was considered to be the best

comparison for capturing the pre- to post-program change in Sankofa participants' reading performance. Therefore, beginning- and end-of-year scores were included in the moderate evidence analyses. Students who participated in Sankofa were compared to a group of non-Sankofa SPPS students selected by means of propensity score matching (see subsection on Propensity Score Matching). Students from Saint Paul City School were excluded from these analysis.

Oral Language is a test of a student's receptive language. The test is made up of 15 sentences that present different syntactical/grammatical structures of oral English. The teacher reads each sentence aloud and the student is asked to repeat the sentence verbatim as read by the teacher. One point is awarded for each sentence repeated correctly in every detail.

Benchmark Text Level/Comprehension is a test that determines a student's instructional text level, or more specifically, the level at which a student is able to read and comprehend with 90-94% accuracy. After the student's reading level is recorded, comprehension of nonfiction and fiction texts is assessed utilizing retell/recount procedures. Text Level scores are reported as letters of the alphabet, ranging from A to W. Scores of A and B are in Mondo's early emergent stage, C and D are in the emergent stage, and so on. A student who is a non-reader is given a score of zero.

In Years 1 and 2, analysis of covariance models were fit for both subtests separately. The dependent variable, the difference between beginning-of-year and end-of-year score, was regressed onto condition (0: comparison, 1: Sankofa) controlling for beginning-of-year score. Mondo data were available for 34 Sankofa participants and 34 comparison students in Years 1 and 2.

The Mondo was not used in Years 3 and 4 as a result of the revised SEP. The Mondo was removed because 1) we did not believe it would be possible to obtain moderate evidence using that design, 2) our use of the Mondo as an outcome was not a validated use for the instrument, and 3) there was no definitive source to determine whether a non-Sankofa student was attending another reading or cultural program and therefore we could not create appropriate comparison groups.

Minnesota Comprehensive Assessment - Reading. The MCA are the state of Minnesota's tests that meet the requirements of the Federal Elementary and Secondary Education Act. The tests that were implemented during the evaluation were in their third revision and are titled the MCA-III. The MCA-III tests were administered only in the spring. Scores on the MCA-III were used to determine proficiency in reading and math and are also used to compare students to one another on reading and math skills. Proficiency is a dichotomous (i.e., yes/no) variable that indicates whether a student has met grade-specific state standards. For the MCA-III reading test analyses, third-grade students who participated in Sankofa were compared to a group of non-Sankofa SPPS students selected by means of propensity score matching (see subsection on Propensity Score Matching). Students in kindergarten through second grade do not take the MCA and were not included in the analysis nor were students from Saint Paul City School.

The MCA data were analyzed with independent t-tests in Years 1 and 2 and were presented in the in Years 1 and 2 interim report. For Years 3 and 4, we used a mixed effects model and regressed the scaled MCA score onto condition (0: comparison, 1: Sankofa) and controlled for sex (because of lack of balance) and academic school year as fixed effects and school as a random effect. For Years 1 and 2, data were available on 9 Sankofa participants and 9 comparison students. For Years 3 and 4, data were available on 37 Sankofa participants (60.6% of Sankofa students served in Years 3 and 4) and 253 comparison students.

Descriptive analysis using MCA data were also conducted to answer exploratory question 1, "How do children who complete Sankofa perform on third-grade reading proficiency measures?".

Propensity score matching. For Years 1 and 2, propensity score matching was done using nearest neighbors without replacement. The propensity score model for Years 1 and 2 included the following variables:

- School
- Sex
- Race/Ethnicity
- Free-/reduced-price lunch status
- Special education status
- English language learner status

and these variables were regressed onto whether a student was in Sankofa or not. The original, approved SEP stated that a pre-intervention reading score would be included as a covariate. However, SPPS staff recommended not including the Mondo, the only potential district-wide pre-intervention measure, because of the way that the Mondo was administered to students (see above) and because the number of administrations are determined by student grade-level and prior performance. In the revised SEP, we attempted to remove this pre-intervention measure, however, external evaluators requested a pre-intervention reading measure and the Mondo was included in the Years 3 and 4 propensity score models.

For Years 3 and 4, we restricted the comparison pool to only students who identified as African or African American. For Years 3 and 4, the following variables were included:

- Sex
- English language learner status
- Free-/reduced-price lunch status
- Special education status
- Continuous enrollment at the same school
- Pre-test reading level as measured by the Mondo

and these variables were again regressed onto whether a student was in Sankofa. For Years 3 & 4, we used radius matching with replacement (Deheji & Wahba, 2002). Radius matching is a form of caliper matching (Caliendo & Kopeinig, 2005), which defines an acceptable maximum propensity score distance (caliper) and uses all individuals within the caliper as comparisons. We

set our radius to .05 and subsequently all comparison students that were within .05 of a Sankofa participant were retained for the analysis. All Sankofa students with MCA data were matched to the 253 comparison students using this method.

Information about balance and the distribution of the propensity scores for Years 3 and 4 is presented in Appendix B.

Interrupted time series. This design was used to answer confirmatory question 4, "Do children who participate in Sankofa exhibit greater rates of literacy growth after completing Sankofa, compared with their growth before program participation, according to FastBridge Learning reading measures?", and is capable of providing a moderate level of evidence. The assessments associated with this design were developed by FBL. For this evaluation, we used the Letters Sounds, Sight Words, Decodable Words, earlyReading, and CBMreading assessments. The revised SEP indicated we would also use the Letter Names assessment, however, after discussion with NdCAD staff, we decided to not administer this assessment but instead to just administer Letter Sounds to participants in grade K and 1.

The ITS design was only implemented to participants in Year 4³ because of the timing of the SEP revision. The design required that NdCAD staff assess Sankofa participants weekly during the 6 weeks prior to Sankofa and 6 weeks immediately after Sankofa. However, because of the complexity of implementing this design (see Results section), no Sankofa participant had complete data.

To analyze the ITS data, a longitudinal linear mixed effects model was used (Pinheiro & Bates, 2000; Fitzmaurice, Laird, & Ware, 2004; Diggle, Heagerty, Liang, & Zeger, 2002). Mathematically, the model shown on the right graph in Figure 4 can be expressed as:

$$Y_{ij} = \beta_{1i} + \beta_{2i}t_{ij} + e_{ij}$$

 $\beta_{1i} = \beta_1 + \beta_3 X_i + b_{1i}$
 $\beta_{2i} = \beta_2 + \beta_4 X_i + b_{2i}$
Eq. 1

which states that student i's observed reading score at time j (Y_{ij}) is a function of the mean intercept effect and a random deviation (β_1 and b_{Ii}) and a mean slope effect and a random deviation (β_2 and b_{2i}^4) and a dummy variable, X_i , that takes on the value of 0 pre-Sankofa and 1 post-Sankofa. In this equation, β_3 and β_4 represents the estimated causal effect of Sankofa with β_3 representing the intercept/level effect and β_4 representing the slope effect. Omitted from Equation 1 but included in our models was grade and cohort, our proxy for school, which were included as covariates in the level-2 equation for the intercept (i.e., the β_{1i} equation).

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 $^{^3}$ However, some participants served in Year 5, school year 2017 - 2018, were included in the ITS to increase the sample size.

⁴ For some models, this variance could not be estimated as it was effectively zero. Therefore, it was removed from the models. See Appendix D for details.

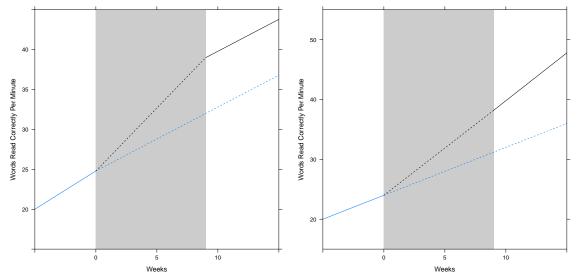


Figure 4. Potential effects of Sankofa on reading ability. The graph on the left corresponds to an intercept/level effect (most likely) and the graph on the right corresponds to a slope and intercept effect. Not pictured is a slope only effect. The solid blue line corresponds to growth in reading prior to Sankofa and the dotted blue line corresponds to expected growth if there is no effect of Sankofa. The black line corresponds to expected growth if there is an effect of Sankofa. The dotted black line corresponds to unmeasured growth during Sankofa.

We first fit a reduced version of the model presented in Equation 1 where the slope effect, β_4 , was not present. We tested the following null hypothesis, which would correspond to an intercept, or level-effect, of Sankofa (the relationship pictured on the left-side of Figure 4).

$$H_0: \beta_3 = 0$$

$$H_1: \beta_3 \neq 0$$

We then tested for a slope effect of Sankofa.

$$H_0: \beta_4 = 0$$

$$H_1: \beta_4 \neq 0$$

The slope effect was believed to be an unlikely effect of the Sankofa program but it was examined. The *p*-values for the linear mixed effects models were calculated using Satterthwaite's method for approximating the degrees of freedom for t-tests (Kuznetsova, Brockhoff, & Christensen, 2017) and if an effect was found to be significant we corrected for multiple comparisons.

Students' school attendance served as a nonequivalent dependent variable. A nonequivalent dependent variable is a variable that should not be affected by the Sankofa intervention but

would respond in a similar way as the primary dependent variable to a relevant validity threat (Shadish, Cook, & Campbell, 2002). While attendance data does not represent an ideal nonequivalent dependent variable, as it could potentially be affected by Sankofa, it allowed us to assess whether the attendance pattern remained constant before and after Sankofa. If attendance remained constant, but reading improved, this increases the likelihood that the effect was attributable to Sankofa and not an outside factor (such as a general increase in aptitude because of an increase in attending school).

Qualitative study. A qualitative study was conducted from June through November, 2017 to address the impact exploratory questions 4 and 5 that were added in Years 3 and 4 of the SIF. CAREI collaborated with University of Minnesota School of Social Work faculty member Priscilla Gibson, NdCAD, and SPPN staff to conduct a parent focus group (n = 6) and parent phone interviews (n = 4). The questions for parents included topics such as their participation in the Parent Power Program (a NdCAD parent training program to help parents improve reading in their children). All parents who participated in the study received a \$20 Target gift card. All data were collected in English with the exception of the focus group, which was conducted in Somali.

Of the 10 parents who participated in the study, nine were mothers. The parents' households consisted of a total of 25 children with one to five children per household. The number of children per household who attended the Sankofa reading program were one child (in eight of the households), two children (in one household) and three children (in one household). All parents indicated that their children completed Sankofa and three reported they had children attending other tutoring programs.

A focus group was also conducted with Sankofa staff (n = 9) to explore to what extent having African/African American tutors affects parental engagement in improving their child's literacy. Of the nine staff members who participated, four were tutors. All had received training on content such as phonogram cards, the instruction approach, student assessments, culture, lesson planning, history, and the meaning and foundation of Sankofa.

All focus groups and interviews were audio-taped and transcribed. Data analysis included multiple reviews of both the transcripts and audio tapes. Through repeated readings of the transcriptions and listening to tapes, codes were developed and merged using open and selective coding methods.

Implementation Evaluation

Fidelity of implementation data were either obtained electronically from a database maintained by the SPPN or via hard copies of records provided to SPPN by NdCAD. The fidelity of implementation measures included:

- 1. Number of student participants
- 2. Location of Sankofa cohorts
- 3. Dates of Sankofa cohorts
- 4. Attendance of student participants
- 5. Number of hours of Sankofa programming received by student participants
- 6. Number of books given away to student participants

- 7. Qualifications of tutors
- 8. Content of lesson plans
- 9. Observations of tutoring sessions
- 10. Communications sent to participants' parents
- 11. Responses to a parent survey

These data sources were analyzed descriptively in Years 1 through 4, with no statistical testing performed.

Results

The results are presented by evaluation question, first for the impact evaluation followed by the implementation evaluation.

Impact Evaluation for Years 3 and 4

Confirmatory question 1: Do children who participate in Sankofa exhibit increased reading performance as identified by pre-post program scores on the Developmental Reading Assessment (DRA)? In Years 3 and 4, DRA II pre- and post-data were available on 146 Sankofa participants. Data were available on 30, 41, 35, and 40 participants in grades K through 3. Of the 146 participants, 90% of the participants increased their DRA II performance by at least one reading level. The student performance goal stated in the logic model (Figure 3) was that 80% of the students would improve their program assessment scores. Therefore, the actual improvement rate of 90% exceeded this goal. This was similar to what was found for Years 1 and 2 (96% improvement rate). Ninety percent, 88%, 91%, and 93% of participants in grades K through 3 improved by at least one level during Sankofa. On average, participants in grades 2 and 3 increased the most levels (2.17 and 2.15, respectively) followed by grade 1 (2.07) and grade K (1.43).

The Sankofa participants' performance on the DRA II was compared to the soft target grade-level reading goals established by SPPS (see Appendix C) by comparing the participants' pre-and post-program DRA II scores to the targets for the time points associated with each participant's DRA II administrations. The Sankofa participants' pre- and post-program performance was categorized as below, meets, or exceeds the SPPS target for their grade level. The results are displayed in Table 2. For all grade levels across all the years, including kindergarteners, the post-program results show that the percent below target decreased. Table 2 also shows that for Years 3 and 4, that kindergarteners were the best readers, based on SPPS targets, at the start of the Sankofa program relative to the other grades and that more than half of the participants in grades 2 and 3 were struggling readers at the start of Sankofa. Because of this, the largest effect (i.e., the greatest decrease in % below from pre- to post-Sankofa) was associated with grade 3.

While 90% of the student participants increased by at least one reading level from pre- to post-program, only 11 participants (8%) who were below target based on their pre-Sankofa DRA II scores were at meets or exceeds target after Sankofa (see Table 3). Therefore, it is informative to examine the progress that was made by students in the below-below group (i.e., the group that was below the SPPS target both pre- and post-Sankofa). When the performance of the below-below group (n = 58) was analyzed separately, it was found that the reading level increases for this group ranged from 0 to 6 levels, with an average of 1.74. The most common increase was 1 or 2 levels, attained by 78% of the students in this group. Forty-one percent attained an increase of 2 levels, and 10% attained an increase of 3 levels. Therefore, even though these students did make progress during the Sankofa intervention, it was not enough to reach grade-level expectations based on SPPS soft targets.

Table 2

Comparison of Sankofa Students' Pre- and Post-Program DRA II Scores with SPPS Soft Target Reading Goals for Years 1 through 4.

Year	Grade	N	Pre/Post	Below	Meets	Exceeds
	V	26	Pre	8%	46%	46%
	K	26	Post	4%	8%	88%
	1	36	Pre	61%	6%	33%
	1		Post	56%	3%	42%
1 2	2	22	Pre	59%	0%	41%
1 - 2	2	22	Post	55%	0%	45%
	3	15	Pre	53%	7%	40%
		13	Post	47%	0%	53%
	T. (1	00	Pre	45%	15%	39%
	Total	99	Post	40%	3%	57%
	V	36	Pre	11%	58%	25%
	K		Post	8%	14%	61%
	1	56	Pre	50%	20%	25%
		30	Post	38%	16%	20%
3 - 4	2	48	Pre	56%	10%	31%
3 - 4		40	Post	44%	4%	25%
	3	62	Pre	53%	13%	27%
	<i>3</i>	62	Post	32%	6%	26%
	Total	202	Pre	46%	22%	27%
	Total	202	Post	32%	10%	30%

The other group that had a fairly large number of participants, was the exceeds-exceeds group (n = 37). The increases for the exceeds-exceeds group ranged from 0 to 6 levels, with an average of 2.65 levels. The most commonly occurring increases for the exceeds-exceeds group were 1 level (24%), 2 levels (22%), and 3 levels (27%). As originally noted in the Years 1 and 2 report it appears that students in the exceeds-exceeds group were able to make more progress during Sankofa than students in the below-below group, but not by a large margin.

Table 3

Number of Sankofa Students by Pre- and Post-Program SPPS Soft Target Outcomes for Years 1 through 4.

Year	Target Outcomes	Grade				Across	Mean Increase in Levels
	Category	K	1	2	3	Grades	
1 - 2	Below-Below	1	19	12	7	39	1.77
	Below-Meets	0	1	0	0	1	- -
	Below-Exceeds	1	2	1	1	5	1.10
	Meets-Below	0	1	0	0	1	- -
	Meets-Meets	2	0	0	0	2	4.20
	Meets-Exceeds	10	1	0	1	12	2.33
	Exceeds-Below	0	0	0	0	0	-
	Exceeds-Meets	0	0	0	0	0	-
	Exceeds-Exceeds	12	12	9	6	39	2.03
3 - 4	Below-Below	2	17	19	20	58	1.74
	Below-Meets	2	0	0	4	6	2.17
	Below-Exceeds	0	2	2	1	5	4.60
	Meets-Below	1	2	1	0	4	1.00
	Meets-Meets	2	6	1	0	9	0.78
	Meets-Exceeds	14	2	1	2	19	1.95
	Exceeds-Meets	1	3	1	0	5	1.00
	Exceeds-Below	0	2	1	0	3	0.67
	Exceeds-Exceeds	8	7	9	13	37	2.65

Confirmatory question 2: Do children who participate in Sankofa exhibit greater levels of social emotional development such as confidence in reading after the nine-week program? For Years 3 and 4, a total of 10 individuals in two of the Sankofa cohorts completed the parent survey. There were no parent surveys for the other 7 cohorts. If we assume that each survey corresponds to a single participant, then the response rate was 7%. However, given that the surveys did not require identifying the Sankofa participant, there could be multiple surveys for a single student. Additional caution should be exercised in generalizing the results since opinions of the adults who attended the ceremony may be different from those who were not in attendance and those who took the time to fill out this voluntary survey may differ from those who chose not to. For example, adults attending the ceremony and taking time to respond to the survey may have been more positive about the Sankofa reading program.

The parent survey contained a total of ten questions. Five of the questions were open-ended and five were forced-choice. The items asked the respondents about changes they noticed in their child related to reading and school performance, the parts of the program they found most helpful, their suggestions for improving the program, whether or not they would recommend the program to others, and any additional comments they would like to make. A copy of the survey

instrument is provided in Appendix E. The respondents' open-ended comments were examined and organized according to topic; a summary is provided in the following paragraphs.

Increases in positive behavior or attitude. The first question on the survey asked if respondents had seen an increase in 11 behaviors and attitudes as a result of participating in the Sankofa reading program. Respondents could select yes, no, or don't know/haven't observed. Across the nine respondents who answered this question, participants rated seeing an increase in 63% to 100% of the 11 behaviors and attitudes, with an average of 88%.

Stronger connections to family and community. Respondents were then asked if their child had formed stronger connections to family and community since participating in Sankofa. All but two respondents said their child had formed strong connections to family since participating in Sankofa, and one of the two who did not report stronger connections noted that their child had always had a strong family connection. Similarly, eight of the 10 respondents said their child had formed a stronger connection to their community since participating in Sankofa.

Other changes. When asked about other changes in their children, several respondents noted increases in excitement about reading and writing, and school more generally. In addition, one respondent noted that their child had become a better and more respectful communicator since participating in Sankofa.

Program components. Respondents were then asked three questions about seven specific program components and any other component they found helpful, as well as what Sankofa could do to improve. Regarding the seven specific program components, 50% reported that instruction on phonemic awareness was helpful, 75% reported that instruction on the seven comprehension strategies was helpful, 75% reported that learning about African heritage was helpful, 88% reported that learning about positive learning environments was helpful, 88% reported that Sankofa staff having high expectations of their child was helpful, 25% reported that the low student-teacher ratio was helpful, and 50% reported that the weekly communication from the tutors was helpful. Other program components respondents found helpful included: connection with other students, having something to do after school, excitement for learning, and the connection to community and family.

Recommending the program to others and satisfaction. All respondents (100%) indicated that that they would recommend the program to family or friends. The final item of the survey asked the parents to rate their overall satisfaction with the Sankofa program using a 5-point Likert scale. Of the nine respondents who provided a rating, 100% selected *satisfied* or *very satisfied*.

Confirmatory question 3: Do children who participate in Sankofa exhibit greater reading proficiency as identified by Mondo Bookshop Assessments after the nine-week program than similar children who do not participate in any literacy development program or similar children who participate in a non-culturally-specific literacy development program? As indicated in the Methods section, this evaluation question could only be partially addressed because a non-culturally-specific literacy comparison group could not be created and was removed in the revised SEP. For Years 1 and 2, when this question was partially addressed, there was no evidence of an effect of the Sankofa program based on the Mondo Bookshop

Assessments. Specifically, there was no significant difference between Sankofa participants and comparison students on Oral Language (F(1, 65) = 1.46, p = .231, Cohen's d = 0.25) or the Benchmark Text Level/Comprehension (F(1, 65) = 1.10, p = .754, Cohen's d = -0.02) subtests after controlling for beginning-of-year score on these assessments, respectively. Of the 60 possible Sankofa participants, data were only available for 34 participants. In other words, 43% of eligible Sankofa participants did not have Mondo available. The non-significant small-to-medium effect size for Oral Language suggests that the analysis may have been underpowered and unable to detect a program effect.

Confirmatory question 4: Do children who participate in Sankofa exhibit greater rates of literacy growth after completing Sankofa, compared with their growth before program participation, according to FastBridge Learning reading measures? Prior to performing the ITS analysis, we examined the relationship between daily school attendance (the nonequivalent dependent variable) before and after Sankofa. If attendance remained constant, then this provides validity evidence that any significant Sankofa effect measured by the FBL assessments cannot be explained by an increase in attending school.

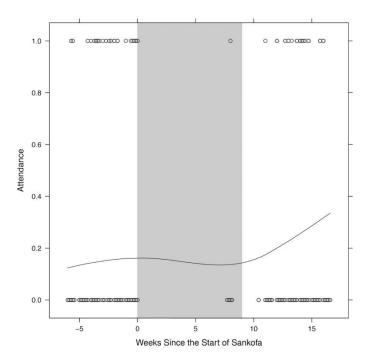


Figure 5. Daily school attendance against weeks since the start of Sankofa. The points are daily, observed attendance records for a participant, the line is a locally weight scatterplot smoother, and the gray rectangle corresponds to time when participants were attending Sankofa.

A plot of attendance for participants included in the ITS analysis is shown in Figure 5. The black line corresponds to a non-parametric smoother, which smooths over data and more heavily weighs the observations that are closer in time to come up with an estimate of the slope of the line at a particular point in time and can be used to detect non-linear growth and subsequently visually assess change in attendance over time. Figure 5 shows that attendance appears to be non-linear and that it increases after completing Sankofa. This figure indicates that it will be

impossible to ascertain if a significant effect is from an increase in attendance at school or Sankofa. However, it should be noted that attendance was expected to be affected by Sankofa (see the logic model in Figure 3) and the utility of attendance as a nonequivalent dependent variable is questionable as the observed increase in attendance may also represent a positive effect of Sankofa.

Initial observations indicated that the CBMReading and earlyReading assessments were too difficult for Sankofa participants. Because of this it was decided to not collect post-Sankofa data on these measures and to stop administering these assessments. Therefore, for the ITS analyses presented below, we used only the Decodable Words, Letter Sounds, and Sight Words assessments and performed our analyses controlling for grade and cohort (as indicated in the Methods section above).

We anticipated having data on 87 Sankofa participants for the ITS design but ended up with data on 92 Sankofa participants, exceeding this goal. A total of 13, 28, 21, and 30 Sankofa participants in grades K, 1, 2, and 3 provided FBL assessment data.

Table 4
Summary information about the ITS design by measure

Assessment		Grade	Participants with any data	_
Decodable Word	Duo	2	17	1.882
	Pre	3	24	3.625
	Post	2	14	3.714
		3	23	3.174
Letter Sounds	Pre	K	11	2.545
		1	24	3.500
	Post	K	13	3.077
		1	18	3.833
G. L. W. J	Pre	2	17	1.882
		3	25	3.520
Sight Word	Post	2	14	3.714
		3	23	3.130

Table 4 provides summary information about the ITS design by assessment. Three general observations about the implementation of the ITS design can be made from this table. First, the number of participants with pre-Sankofa data by grade was greater than the number of participants providing data post-Sankofa. The one exception was for Letter Sounds and grade K. This implies participant attrition in the design. Second, the average number of assessments taken by the participants was greater post-Sankofa than pre-Sankofa. Third, the average number of

assessments per participant, both pre- or post-Sankofa, was around three, suggesting that, on average, participants were missing about 50% of their data. While no participant had complete data, i.e., six assessments pre-Sankofa and six assessments post-Sankofa, there were several participants with five assessments pre-Sankofa and ten participants with six assessments post-Sankofa. However, none of the participants with five assessments pre-Sankofa had six assessments post-Sankofa.

The percent of missing data, assuming that each of the 92 participants could provide data at each assessment window, is shown in Figure 6. Figure 6 shows that the percent of missing data, at any assessment window, ranged from just above 20% to just over 80%, and that the closer the assessment window was to the start of Sankofa, the lower the percent of missing data. Part of the reason for this missing data was that SPPN was still recruiting participants within six weeks of the start of Sankofa and those participants could not have had six weeks of pre-Sankofa assessments.

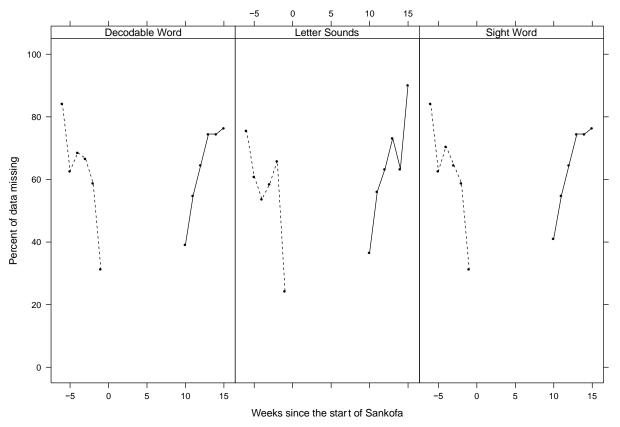


Figure 6. Percent of data missing by weeks since the start of Sankofa by assessment. The dotted line corresponds to the assessments pre-Sankofa and the solid line corresponds to the assessments post-Sankofa.

To address the extensive missing data, the analysis was conducted two ways. First, only participants with at least one pre-Sankofa and one post-Sankofa assessment were included in the analyses. This analysis used listwise deletion and removed all participants that did not have pre-and post-Sankofa data. Second, multiple imputation was performed using the pan package (Zhao

& Schafer, 2016) in R. The only variables available for multiple imputation were the cohort identifier, the participant identifier, the participant grade, the participant' other scores on the assessment(s), and time since the start of Sankofa. In order to reduce the between-imputation variability, we specified 100 imputations. We then applied Rubin's rules to pool the findings across the imputations (Rubin, 1974). However, it should be noted that variables that were included in the imputation model were driven by availability and not variables that we believed were correlated with the assessment score or missingness and even after an extremely long burnin time of 1,000,000 it was not clear if stationarity was actually achieved.

The Letter Sounds assessment was administered to Sankofa participants in grades K and 1. The target in the revised SEP was for 11 participants in grade K and with a power of 0.8, we anticipated being able to detect a level effect of 18 letter sounds read correctly per minute (LSRCM) and a slope effect of 2.2 LSRCM per week. Overall, 25 participants in grade K and 1 contributed Letter Sounds data for the analysis. The level effect was estimated at 5.66 LSRCM and was not significant (t = 1.034, df = 129.582, p = .303). The slope effect was estimated at 0.023 and was not significant (t = .027, df = 131.308, p = .979). The results from the pooled multiple imputation analysis that included all 41 participants in grades K and 1 that had any Letter Sounds data also concluded no significant level (estimate = 4.409, t = 0.958, df = 777.733, p = .338) or slope effect (estimate = 0.078, t = 0.129, df = 496.660, p = .898).

The Sight Words assessment was administered to Sankofa participants in grades 2 and 3. The target in the revised SEP was for 76 participants in grades 2 and 3 and with a power of 0.8, we anticipated being able to detect a level effect of 7 words read correctly per minute (WRCM) and a slope effect of 0.8 WRCM per week. Overall, 28 participants in grade 2 and 3 contributed Sight Words data for the analysis. The level effect was estimated at 0.785 WRCM and was not significant (t = 0.079, df = 135.358, p = .938). The slope effect was estimated at 1.198 and was not significant (t = 0.213, df = 134.336, p = .423). The results from the pooled multiple imputation analysis that included all 51 participants in grades 2 and 3 that had any Sight Words data also concluded no significant level (estimate = -2.363, t = -0.327, t

The Decodable Words assessment was administered to Sankofa participants in grades 2 and 3. The target in the revised SEP for Decodable Words was the same as for Sight Words. Overall, 27 participants in grade 2 and 3 contributed Decodable Words data. The level effect was estimated at 0.056 WRCM, which was not significant (t = 0.022, df = 127.236, p = .982). However, there was evidence of a significant slope effect of Sankofa on WRCM (t = 2.453, df = 132.192, p = .015). The slope effect was estimated at 0.978. However, after correcting for multiple comparisons⁷, using either a Bonferroni's correction or the Benjamini-Hochberg method (Benjamini & Hochberg, 1995), the slope effect was no longer significant. The results from the pooled multiple imputation analysis that included all 51 participants in grades 2 and 3 that had any Decodable Words data concluded no significant level (estimate = 0.193, t = 1.426, df =

⁵ Parameter tables for all ITS models are shown in Appendix D.

⁶ See appendix D for full results from the multiple imputation analysis.

⁷ To correct for an inflated probability of observing an effect by chance when there is no effect (i.e. Type I error).

381.727, p = .155) or slope effect (estimate = 0.165, t = 0.209, df = 465.186, p = .834). Because the slope effect was not corroborated by the pooled multiple imputation analysis and did not persist after adjusting for multiple comparisons, this effect was not interpreted further.

In summary, there were no significant effects on either level or slope for the Letter Sounds, Sight Words, or Decodable Words assessments and while the slope effect for Decodable Words was significant, after correcting for multiple comparison the effect was no longer significant (suggesting the size of the effect could have been observed by chance). The slope effect for Decodable Words was also found to not be significant based on the pooled multiple imputation analysis.

Exploratory question 1: How do children who complete Sankofa perform on third-grade reading proficiency measures? MCA-Reading data were available for 37 Sankofa participants in grade 3 for Years 3 and 4. Descriptive information for Sankofa participants and their matched comparisons are shown in Table 4. The data shows that 5% of Sankofa participants met reading proficiency in grade 3 and 27% partially met reading proficiency. In contrast, for the matched comparison (n = 253), 40% partially met MCA proficiency, 21% met MCA proficiency, and 2% exceeded MCA proficiency. In addition, the average MCA scale score for Sankofa participants (323.5) was lower than for the comparison group (333.4). However, there was a wide range of MCA scale scores for Sankofa participants (Figure 7) and the scale scores ranged from 301 (corresponding to the 1st percentile) to 362 (corresponding to the 68th percentile).

Exploratory question 2: Do children who complete Sankofa perform better on third-grade reading proficiency measures than similar children who do not participate in any literacy development program or similar children who participate in a non-culturally-specific literacy development program? Not addressed during the evaluation.

Means and Standard Deviations of MCA-Reading Proficiency and Scale Scores of Sankofa and Comparison Group Students.

companies on c	. oup since inst				
Group	oup % partially meets %		% exceeds MCA	Average MCA	
	MCA proficiency ⁸	proficiency	proficiency	scale score	
Sankofa	27%	5%	0%	323.5	
Comparison	40%	21%	2%	333.4	

Center for Applied Research and Educational Improvement, University of Minnesota

Table 4

⁸ Scale scores corresponding to levels of proficiencies are available on the Minnesota Department of Education website.

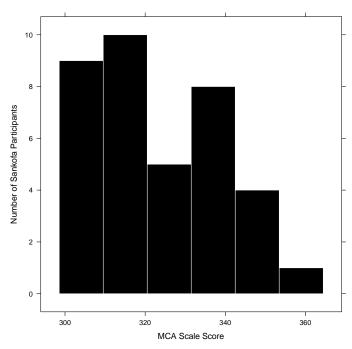


Figure 7. Distribution of MCA scale scores for Sankofa participants in Years 3 and 4.

Exploratory question 3: Do children who complete Sankofa perform better on third-grade reading proficiency measures than similar children in Saint Paul Public Schools? For the combined Year 3 and 4 analysis, the results of the matched-comparison analysis indicated a significant effect of Sankofa on third-grade participants reading achievement, as measured by the MCA-Reading, but in favor of the comparison students after controlling for sex, year, and school (see Table 4). The estimated average treatment effect of the treated was -7.25 scale scores with SE = 3.60, t = -2.014, p = .045 (see Appendix B). However, this effect was not observed when comparing Sankofa students to all the potential SPPS students (unmatched comparison) using a mixed effects regression that controlled for the covariates used in PSM as well as the school (t = 0.98, df = 358.49, p = .327). In Years 1 and 2, there was no difference between Sankofa participant and comparison students on this measure.

Exploratory question 4: Do African-centered and African-theme texts change participants' attitudes about reading? Both parents' and staff's perceptions were positive with regard to using an African-centered approach to reading and to Sankofa itself. Findings from parents and Sankofa staff are reported in the sections below.

Parents' perceptions. When sharing their thoughts after hearing the phrase, "reading is important for children of African-descent," parents related to an African identity such as knowing about their culture and ancestors, knowledge about history and knowing about their backgrounds. One parent connected the importance of reading African-centered text to having positive role models. The parent said,

That's good because they don't really have any positive Black people on television or they don't really see too many Black children books.

Another parent related it to a developmental stage and competing with the racial majority group by saying,

They (children) know that they are children and can learn like Whites.

While concurring with the importance of reading African-centered text, one parent offered the following caveat. The parent said,

It's important but it doesn't cure everything. It doesn't tell very much.

All 10 parents in the study reported that reading about Africans was very meaningful to their children. Two parents connected the reading program to their children developing a positive racial identity. They said, "being happy with his race" and "it is good for them to know where they come from."

Another parent believed that reading about Africans helps children dispel negative images of their culture. One parent said, "Before, they (children) didn't know; some thought that they (Africans) were savages."

When speaking about the work of Sankofa tutors, one parent said, "...and it sounds like they (tutors) made it very fun. She (parent's child) comes home with all of these different pictures and books and packets and posters and things like that. They definitely made it fun but that's what the kids need."

Parents appreciated that their children were "gaining knowledge." They also appreciated the "value of children learning about their culture," and "being exposed to new knowledge."

In responding to the question about whether there are differences between reading Africancentered text and text about other races, parents had a range of perceptions with no majority agreement. Some parents noted the differences as "very meaningful" and allowed his/her child to "see people like yourself." Another parent described the difference as building on knowledge by saying, "If they know where they come from, they can learn about other cultures."

In contrast, another parent was definite that there was no difference and said, "It's about gaining knowledge." Yet, others had various views. One parent agreed that there was no difference in reading African-centered text but conceded that it may be meaningful to her daughter. She said,

Well maybe (for her, daughter) but she's so little. So, we kind don't really try to separate her. I'm not about everybody's different colors and all that kind of stuff. We do talk about all of them, not just our own, and equality and everyone is the same inside. I try not to isolate her too much at this point.

Overall, parents reported positive changes in their children's abilities since attending the Sankofa program. Some changes that they mentioned included: *positive attitude, reading better, writing*

better, improvement in math and pronunciations. Most parents identified children's reading as the area that had the most gains.

Parents' lessons learned were in the form of knowledge gained by their children. They expressed pleasure in the realization that their children "were exposed to reading about culture," "loved Black movies and history," "identified as African American," and "talking about what he read." One parent reported that Sankofa supported her/his daughter's reality by saying,

Oh I didn't know what the program (Sankofa) was or anything behind it. It was just explained to me as a program to help the kids enjoy reading. It wasn't called out that they were gonna be focusing on culture. I'm used to the schools having their version, if you will, of history so that's why I said it was refreshing. Then she was reading some other stuff that was more, I guess, real for lack of a better word.

Staff members' perceptions. All nine Sankofa staff members in the focus group firmly believed that an African-centered approach was the best tool for teaching reading to children of African descent. When entering the program, children were observed to have a "lack of awareness about their culture and race" and to "say that they are not connected to Africa." According to staff, after these same children were in Sankofa for a period of time, their "self-confidence increased," "they were more interested in content about their culture," and there was "excitement" about the content.

Tutors observed that children responded "positively to the texts used in the program." They also reported that children "liked looking at illustrations" in books that included people who looked like them and that the children could "visualize" themselves in the stories. Tutors also described how the program promotes children's self-knowledge by using (a) "opening and closing rituals," (b) "modeling language and belongingness by the tutors calling each other, brother and/or sister," (c) "wearing traditional African clothing," (d) "using call and response," and (c) "applying the Seven Principles of Kwanza."

Exploratory question 5: How does having (African/African American) tutors change parent involvement in improving child's literacy?

Parents' perceptions. Parents had mixed views about their own engagement in their children's learning. Mostly, parents characterized themselves as having *moderate* to *no* (engagement) regarding their own level of engagement in the Sankofa reading program. However, one parent was very interested and wanted to, "learn more about what they're doing and sitting down listening to what they're doing."

Most parents (n = 6) had interacted with their children's tutor. They communicated with the tutors through email, phone or text. Similarly, parents had different perceptions about who was the best tutor for their children. Some felt that tutors belonging to the same racial group as the students increased relatedness, while others said that it played no role in their engagement with their children's learning. One parent identified himself/herself as the best tutor for her/his child

by replying, "me" in response to the question. Other parents noted that it depended on the person's "knowledge of the topic."

Initially, parents shared no suggestions on how Sankofa could improve their children's reading. All said that the program is doing a "good job." When pressed with, "there is always room for improvement," some parents suggested more emphasis on "phonetic awareness," "involving parents," and "listening and writing skills."

Some parents provided other comments about Sankofa. One parent thought the initial start of the Sankofa was confusing. The parent said,

They (school personnel) thought they had the program but they didn't have transportation so parents had to go and get the kids. The kids didn't get on the school bus to go home. So, you know it was more of a technical or administrative problem not a program content problem.

Another parent commented on Sankofa's use of group-based instead of individual-based learning. The parent said,

Certain kids do need that because their reading skills ain't up to par like everybody else's. So, for them to really understand what's going on, I think some kids need one-on-one. They (Sankofa) could probably just take a couple minutes for some one-on-one schooling.

Staff members' perceptions. Sankofa staff had many suggestions to increase parent engagement such as, "making calls to parents as part of our routine," "involving tutors in home visits," being more vocal about the concept of "it takes a village," "connecting all aspects" of Sankofa for parents, and "being clear about their relationship with children." They reportedly believe that another benefit of the program is forming close relationships with their students and treating them as if they were fictive kin (blood related).

Staff members' recommended strategies for improving Sankofa included, using the "knowledge and wisdom we have gained to build on the African-centered approach." "developing and using in games." and using more materials that "relate to modern day Africa."

Implementation Evaluation for Year 4

Sankofa tutors. In order to be selected as a Sankofa tutor, an individual must have, at a minimum, experience as a tutor or working with children in the community. During Year 4, school year 2016 – 2017, 19 individuals served as tutors in the Sankofa reading program. Information about the tutors' qualifications is provided in Table 6 (p. 37). All tutors were either African or African American. Everyone had completed at least some college, one had a master's degree, eight had a bachelor's degree, and three had associate degrees. One tutor had a Minnesota teaching license in elementary education. This is similar to what was found for Years 1 through 3.

Table 6

Qualifications of Sankofa Tutors.

African/African	Minnesota	Highest Level	
American American	Teacher	of Education	Field(s) of Study
American	License	Attained	
			Literature, African, American
Yes	Yes (K-8)	Masters	studies communication,
			language arts
Yes	No	Bachelors	BA Film and Media Studies
			Education, Art,
Yes	No	Associate	Communications, Pursuing
			Bachelors in Education
Yes	No	Some College	Some College Criminal
168	110	Some Conege	Justice
Yes	No	Some College	Currently In process
Yes	No	Some College	Currently In process
Yes	No	Some College	Currently In process
Yes	No	Some College	Some College Criminal
103	110	Some Conege	Justice
Yes	No	Bachelors	BA Professional Education
103	110	Dachelois	Teaching
Yes	No	Associate	A.A.S. Paralegal Studies
Yes	No	Bachelors	BA Biochemistry
Yes	No	Bachelors	BA Psychology and Ethnic
168	110	Dachelois	Studies
Yes	No	Bachelors	BA Psychology
Yes	No	Bachelors	BA Fine Arts
Yes	No	High School	N/A

All tutors completed two or three trainings conducted annually by NdCAD staff on implementation of the Sankofa reading intervention. In-house training is given on implementing reading strategies as well as on culturally responsive strategies included in the Sankofa program. The required and additional trainings are listed below.

Required Trainings

- Organization overview/mission/purpose
- Literacy and identity connections and use of culturally specific leveled texts
- Triangulation of Sankofa curriculum-instruction-assessment
- Balanced literacy approach and implementing the Readers Workshop
- Conducting reading assessments and writing individual learning plans
- Developing daily activity plans and instructional resources/tools
- Teaching and modeling comprehension strategies
- Teaching phonemic awareness using the Spalding Phonogram Cards
- Strategies for implementing read-alouds and independent guided reading
- Cultural rituals and routines of the Sankofa reading program

- Strategies for building student self-regulation and behavior management
- Program policies, procedures, and expectations

Additional Trainings

- Understanding and building cultural resiliency in students
- Multiple intelligences and learning styles
- Understanding mental health needs/issues of students/families
- Understanding the program logic model
- Understanding learning resistance and student engagement strategies
- Parent engagement strategies

Tutors were selected for each team based on how well the individuals complement one another regarding their strengths in different learning styles such as visualizing and hands-on activities. The team of tutors for each Sankofa cohort met weekly to develop and discuss lesson plans, and the team debriefs after each session. When a special approach seemed needed for an individual child or group of children, the team held additional strategy meetings to devise an appropriate plan.

Question 1: Is the Sankofa program being implemented as intended? Does program content include the following elements? To answer Question 1, a form was created by Sankofa staff for tutors to record their plans for each lesson. An example lesson plan form is included in the Appendix F. The evaluators examined 274 completed lesson plans for Year 4. In addition, NdCAD staff observed three or four sessions each for seven cohorts for a total of 23 observations. During these observations, NdCAD used a checklist to ensure that the sessions were implemented as intended. Observation data by cohort were summarized across the cohorts and are presented in Table 7. These data are included in Appendix G.

Cultural teachings, rituals, and activities. One hundred percent of the lesson plans examined in Year 4 had opening and closing rituals. This was consistent across all four years of the SIF. Ninety-six percent of the sessions were observed to be using cultural routines and rituals and upon entry to the Sankofa session, the NdCAD observer was greeted 100% with Hotep.

Academic activities and cognitive skill building. One hundred percent of the lesson plans examined in Year 4 had whole group instruction on comprehension strategies and reflection and review questions. This was consistent across all four years of the SIF. One hundred percent of the observed sessions included learning objectives for the session.

African-centered, leveled texts. One hundred percent of the lesson plans examined in Year 4 used African-centered texts (including Grandpa's face, the Hickory Chair, and A is for Africa). This was consistent across all four years of the SIF. In addition, 78% of the sessions that were observed had culturally specific, leveled texts on display.

Instructional links with school day/standards (e.g., readers workshop, scaffold instruction). The use of African-centered, leveled texts or instructional links with school day/standards could not be determined by examining the lesson plans because the lesson plan form did not contain sections to note these items. However, in sessions that were observed by the

evaluator in Years 1 and 2, all texts were African centered, and scaffolding was noted with respect to previewing the text, presenting key vocabulary, reading the text section by section, and discussing each section.

Table 7
Summary of observation checklists across the observed cohorts.

	Number of sessions	Percent of sessions
	demonstrating item	demonstrating item
1. Does it look like planned program is going on?	22	96%
2. Is the Daily schedule posted clearly for all to see?	22	96%
3. Does the daily plan list the learning objectives for the session, e.g. Specific reading skills, strategies, activities and supplies?	23	100%
4. Are culturally rich program materials displayed in a planned and organized manner?	22	96%
5. Are there culturally specific leveled books displayed.	18	78%
6. Did you observe rich and meaningful dialog among/within the group e.g. adult/child and/or child/child?	23	100%
7. Was I greeted when I entered the classroom? Who greeted me? Was I greeted with Hotep?	23	100%
8. Are you observing cultural routines and rituals?	22	96%
9. Are connections to child's home and community being reinforced (through verbal, visual, etc)?	22	96%
10. Are the separate group activities going on?	23	100%
11. Is it clear what type of activities are taking place in each section of the room?	23	100%
12. Is the sign in/attendance sheet in the same place every session?	23	100%
13. Is the snack in the same place every session?	23	100%

Individual and small group tutoring. One hundred percent of the lesson plans examined in Year 4 had time allocated to small group tutoring and independent silent reading. This was consistent across all four years of the SIF.

Group dialogue, interactions, storytelling, and free books. One hundred percent of the sessions were observed to have rich and meaningful dialog among the group as well as group work.

To encourage reading at home, the Sankofa reading program gives away books free of charge to participating students to help them build their home libraries. The books that are gifted to

students are new or gently used books donated by the community. On the last session of each week, all Sankofa students who are in attendance that day receive three books. Each student is able to select books from a large collection. Based on records kept by NdCAD, a total of 6,525 books were given to the students in Year 4. On average, each child received approximately 48 books (or approximately 8 books per week per child). A total of 11,697 books were given away during the SIF.

Question 2: Is the Sankofa program delivery consistent with the intended program structure?

40.5 total hours of tutoring per student and three 90-minute tutoring sessions per week for a period of 9 weeks. It is the intention of the Sankofa reading program to schedule each cohort for a nine-week period with three 90-minute sessions per week, totaling 27 sessions and 40.5 program hours per cohort. In Year 4, the number of sessions ranged from 26 to 27 with a mean of 26 and the total number of sessions was 241 for Year 4. The number of program hours per cohort ranged from 39 to 40.5 with a mean of 40.2 (see Table 8).

Enrollment and Completion Rates by Cohort Location

Table 8

Cohort	Cohort Dates	Location	Enrollment	Cohort	Number	Program
Number				Completion	of	Hours
				Rate	Sankofa	
					Sessions	
1	5/20/13 -	Wilder	9	89%	27	40.5
	7/22/13	Center				
2	10/7/13 -	St. Paul	17	82%	32	40.5
	12/18/13	City School				
3	1/13/14 -	Maxfield	9	89%	27	40.5
	4/14/14	Magnet				
		Elementary				
4	2/3/14 -	St. Paul	7	100%	28	40.5
	4/15/14	City School				
5	5/27/14 -	NdCAD	5	60%	26	39.0
	7/23/14					
6	10/13/14 -	Jackson	14	100%	25	37.5
	12/17/14	Preparatory				
		Magnet				
7	10/20/14 -	St. Paul	13	85%	27	40.5
	1/8/15	City School				
8	11/3/14 -	NdCAD	6	100%	24	36.0
	1/14/15					
9	1/26/15 -	Jackson	18	83%	26	39.0
	3/25/15	Preparatory				
		Magnet				

Enrollment and Completion Rates by Cohort Location (Continued).

Table 8

Cohort	Cohort Dates	Location	Enrollment	Cohort	Number	Program
Number				Completion	of	Hours
				Rate	Sankofa	
					Sessions	
10	2/11/15 —	NdCAD	14	100%	27	40.5
	4/22/15	(Maxfield				
		Magnet				
	c 10 0 11 F	Elementary)				
11	6/30/15 –	NdCAD	5 ^a	60%	26	39
	8/26/15					
12	10/27/15 –	Saint Paul	12	8%	27	40.5
	02/02/16	City School				
13	11/10/15 –	Benjamin E	11	27%	27	40.5
	1/27/16	Mays				
14	2/22/16 –	NdCAD	15	53%	27	40.5
	4/27/16	In alvanu				
15	2/29/16 – 5/4/16	Jackson Elementary	16	44%	27	40.5
16	10/10/16-	Jackson	16	56%	27	40.5
10	12/14/16	Elementary	10	30%	21	40.3
17	10/10/16-	NdCAD	18	83%	27	40.5
17	12/7/16	NuCAD	10	0370	21	40.5
18	10/11/16-	B.E.Mays	25	76%	27	40.5
10	12/21/16	Elementary	23	7070	27	10.5
19	10/11/16-	St. Paul	18	67%	27	40.5
17	12/21/16	City School	10	0,7,0	_,	10.0
20	2/14/17-	St. Paul	6	100%	27	40.5
	4/26/17	City School	Ü	10070	_,	
21	2/21/17-	B.E.Mays	20	95%	26	39.0
	5/30/17	Elementary				
22	4/10/17-	Maxfield	13	92%	27	40.5
	5/24/17	Elementary				
23	4/10/17-	Jackson	8	88%	26	39.0
	6/10/17	Elementary				
24	6/29/17-	Liberty	19	89%	27	40.5
	8/24/17	Plaza				

Dosage, hours of programming received by each participant, was estimated by multiplying each participant's attendance rate by the number of program hours for their respective cohort. The average dosage ranged from 9.1 hours to 35.6 hours across cohorts. These results indicate that no student received the full dosage of programming indicated in Sankofa's logic model (40.5 hours).

Individual and small group instruction. Evaluator observations in Years 1 and 2 observed both individual and small group instruction. No observations by the evaluators was performed in Years 3 and 4 because of the high fidelity observed in Years 1 and 2. In addition, 100% of the sessions that NdCAD observed had separate group activities taking place.

Pre and post assessment. For all cohorts in Year 4 (as well as Years 1 through 3 of the SIF), NdCAD administered the DRA II to students at the beginning and end of the Sankofa program. The results from this assessment were presented in the impact evaluation results section above. In addition, in Year 4 for cohorts participating in the ITS, FBL data were collected on students 6 prior to weeks and 6 weeks after Sankofa (though no participant had complete data).

Individual learning plans. No data on individual learning plans was collected by the evaluator or provided by NdCAD or SPPN during any year of the SIF. However, all Sankofa tutors were required to undergo training to write individual learning plans and 96% of the NdCAD observed sessions appeared to be using a planned program but it was unclear if this extended to individual learning plans or was just for the group.

5:1 student/tutor ratio. The Sankofa tutors work in teams made up of one lead tutor and the number of assistant tutors needed to have a student:teacher ratio of 5:1. The student:teacher ratio observed during Year 4 ranged from 3:1 to 8:1. In Years 1 and 2, this ratio was observed to be 5:1 and in Year 3, it ranged from 5:1 to 6:1. This suggests that across the years, there was high fidelity with more variability observed in Year 4.

Question 3: Has the Sankofa program achieved its intended implementation output and goals? Throughout the SIF funding, recruitment efforts targeted children of African descent who had low reading scores according to the Mondo assessments, which were administered at the schools, and went to school in the SPPN or lived in the SPPN. The administrators (school principals) at each SPPN partner school have access to all school data and shared student data with SPPN in order to identify students for recruitment purposes. SPPN School Partnership Coordinators at Benjamin E. Mays Elementary, Jackson Elementary, and Maxfield Elementary assisted in identifying students who would be most likely to benefit from participation in Sankofa. School administrators and staff assisted in identifying students at Saint Paul City School (SPPN did not have a school partnership coordinator at Saint Paul City School yet during the SIF grant). School administrators then prepared a list of students they felt would benefit from the Sankofa reading program. The parents of students on the list were then contacted by SPPN School Partnership Coordinators regarding enrollment in the Sankofa reading program.

How many students participated in Sankofa? Between October 2016 and August 2017, Sankofa offered its reading program to nine cohorts of children enrolled in kindergarten through third grade. The total number of SIF-supported participants across the nine cohorts was 143 in Year (see Table 9). The original target for Year 4 was to serve 60 students in four cohorts. Six additional cohorts were added to Year 4 at the time the SEP was amended to accommodate the newly implemented ITS design. The revised Year 4 target was to serve 144 students in ten cohorts. Students in the tenth cohort (Cohort 25) were not included in this report because programming for Cohort 25 did not end until late 2017.

Table 9

Elementary Schools of Sankofa Participants for Years 1 through 4.

School	School District or Charter	Number of Participants	Percent of Participants
Years 1 and 2		Turtioipunts	Turticipants
Schools located in the Saint Paul Pron	nise Neighborhood:		
Jackson Elementary	St. Paul Public Schools	36	32%
Maxfield Elementary	St. Paul Public Schools	32	29%
St. Paul City School	Charter	34	30%
Schools not located in the Saint Paul I	Promise Neighborhood:		
Galtier Elementary	St. Paul Public Schools	1	1%
J.J. Hill Montessori Magnet	St. Paul Public Schools	1	1%
L'Etoile du Nord French Imm	St. Paul Public Schools	1	1%
Mississippi Creative Arts	St. Paul Public Schools	2	2%
Obama Elementary	St. Paul Public Schools	2	2%
Wellstone Elementary	St. Paul Public Schools	1	1%
Sheridan Arts Magnet	Minneapolis Public Schools	1	1%
Urban Academy Charter	Charter	1	1%
Year 3	Citat to	1	1/0
School located in the Saint Paul Prom	ise Neighborhood:		
Benjamin E. Mays Elementary	St. Paul Public Schools	11	19%
Jackson Elementary	St. Paul Public Schools	20	34%
Maxfield Elementary	St. Paul Public Schools	15	25%
Saint Paul City School	Charter	12	20%
School <i>not</i> located in the Saint Paul P.		12	2070
Bruce F Vento Elementary	St. Paul Public Schools	1	2%
Year 4	St. 1 au 1 uone Senoois	1	270
School located in the Saint Paul Prom	ise Neighborhood:		
Benjamin E. Mays Elementary	St. Paul Public Schools	46	32%
Jackson Elementary	St. Paul Public Schools	24	17%
Maxfield Elementary	St. Paul Public Schools	31	22%
Saint Paul City School	Charter	24	17%
School <i>not</i> located in the Saint Paul Paul Paul Paul Paul Paul Paul Paul	romise Neighborhood:		
Four Seasons Elementary	St. Paul Public Schools	2	1%
Expo/Harriet Elementary	St. Paul Public Schools	1	1%
Obama Elementary	St. Paul Public Schools	1	1%
Galtier Elementary	St. Paul Public Schools	1	1%
Capital Hill GT Magnet	St. Paul Public Schools	1	1%
Bancroft Elementary	Minneapolis Public Schools	2	1%
Higher Ground Academy	Charter	3	2%
Universal Academy	Charter	2	1%
Twin Cities International Elem.	Charter	1	1%
Dugsi Academy	Charter	1	1%
Total		311	

Nonetheless, the percent of students that were served was 100% of the original Year 4 target and 99% of the revised Year 4 target. In Year 4, SPPN offered parents gift cards for enrolling their

students in Sankofa and built a stronger relationship with the new Maxfield Elementary principal, which helped with enrollment in Year 4, which was high relative to Years 1 through 3. A total of 311 SIF-supported participants were served over the course of Years 1 through 4.

In Year 4, the 124 SIF-supported participants in Cohorts 16 through 23 came from one of the four different elementary schools located in the Saint Paul Promise Neighborhood (Benjamin E. Mays Elementary, Jackson Elementary, Maxfield Elementary, and Saint Paul City School). Benjamin E. Mays Elementary, Jackson Elementary, and Maxfield Elementary are in the SPPS district, and Saint Paul City School is a charter school. The 19 SIF-supported participants in Cohort 24 came from one of 11 different elementary schools, only one of which was located in the Saint Paul Promise Neighborhood (Benjamin E. Mays Elementary). The remaining 10 schools include five schools that were part of the SPPS district, one school that was part of the Minneapolis Public School district, and four charter schools located in Minneapolis or Saint Paul. School enrollment data were not available for four participants in Cohort 24. Table 9 includes further information about the schools the participants attended in Years 1 through 4.

Demographic data for Sankofa participants in Cohorts 16 through 24 were provided to the evaluators from NdCAD. Demographic characteristics are summarized in Table 10 (p. 45). More boys (55%) than girls (44%) participated in Sankofa in Year 4 (similar to Years 1 through 3). With respect to grade level, third graders made up the largest group, followed by first graders. There were relatively fewer kindergarten and second grade students. In Years 1 through 3, first graders were the largest group (for Year 3, second graders were tied as the largest group with first graders). All the students identified as African American in Years 3 and 4.

The Sankofa program was offered at six different locations during the time period October 2016 to August 2017 and during the time of the SIF (see Table 8). Four of the locations were elementary schools in the SPPN (Benjamin E. Mays Elementary, Jackson Elementary, Maxfield Elementary, and Saint Paul City School). The other locations were at the NdCAD facility on Fairview Avenue N. in Saint Paul (cohort 17) and at Liberty Plaza, an affordable housing development in Saint Paul (Cohort 24). All students in Cohort 17 were from Maxfield Elementary and the students in Cohort 24 were from eleven different schools (see above for more details about the schools Cohort 24 were enrolled in).

What percent of enrolled students completed the Sankofa program? The Sankofa program was designed to accommodate a maximum of 10 or 15 students in each cohort, depending on the location. The number of SIF-supported students per cohort ranged from 6 to 25 for Year 4 (see Table 9). In Table 9, we see that 83% of participants completed Sankofa, which was above the target of 80%, but that the completion rate ranged from 56% to 100% across the cohorts. Across all the years, a total of 216 Sankofa participants (70%) completed the Sankofa program. While this falls short of the target of 80%, it is likely because of Year 3, where the completion rate was 37% and was attributed to the increase levels of student mobility and homelessness of served participants.

Demographics of Sankofa Participants in all years.

Table 10

Demographic Characteristic	n	%
Years 1-2		
Gender $(n = 82)$		
Female	35	43%
Male	47	57%
Grade Level ($n = 100$)		
K	26	26%
1	36	36%
2	22	22%
3	16	16%
Ethnicity $(n = 96)$		
African	92	96%
White	1	1%
Native American	2	2%
Mexican	1	1%
Year 3		
Gender $(n = 59)$		
Female	24	41%
Male	35	59%
Grade Level $(n = 58)$		
K	7	12%
1	18	31%
2	18	31%
3	15	26%
Ethnicity $(n = 59)$		
African American	59	100%
Years 4		
Gender $(N = 143)$		
Female	64	45%
Male	79	55%
Grade Level ($N = 143$)		
K	28	20%
1	39	27%
2	30	21%
3	46	32%
Ethnicity ($N = 143$)		
African American	143	100%

What percent of parents received weekly communications? Communication with parents is a very important part of the Sankofa program. To ensure that 100% of Sankofa students' parents receive weekly communications, the lead tutor prepares a hand-written note for each child that is given to the child on the last session of each week to take home to his or her

parents. The lead tutor includes information about the strategies that were covered that week, the strengths exhibited by the child, and what the parents might work on at home with the child. The content of messages to the parents comes primarily from the observation notebooks that tutors take to every session. When observing and interacting with the students, the tutors especially look for increases in engagement, increases in confidence, and greater enjoyment of learning to read. In special cases where engagement levels remain low, the team along with a program administrator will phone the parent to discuss the situation and identify appropriate strategies.

The tutors also connected with parents if they pick up their children after the sessions. The parents are invited to come into the building to talk to the tutors about their child. This is seen as an opportunity for the tutors to acknowledge the important role played by the parents and to encourage their active participation in helping their child acquire reading skills.

One-thousand, three-hundred and five notes were sent to parents of children attending Cohorts 16 through 24. This results in an average of nine notes per student. This is right on the target of one note per child per week or a total of nine communications during Sankofa. Therefore, parent communication appeared to be implemented with a high degree of fidelity and was similar across the four years of SIF funding.

Question 4: What program services are received by the comparison groups? Not addressed during the evaluation (see Methods section).

Question 5: What are reasons why participants do not complete Sankofa? Several reasons were provided to SPPN staff as to why students did not complete Sankofa. This included that the child was homeless (n = 2), that the child had enrolled in another program (n = 2), that language was a barrier (n = 1), that transportation was a barrier (n = 2), and that they left the school or state (n = 2). For one of the participants where transportation was a barrier, SPPN successfully addressed this and the child was able to complete the Sankofa program. One participant that left a cohort re-enrolled in later Sankofa cohort. Additionally, many of the parents/guardians of the participants who left the program did not provide a reason.

Question 6: What is the average number of follow-ups (by NdCAD tutors and/or SPPN School Partnership Coordinators) before participants discontinue the program? The average number of follow-ups made by SPPN or NdCAD staff was 0.826 where both the median and mode number of follow-ups were 1, respectively. The number of follows-up ranged from 0 to 2.

Summary of the Findings

Summary of the Impact Evaluation for Years 3 and 4

Confirmatory question 1: Do children who participate in Sankofa exhibit increased reading performance as identified by pre-post program scores on the Developmental Reading Assessment (DRA)?

- 146 Sankofa participants in Years 3 and 4 provided DRA II data.
- 90% increased their DRA II performance by at least one reading level surpassing the goal of 80% in the logic model.
- This improvement rate was similar to Years 1 and 2 (96% improvement rate)
- For all grades, the percent of participants below SPPS soft target decreased from pre to post.

Confirmatory question 2: Do children who participate in Sankofa exhibit greater levels of social emotional development such as confidence in reading after the nine-week program?

- The majority of parents noted an increase in positive behavior or attitude in their children's behavior.
- 80% of parents reported their children had strong connections to their family and community.
- Parents noted excitement about reading and writing, and school more generally.

Confirmatory question 3: Do children who participate in Sankofa exhibit greater reading proficiency as identified by Mondo Bookshop Assessments after the nine-week program than similar children who do not participate in any literacy development program or similar children who participate in a non-culturally-specific literacy development program?

- Only partially addressed in Years 1 and 2 and not addressed in Years 3 and 4 as it was removed from the revised SEP.
- Compared to a SPPS derived matched-comparison group in Years 1 and 2, there was no evidence of an effect of Sankofa as measured by the Oral Language and Benchmark Text Level/Comprehension.
- For the Oral Language assessment, a small-to-medium effect size for Oral Language was found suggesting the analysis might have been underpowered (n = 68).

Confirmatory question 4: Do children who participate in Sankofa exhibit greater rates of literacy growth after completing Sankofa, compared with their growth before program participation, according to FastBridge Learning reading measures?

 No evidence of an effect of Sankofa using an ITS design with FBL's Letter Words, Sight Words, and Decodable Words assessments (moderate level of evidence design). Initially a significant slope effect was found for Decodable Words but this effect was no longer

- significant after correcting for multiple comparisons and was not corroborated by the multiple imputation pooled analysis.
- No participants provided complete pre-Sankofa and post-Sankofa data on these assessments.
- The non-equivalent dependent variable, school attendance, showed an increase after Sankofa (Figure 5).

Exploratory question 1: How do children who complete Sankofa perform on third-grade reading proficiency measures?

- MCA data were available on 39 Sankofa participants.
- 27% of these Sankofa participants partially met MCA proficiency and 5% met MCA proficiency.
- The average MCA scale score for Sankofa participants was 323.5 (which lies between the 11th and 12th percentile).
- Sankofa participants ranged from the 1st to the 68th percentile on the MCA scale score.

Exploratory question 2: Do children who complete Sankofa perform better on third-grade reading proficiency measures than similar children who do not participate in any literacy development program or similar children who participate in a non-culturally-specific literacy development program?

• Was not addressed during the evaluation.

Exploratory question 3: Do children who complete Sankofa perform better on third-grade reading proficiency measures than similar children in Saint Paul Public Schools?

- In Years 1 and 2, no difference was found, whereas in Years 3 and 4, a significant difference was found.
- The MCA-Reading scale score analysis found that Sankofa participants scored significantly lower than their matched comparisons from SPPS.
- On average, Sankofa participants were expected to score 7.25 points lower on the MCA than the non-Sankofa SPPS comparison.
- This finding was not observed in the unmatched analysis.

Exploratory question 4: Do African-centered and African-theme texts change participants' attitudes about reading?

- Both parents' and staff's perceptions were positive with regards to using an Africancentered approach to reading and to Sankofa itself.
- Parents felt it was meaningful that their children were reading about Africans.
- Parents had a range of perceptions, with no majority agreement, regarding whether there are differences between reading African-centered text and text about other races.
- Parents were pleased that their children were reading about their culture.

• Sankofa staff members in the focus group firmly believed that an African-centered approach was the best tool for teaching reading to children of African descent.

Exploratory question 5: How does having (African/African American) tutors change parent involvement in improving child's literacy?

- Parents had mixed views about their own engagement in their children's learning and who was the best tutor for their child(ren).
- Parents described their engagement from moderate to none.

Summary of the Implementation Evaluation for Year 4

Question 1: Is the Sankofa program being implemented as intended? Does program content include the following elements?

- The Sankofa program continues to be implemented as intended.
- Examination of lesson plans and observation checklists showed evidence of
 - o Cultural teachings, rituals, and activities being used.
 - o Academic activities and cognitive skill building.
 - o The use of African-centered, leveled texts.
 - o Individual and small group tutoring
 - o Group dialogue and providing free books to Sankofa participants
- While not directly observed in Year 4, previous evaluator observations in Years 1 and 2 found evidence of scaffolding.
- The implementation of Sankofa tracks closely the logic model presented in Figure 3.

Question 2: Is the Sankofa program delivery consistent with the intended program structure?

- The Sankofa program continues to be delivered consistently with its intended program structure.
- In Year 4, the number of sessions range from 15 to 27 with a mean of 24. The number of program hours per session ranged from 22.5 to 40.5 with a mean of 36.7 and the dosage ranged from 9.1 to 35.6 hours.
- Pre- and post-Sankofa DRA II assessments were administered to most Sankofa participants and many Sankofa participants participated in the ITS study.
- During Year 4, the student to teacher ratio ranged from 3:1 to 8:1.

Question 3: Has the Sankofa program achieved its intended implementation output and goals?

- In Year 4, Sankofa was delivered to 143 students. The original target for Year 4 was 60, which was later revised to 147 to accommodate the ITS study.
- Cohorts were held at 6 different locations in the SPPN.

- One hundred percent of participants identified as African American and there were slightly more male than female participants.
- The completion rate in Year 4 was 83%, which was above the target of 80%. This was also well above the completion rate of 37% in Year 3.
- One-thousand, three-hundred and five notes were sent to parents of children attending cohorts 16 through 24. This results in an average of 9 notes per student, which implies that parent communication was implemented with a high degree of fidelity and was similar across the four years of SIF funding.

Question 4: What program services are received by the comparison groups?

• Was not addressed during the evaluation due to unavailable data.

Question 5: What are reasons why participants do not complete Sankofa?

- Homelessness, enrolling in other programs, leaving the school or state, and barriers
 associated with language and transportation were identified as reasons participants did
 not complete Sankofa.
- For one of the participants where transportation was a barrier, SPPN was able to successfully address this and the participant completed Sankofa.

Question 6: What is the average number of follow-ups (by NdCAD tutors and/or SPPN School Partnership Coordinators) before participants discontinue the program?

- The average number of follow-ups that was made by SPPN or NdCAD staff was 0.826 where both the median and mode number of follow-ups were 1, respectively.
- The number of follows-up ranged from 0 to 2.

Interpretations and Limitations

The impact evaluation found a significant effect of Sankofa on the DRA II (preliminary level of evidence design). The preliminary evidence design, however, lacked a comparison group, either a matched-comparison or comparing participants with themselves over time, and suffered from limited internal validity as the program effect could have been caused by external factors or just represent normative growth.

The impact evaluation found a significant effect of Sankofa on growth in reading for the Decodable Words assessment using an ITS design (moderate level of evidence design) but not for the Letter Sounds or Sight Word assessments. However, this effect for Decodable Words was not significant after correcting for multiple comparisons (suggesting this finding could have been obtained by chance) and it was not corroborated by the multiple imputation pooled analysis. For the exploratory matched-comparison design, there were no effects of Sankofa on the MCA-Reading.

The purpose of this section is to provide some insight into the interpretations and limitations of these findings.

Regarding program implementation, was the program implement as intended? Based on the logic model presented in Figure 3, the answer is largely yes. Sankofa has been consistently shown to be implemented during the SIF period with high fidelity (often exceeding their goals). Across the four years, the Sankofa program has utilized cultural teachings and rituals with academic activities. They have used African-centered level texts, instructional links, and scaffolding. The program has incorporated group dialogue, provided opportunities for child-to-child and child-to-tutor interactions, storytelling, and NdCAD has given an immense, and extremely laudably, number of books to their participants. Staff have administered the DRA II to participants entering and completing Sankofa and while it was not directly observed by the evaluators, the tutors were required to undergoing training in writing individual learning plans, which they then likely tailored to their participants' needs.

The largest variation in the Sankofa program has been around the actual dosage that participants have received versus the intended dosage (intended to be 40.5 hours), and the variation in the student to tutor ratio (intended to be 5:1). Of the two, the variation in the student to tutor ratio has been much less. However, each of these deviations, particularly received dosage, could accumulate to hinder one's ability to detect program effects across all of the evaluation designs. If full dosage is critical for receiving the Sankofa program, then deviation from this should dramatically reduce the program's impact.

Sankofa serves a very heterogeneous reading population and it is increasingly serving participants with greater needs, because of homelessness and heightened mobility. Therefore, there might need to be some alterations in how the program is delivered to effectively cater to these diverse learning needs and there may need to be new strategies to bolster attendance, and subsequently ensure that participants receive the full programming.

Regarding the research design, was it implemented as intended? Given our targeted level of evidence (moderate) and the use of quasi-experimental designs, our concerns with evaluating this question surrounds validity, specifically internal validity. Validity ultimately refers to the extent to which our findings are trustworthy, and internal validity is concerned with the extent that our research design was properly implemented to support the nature of our claims

For the SIF evaluation, Sankofa was expected to target the lowest performing readers. However, during the SIF, Sankofa served students with a wide range of reading abilities (e.g., see the MCA and DRA II analyses) and it is possible that serving students with such a myriad of abilities could cloud the evaluation's ability to detect an effect. However, as was noted earlier, SPPN was recruiting low performing students based on the Mondo. This implies disagreement about a student's reading abilities on these assessments. Outside of the SIF, Sankofa serves all students and there is nothing in their logic model that requires Sankofa participants to be low performing readers. Therefore, it is unclear the extent to which this is a validity threat outside of the evaluation.

In this evaluation, we used two quasi-experimental designs, a matched-comparison and an ITS design. Initially, a matched-comparison was used in Years 1 and 2 that compared the performance of SPPS students to Sankofa participants on the Mondo Bookshop Assessment. As noted at the time of the revised SEP, the use of the Mondo Bookshop Assessment as a summative assessment is not a valid use and instead this assessment was intended to be used for curriculum-development. Therefore, we removed the Mondo Bookshop Assessment in the revised SEP. In addition, we were unable to create the counterfactual comparison groups that we originally proposed because the data were not collected by SPPS or from a program partner.

Throughout the SIF, we compared the performance of 3rd graders in SPPS to 3rd grade participants in Sankofa on the MCA-Reading. In Years 1 and 2, we found no effect, while in Years 3 and 4, we found a significant, negative effect of Sankofa. How valid is this finding?

First, this effect was exploratory in nature. There was nothing in the logic model to directly link Sankofa participation to MCA-Reading scores. Therefore, it would be an improper use of this analysis to evaluate the program based on this effect. Second, for a matched-comparison to provide an unbiased estimate of a treatment effect, we need variables in our PSM that are related to the treatment (Sankofa) or the outcome measure (MCA-Reading) and preferably both. The variables included in our model were not derived by theory, but instead by their availability. In our PSM, the variables that were included were the variables that SPPS collects data on and not necessarily variables related to participation in Sankofa (or a similar reading or cultural intervention) or achievement. The more these variables related to the treatment and/or the outcome, the less bias there should be in our estimate of the treatment effect. For the Mondo Bookshop Assessment, we were unable to include a prior measure of achievement and for the MCA, we used the Mondo Bookshop Assessment as our prior measure. However, as noted earlier, this assessment was administered largely on an as-needed, formative basis, so students in SPPS have varied amounts of data available for this assessment and varied opportunities to provide this data.

For the matched comparison analyses, we included only students in SPPS and not in Saint Paul City School as there was no common prior achievement measure across the schools. In an ideal design, all students at SPPS and Saint Paul City School would have been given a common reading assessment prior to Sankofa and this would have been used as our prior achievement variable in our PSM model. However, a common assessment was not used at the two locations making it possible that the Sankofa and comparison students had significantly different reading abilities that were not adjusted for during our analysis and the exclusion of the Saint Paul City School students would have reduced the generalizability of any significant findings.

Finally, it is unclear if the MCA is a malleable enough outcome for a program with a duration of 9 weeks to affect. If the Sankofa program had a meaningful "bump" in reading that occurred during the program and persisted for only a short while afterward, then the MCA might not be able to detect a difference as it is administered in the spring and many Sankofa participants could have completed Sankofa almost a year earlier and this effect may have disappeared.

For these reasons, as well as the exploratory nature of this impact question, any significant findings based on the MCA may be dubious and should be interpreted with caution.

Because of our shortcomings with a matched-comparison design, in the final year of the SIF, an ITS was proposed and implemented. The ITS used FBL's assessments, which are intended to be used for progress monitoring. Unlike the Mondo Book Assessment and the MCA, the use of the FBL measures for assessing the impact of a 9-week reading program is a clearly valid and intended use. However, there were no significant effects found in the ITS study after correcting for multiple comparisons.

Why did the ITS fail to find a significant treatment effect for the measures? Most importantly, the implementation of the ITS was logistically difficult. It was difficult to identify prospective participants far enough in advance to assess them six weeks prior to Sankofa and then to track them long enough to assess them six weeks after Sankofa. Because of this no participant had complete data (i.e., six assessments both pre- and post-Sankofa). Assessing participants six times over six weeks put a burden on the participant, the assessor, and the participant's family because special arrangements were needed just for their child to be assessed for a minute (the length of time it takes to administer the FBL assessments) because SPPS did not allow NdCAD to collect data in their schools. Finally, because the ITS was implemented in the final year, little time was available to work out these logistical hurdles and combat them before going "live."

The extent to which the missing data were ignorable for both the ITS and the matched-comparisons has important consequences. If participants were missing data on these measures just because they were low on the FBL assessments, Mondo Bookshop Assessment, or the MCA then this introduces bias into our estimates. Given the extent of the missingness for all our measures, the importance of this cannot be understated.

Arguably, missing data was the single largest internal validity threat. While we used multiple imputation to attempt to address missingness, it could be argued, similar to the matched comparison analysis, that because the variables included in the multiple imputation model were

driven by availability and not by theory that this analysis had limited statistical validity. In addition, regardless of the burn-in period used for the multiple imputation model, the chains failed to reach stationarity suggesting that the model may not have converged.

While the ITS failed to find a significant treatment effect for all the measures and was hindered with missingness, it still represented the best opportunity for obtaining moderate-evidence. Why? First, only the FBL assessment used in the ITS has been shown to be valid for progress monitoring over a short-time frame. Second, the ITS allowed us to skirt the issue of creating a matched-comparison counterfactual group by comparing Sankofa participants to themselves. Third, with complete data, it is probable, though not guaranteed, that we would have detected an effect of Sankofa for Letter Sounds, Sight Words, and Decodable Words.

Finally, the utility of daily school attendance as a nonequivalent dependent variable is questionable. This variable is one of the short-term outcomes in the logic model that Sankofa was expected to improve, which did happen (Figure 3). However, because it is an outcome for the program, it is not considered nonequivalent. In this evaluation, we did not separately measure a nonequivalent dependent variable and instead relied on SPPS and Saint Paul City School to provide that data. However, there was no guarantee that the data provided would have been an appropriate nonequivalent dependent variable. The design could be made stronger by using a nonequivalent dependent variable that is not already an outcome expected to be affected by Sankofa. Instead, an appropriate variable would relate to an overall increase in the level of student achievement (such as mathematics achievement or stable housing) but not expected to be affected by participating in Sankofa.

At this point, a significant effect of Sankofa on reading proficiency was found only for the DRA II (a preliminary level of evidence design). Based on this evaluation, our recommendation is to continue developing strategies to ensure high attendance and full dosage during Sankofa, and to continue to work at developing an evaluation framework that can validly measure the impact of Sankofa, and is practically feasible to implement (i.e., that minimizes missing data and subsequently maintains high internal validity). The framework needs to also include access to data that can be collected by the program or the evaluation and does not depend on the schools.

Conclusions and Recommendations

Impact Evaluation for Years 3 and 4

The confirmatory impact evaluation for Years 3 and 4 found the following:

- Evidence of an effect of Sankofa using a pre/post design with the DRA II as the outcome.
 - o 90% of Sankofa participants increased by at least one reading level (preliminary level of evidence design).
- Parents reported an increase in positive behavior or attitude in their children
 - o 80% of parents reported that their children had stronger connections to their family and community since participating in Sankofa.
- No evidence of an effect of Sankofa using an ITS design with FBL's Letter Words, Sight Words, and Decodable Words assessments (moderate level of evidence design).
 - Initially a significant slope effect was found for Decodable Words but this effect was no longer significant after correcting for multiple comparisons and was not corroborated by the multiple imputation pooled analysis.
- The ITS design had substantial missing data.

The exploratory impact evaluation for Years 3 and 4 found the following:

- On the MCA, 27% of Sankofa participants partially met MCA proficiency and 5% met MCA proficiency. Sankofa participants ranged from the 1st to the 68th percentile on the MCA scale score.
- A statistically significant effect on the MCA found that Sankofa participants were expected to score 7.25 points lower on the MCA than the non-Sankofa SPPS comparison. Given that it is unclear that Sankofa and comparison students were balanced on a valid prior achievement measure, there is limited statistical validity to this finding.
- This effect was not observed in the unmatched analysis.

The qualitative study results showed that parents' and staff's perceptions were positive with regards to the African-centered approach used by NdCAD; that parents found it meaningful to read about Africans and one's culture; and that parents expressed a range of opinions regarding the importance of reading African-centered text relative to texts on other races. Finally, parents expressed mixed views regarding who the best tutor for their child was.

Based on the impact evaluation for Years 3 and 4, the following recommendations are provided:

- Continue to address logistical barriers that hinder data collection that make the use of an ITS design difficult. The ITS approach was welcomed by NdCAD and SPPN staff and the ITS design, when combined with robust data collection and a valid outcome measure (such as the FBL measures), represents the best opportunity to observe a moderate-level of evidence.
- 2. NdCAD staff may consider using FBL measures in lieu of the DRA II to track progress before, during, and/or after Sankofa. While this approach would not

necessarily need to be as involved as the ITS design utilized for the SIF, it would allow NdCAD to collect data that goes beyond the DRA II and would allow them to measure growth. Using the FBL measures during Sankofa could allow NdCAD to understand for which participants Sankofa is having the strongest effects and which participants continue to struggle. This, when coupled with individualized learning plans, could make the impact of Sankofa larger.

- 3. If the ITS proves to be too logistically difficult to implement, future considerations could involve regression discontinuity where if prospective participants fall below a certain reading threshold they are assigned to Sankofa and if they are above it they are not. However, this would involve working closely with SPPS to ensure that this approach would be feasible and that the outcome measure used to estimate the treatment effect is appropriate.
- 4. The qualitative study provided the following recommendations for Sankofa regarding the two exploratory questions:
 - a. Allow Sankofa staff to conduct all aspects of recruiting, screening and enrolling children into Sankofa. Parents may be getting mixed information about it.
 - b. Continue using the African-centered approach. Parents appreciate that their children were learning about their race, history and culture. The African-centered approach is working well for the majority of the parents.
 - c. Consider allowing tutors to make home visits. The benefits may result from tutors having a built-in contact with parent.
 - d. Conduct an annual evaluation of all aspects of Sankofa and develop a method to share the findings with parents.
 - e. Develop a strategy for former students/graduates of Sankofa and their parents to remain connected to the program.

Implementation Evaluation for Year 4

The Sankofa program continues to be implemented with high fidelity. The program content and delivery closely resemble that proposed in the logic model. The biggest hurdles for implementation appeared to be around the number of hours that participants are actually receiving.

Based on the implementation evaluation, the following recommendations are provided:

- 1. Consider developing new, or utilizing a diversity of, strategies to keep attendance high. Because no participant received the full dosage of 40.5 hours, this likely reduced the impact of Sankofa on its participants. If the full dosage of 40.5 hours is not necessary, then modifying the logic model is recommended.
- 2. Given the range of reading abilities of participants entering Sankofa, additional tutor trainings that focus on working with readers with varied abilities might be beneficial.

3.	As the number of participants that Sankofa serves that are homeless or highly mobile increases, it might be useful to develop a tutoring training module focused on working with these children as they may have special reading, social, emotional, and behavioral needs.

References

- Barnes, E. J. (1991). The Black community as the source of positive self-concept for Black children: A theoretical perspective. *In* R. Jones (*Ed.*), *Black psychology* (*pp*. 667-692). Berkeley, CA: Cobb and Henry.
- Benjamini, Y., & Hochberg, Y. (1995). Controlling the false discovery rate: a practical and powerful approach to multiple testing. *Journal of the Royal Statistical Society. Series B* (*Methodological*), 289–300.
- Caliendo, M., & Kopeinig, S. (2008). Some practical guidance for the implementation of propensity score matching. *Journal of Economic Surveys*, 22(1), 31–72.
- Corporation for National & Community Service. (2013, May). Social innovation fund: Content requirements for subgrantee evaluation plans.
- Dehejia, R. H., & Wahba, S. (2002). Propensity score-matching methods for nonexperimental causal studies. *Review of Economics and Statistics*, 84(1), 151–161.
- Diggle, P., Heagerty, P.J., Liang, K.-Y., & Zeger, S. L. (2002). *Analysis of longitudinal data*. Oxford University Press.
- DRA2 K-8 Technical Manual (2nd ed.). 2011. Boston, MA: Pearson.
- Fitzmaurice, G. M., Laird, N. M., & Ware, J. H. (2004). *Applied longitudinal analysis*. John Wiley & Sons.
- Grills, C., Cooke, D., Douglas, J., Subica, A., Villanueva, S., & Hudson, B. (2015). Culture, racial socialization, and positive African American youth development. *Journal of Black Psychology*, *1-31*, Retrieved from DOI: 10.1177/0095798415578004
- Hall, N., & Gray, K. (2010). NdCAD's Sankofa Reading Tutorial Program and "Parent Power" Literacy & Advocacy Training Workshops: Evaluation report. St. Paul, MN: GrayHall LLP.
- Hill, P. W., & Jaggar, A. M. (2003). An Evaluation Report on the Impact of Mondo Publishing's Building Essential Literacy (BEL) Design and Bookshop Reading Program 1998–1999 and 1999–2000 School Years. *Unpublished Manuscript*. Retrieved from http://mon.cuesta.com/Pages/articles/Hill.Jaggar.Supovitz.pdf
- Kuznetsova, A., Brockhoff, P. B., & Christensen, R. H. B. (2017). ImerTest Package: Tests in Linear Mixed Effects Models. *Journal of Statistical Software*, 82(13), 1–26. https://doi.org/10.18637/jss.v082.i13
- Ladson-Billings, G. (1995). Toward a theory of culturally relevant pedagogy. *American Educational Research Journal*, 32(3), 465-491.

- Ladson-Billings, G. (2000). Fighting for our lives. *Journal of Teacher Education*, 53(1), 206.
- Ladson-Billings, G. (2011). Boyz to men? Teaching to restore Black boys' childhood. *Race Ethnicity and Education*, 14(1), 7-15.
- Ladson-Billings, G. (2012). Through a glass darkly: The persistence of race in education research and scholarship. *Educational Researcher*, 41(4),115-120.
- Minnesota Department of Education. (2009, December). *Technical Manual for Minnesota's Title I and Title III Assessments*. Roseville, MN: Minnesota Department of Education.
- National Center on Intensive Intervention. (2017, January 16). *Academic Progress Monitoring Tool Charts*. http://www.intensiveintervention.org/resources/tools-charts.
- Northwest Evaluation Association (2018). Measures of Academic Progress. https://www.nwea.org.
- Pinheiro, J., & Bates, D. (2000). *Mixed-effects models in S and S-PLUS*. Springer Science & Business Media. R.
- Pressley, M., Raphael, L., Gallagher, J. D., & DiBella, J. (2004). Providence-St. Mel School: How a school that works for African American students works. *Journal of Educational Psychology*, 96(2), 216-235.
- Rubin, D. B. (1974). Estimating causal effects of treatments in randomized and nonrandomized studies. *Journal of Educational Psychology*, 66(5), 688.
- Shadish, W. R., Cook, T. D., & Campbell, D. T. (2002). *Experimental and quasi-experimental designs for generalized causal inference*. Houghton, Mifflin.
- Supovitz, J. (2003). External Review of the Evaluation of Mondo Publishing's Building Essential Literacy (BEL) Design and Bookshop Reading Program. *Unpublished Manuscript*.
- Taylor, B.M., Pearson, P.D., Clark, K., & Walpole, S. (2000). Effective schools and accomplished teachers: Lessons about primary-grade reading instruction in low-income schools. *The Elementary School Journal*, 101(2), 121-165.
- Zhao, J. H., & Schafer, J. L. (2016). pan: Multiple imputation for multivariate panel or clustered data. R package version 1.4.

Appendix A Assessments

Developmental Reading Assessment: Second Edition

Reliability. The DRA II technical manual states that "triangulation of the multiple forms of reliability analyses that were conducted shows that the DRA II is a reliable measure in that it produces stable, consistent results over time, different raters, and different samples of work or content. Specifically, it demonstrates moderate to high internal consistency reliability, parallel equivalence, test-retest reliability, and inter-rater reliability. While the results demonstrate that the DRA II has relatively little measurement error associated with content, time, and rater, it is important that examiners follow the administration and scoring guidelines provided in the DRA II Kits. Furthermore, it is highly recommended that examiners participate in professional development from Pearson professionals in order to further minimize any measurement error."

Validity. The DRA II technical manual states that "it is imperative that a test is valid in order for the results to be accurately applied and interpreted. The findings presented on content-related validity, criterion-related validity and construct validity provide support for the validity of the DRA II. Specifically, the data show that the DRA II subtests measure those constructs it was designed to measure – oral fluency and reading comprehension. Elaborating on this, results show that oral fluency and reading comprehension, as measured by the DRA II, represent unique dimensions of reading. However, results also show that these two subtests are correlated with one another at a moderate level – as would be expected since comprehension and fluency are both related facets of reading which are highly correlated to the total reading score. Additionally, results indicate that fluency and reading comprehension measures are developmental in nature, as demonstrated by the strong correlations with age, and that accuracy is influenced, as predicted, by reading more challenging texts. In sum, the results presented indicate that the DRA II is a valid measure that can accurately measure students' oral reading fluency and comprehension level."

The technical manual can be download at http://assets.pearsonschool.com/asset_mgr/current/20139/DRA II_Technical_Manual_2012.pdf.

Mondo Bookshop Assessments

Psychometric information. Because the assessments were designed for curriculum development, Mondo Education Publishing has not conducted reliability or validity testing. However, one study that examined the effectiveness of the curriculum did calculate the assessments' reliability and validity within the specific research study. In the study, assessments in the control schools were administered by independent evaluators, while assessments in treatment schools were administered by the student's teacher. Each year, a random sample of students in treatment schools was re-tested by independent evaluators to determine the reliability and validity of the teachers' assessments (Supovitz, 2003). Interrater reliability was at 0.8 or above for all measures except Concepts About Print. According to the study, "The mean scores of classroom teachers and independent assessors are also very comparable, with differences largely accounted for by the fact that retesting typically took place some three weeks after the initial testing, explaining the slightly higher scores of the independent assessors (Hill & Jaggar, 2003)."

Minnesota Comprehensive Assessments

Psychometric information. The MCAs have gone through the federal review process and the U.S. Department of Education has approved the use of the MCA's in Minnesota. The reliability for the MCA-II (MCA-III data are not yet available) ranges from .89 to .92 depending on the grade. The Minnesota Department of Education (MDE) uses a number of methods to document validity. Content validity is achieved through an item creation and selection process and through the bookmarking process used by MDE to set the scores. In addition, MDE uses a model fitting and scaling process to assess unidimensionality. Because it is a criterion-referenced assessment, the MCA's are lacking concurrent or predictive validity studies. They do have classification accuracy values that range from 72.9 to 75.0 (Minnesota Department of Education, 2009).

FastBridge Learning. LLC (FASTTM) Assessments

Description. The Formative Assessment System for Teachers (FASTTM) is a suite of cloud-based technology-enhanced assessments with a built-in database and automated reports (fastbridge.org). The tools are used in more than 30 states and 8,800,000 test administrations were conducted in the 2015-16 academic year alone. FASTTM was initially developed with funding from IES and OSEP. It is a system of assessments and online services that offers a rigorously-developed, highly efficient, instructionally relevant, easy-to-implement, and user-friendly solution to gather and process data to guide instruction for K–12 students by providing universal screening and progress monitoring designed to screen, diagnose, monitor and inform instruction. The suite of assessments includes earlyReading, CBMreading, AUTOreading, aReading, COMPefficiency, as well as many math, and behavioral measures. An independent survey of teachers (n = 2689 responses) by the Iowa Department of Education indicated that 86% of educators believe FAST "may" or "will definitely support increased student achievement" (Greg Felderman, Iowa Department of Education, personal communication, January 2015).

Psychometric information. For the evaluation, we used letters sounds with K. CBMreading and sight words with grades 1-3, decodable words with grades 2-3. Psychometric and use information for these measures are listed on the academic progress monitoring section of the National Center on Intensive Intervention's (NCII) website (NCII, 2017). These measures have all been shown to have adequate reliability of performance level score (median alternate form reliabilities ranging from 0.74-0.94 for CBMreading; 0.89 for letters sounds; 0.98 for decodable words; and 0.94 for sight words), reliability of slope (median reliabilities of 0.70, 0.83, and 0.70 for grades 1-3 for CBMreading; 0.59 for letter sounds; 0.75 for decodable words; and 0.90 for sight words) and validity of performance level (NCII, 2017). Please see NCII's website for more specific validity evidence broken down by the FastBridge measure and grade.

Appendix B Propensity Score Matching for Years 3 and 4

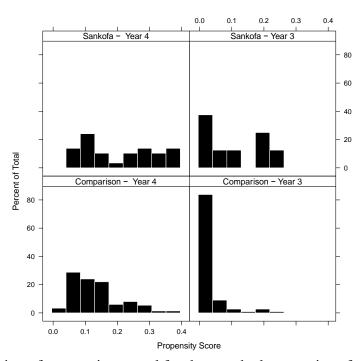


Figure B1. Distribution of propensity scored for the matched comparison for Years 3 and 4.

Baseline Equivalency of Covariates Used in Propensity Score Matching for Years 3 and 4.

Table B1

Standardized Mean Covariates Standardized Mean Differences Before Matching Differences After Matching Year 3 Propensity Score 1.0001 0.0347 Black Grade Level 0.5477 0.0000 LEP flag No LEP flag Yes 0.0000 0.5477 Same School 0.7304 0.0120 0.2475^{1} Female 0.0475 Male 0.0475 0.2475^{1} 0.1007^{1} Mondo 0.7206 Year 4 **Propensity Score** 0.7014 0.0105 Black Grade 0.0379 0.0215 LEP flag No LEP flag Yes 0.0379 0.0215 Same School 0.1438 0.0148 Female 0.1113 0.0754^{1} 0.0754^{1} Male 0.1113 Mondo 0.6317 0.0259

¹ Following Rosenbaum (2010), standardized differences are based on a pooled standard deviation with equal weighting given to the standard deviations of the treatment and comparison groups before matching. The standardized mean differences in for sex (i.e., Female and Male) exceed the suggested 0.05 threshold but are still below 0.25, which best practices suggests is acceptable if we control for them in any outcome analysis.

Table B2.

Regression Results of MCA-Reading Scale Scores on Sankofa Participation in Years 3 and 4

Variables	Estimate	Standard	t-value	df	<i>p</i> -value
		Error			
Intercept	339.23	2.81	120.55	28.30	<.001
Sankofa	-7.25	3.60	-2.01	284.19	0.045
Male	-3.47	2.31	-1.50	279.25	0.134
Year 4	-3.20	2.40	-1.33	284.47	0.183
Var(School)	45.33				

Table B3.

Regression Results of MCA-Reading Scale Scores on Sankofa Participation in Years 3 and 4 for Full Sample

Variables	Estimate	Standard	t-value	df	<i>p</i> -value
		Error			
Intercept	305.11	3.19	95.78	145.01	<.001
Sankofa	2.61	2.66	0.98	358.49	0.327
Male	-3.10	1.54	-2.01	357.76	0.045
LEP	4.25	2.21	1.92	365.66	0.055
Same School	-0.16	2.14	-0.07	328.31	0.942
Mondo	2.65	0.16	16.84	364.01	<.001
Year 4	-2.47	1.57	-1.57	363.56	0.117
Var(School)	32.21				

Appendix C Soft-Target Goals for DRA II

The reading level expectations listed below are to be interpreted as "soft-target" goals for expected reading levels within designated time period of the September to June school year. These reading level expectations were provided by Saint Paul Public Schools for the 2009-10 school year.

(Source: Jan Magrane, Program Manager PreK-6, SPPS District, as presented in N. Hall and K Gray, July 2010, NdCAD's Sankofa Reading Tutorial Program and "Parent Power" Literacy & Advocacy Training Workshops: Evaluation Report)

Grade	Septer	mber	Nove	nber	Mai	rch	Jui	ne
Grade	DRA2	GRL	DRA2	GRL	DRA2	GRL	DRA2	GRL
Kindergarten					1	A	2	В
Grade 1	2	В	7	E	12	G	16	I
Grade 2	16	I	18	J	24	L	28	M
Grade 3	28	M	30	N	34	O	38	P
Grade 4	38	P	38	P	40	QRS	40	QRS
Grade 5	40	QRS	40	QRS	50	TU	50	TU
Grade 6	50	TU	50	TU	60	V	60	V

Appendix D Interrupted Time Series Regression Tables

In Tables D1 – D6, Intercept refers to β_1 ; Time refers to β_2 , which is time since the start of Sankofa in days; Sankofa refers to the level effect, β_3 ; and Time:Sankofa refers to the slope effect, β_4 in Equation. The grades (Kindergarten, Grade 3, and Grade 4) were dummy-coded control variables that were included but not explicitly stated in Equation 1. RI refers to the random intercepts and RS, when included, refers to the random slopes. Finally, Residual refers to the residual variance.

Table D1

Parameter table for Letter Sounds for the level-effect from the listwise deletion analysis.

Parameter	Estimate	Standard Error	t-value	df	<i>p</i> -value
Intercept	41.158	6.108	6.739	17.848	< .001
Time	0.972	0.443	2.195	115.262	.03
Sankofa	5.658	5.475	1.034	129.582	.303
Kindergarten	-24.56	7.203	-3.41	16.871	.003
Cohort 21	-0.861	7.884	-0.109	15.674	.914
Cohort 22	10.82	8.091	1.337	17.913	.198
Cohort 23	5.938	9.89	0.60	16.701	.556
Cohort 24	-10.553	8.409	-1.255	17.21	.226
Cohort 25	-21.954	10.334	-2.124	15.777	.050
Cohort 26	-27.378	13.334	-2.053	15.659	.057
Var(RI)	157.758				
Var(RS)	0.015				
Cov(RI, RS)	-0.691				
Residual	60.627				

Table D2

Parameter table for Letter Sounds for the slope-effect from the listwise deletion analysis.

Parameter	Estimate	Standard Error	t-value	df	<i>p</i> -value
Intercept	41.132	6.179	6.657	18.602	< .001
Time	0.957	0.707	1.354	132.166	.178
Sankofa	5.582	6.172	0.904	133.545	.367
Kindergarten	-24.555	7.204	-3.409	16.866	.003
Cohort 21	-0.873	7.895	-0.111	15.723	.913
Cohort 22	10.825	8.096	1.337	17.906	.198
Cohort 23	5.943	9.892	0.601	16.7	.556
Cohort 24	-10.537	8.452	-1.247	17.548	.229
Cohort 25	-21.958	10.338	-2.124	15.806	.05
Cohort 26	-27.379	13.337	-2.053	15.66	.057
Time:Sankofa	0.023	0.872	0.027	131.308	.979
Var(RI)	157.997				
Var(RS)	0.015				
Cov(RI, RS)	-0.697				
Residual	61.076				

Table D3

Parameter table for Letter Sounds for the level-effect from the pooled multiple imputation analysis.

Parameter	Estimate	Standard Error	t-value	df	<i>p</i> -value
Intercept	24.333	7.649	3.181	4324.656	.001
Time	1.181	0.337	3.508	575.416	< .001
Sankofa	4.409	4.600	0.958	777.733	.338
Grade 1	13.983	6.286	2.224	2610.967	.026
Cohort 21	-3.572	8.552	-0.418	5671.659	.676
Cohort 22	0.265	8.106	0.033	5494.044	.974
Cohort 23	1.381	11.609	0.119	23681.799	.905
Cohort 24	-15.038	8.380	-1.795	5082.234	.073
Cohort 25	-12.79	12.441	-1.028	4137.261	.304
Cohort 26	1.042	10.11	0.103	863.317	.918
Var(RI)	234.956				
Var(RS)	0.634				
Cov(RI, RS)	-5.664				
Residual	72.983				

Table D4

Parameter table for Letter Sounds for the slope-effect from the pooled multiple imputation analysis.

Parameter	Estimate	Standard Error	t-value	df	<i>p</i> -value
Intercept	24.196	7.678	3.151	4568.128	.002
Time	1.142	0.464	2.464	479.435	.014
Sankofa	4.058	5.31	0.764	719.857	.445
Grade 1	13.983	6.286	2.224	2610.972	.026
Cohort 21	-3.572	8.552	-0.418	5671.672	.676
Cohort 22	0.265	8.106	0.033	5494.050	.974
Cohort 23	1.381	11.609	0.119	23681.807	.905
Cohort 24	-15.038	8.38	-1.795	5082.261	.073
Cohort 25	-12.79	12.441	-1.028	4137.261	.304
Cohort 26	1.042	10.11	0.103	863.316	.918
Time:Sankofa	0.078	0.606	0.129	496.660	.898
Var(RI)	234.955				_
Var(RS)	0.634				
Cov(RI, RS)	-5.664				
Residual	73.015				

Table D5

Parameter table for Sight Words for the level-effect from the listwise deletion analysis.

Parameter	Estimate	Standard Error	t-value	df	<i>p</i> -value
Intercept	49.975	33.542	1.490	19.873	.152
Time	0.820	0.707	1.160	135.434	.248
Sankofa	0.785	9.987	0.079	135.358	.937
Grade 3	46.689	19.511	2.393	20.255	.027
Cohort 21	-26.233	39.35	-0.667	19.884	.513
Cohort 22	-49.582	51.313	-0.966	19.961	.345
Cohort 23	-45.583	45.515	-1.002	20.007	.329
Cohort 24	-46.205	38.518	-1.200	20.019	.244
Cohort 25	-31.337	40.842	-0.767	19.882	.452
Cohort 26	-7.061	36.756	-0.192	19.900	.850
Var(RI)	1079.798				
Residual	280.917				

Table D6

Parameter table for Sight Words for the slope-effect from the listwise deletion analysis.

Parameter	Estimate	Standard Error	t-value	df	<i>p</i> -value
Intercept	48.981	33.577	1.459	19.928	.160
Time	-0.066	1.310	-0.050	134.35	.960
Sankofa	-1.819	10.512	-0.173	134.381	.863
Grade 3	46.633	19.518	2.389	20.256	.027
Cohort 21	-26.968	39.375	-0.685	19.907	.501
Cohort 22	-50.684	51.35	-0.987	19.99	.335
Cohort 23	-46.728	45.554	-1.026	20.047	.317
Cohort 24	-45.525	38.542	-1.181	20.039	.251
Cohort 25	-32.182	40.87	-0.787	19.909	.440
Cohort 26	-7.933	36.785	-0.216	19.935	.831
Time:Sankofa	1.198	0.213	1.490	134.336	.423
Var(RI)	1080.51				
Residual	281.625				

Table D7

Parameter table for Sight Words for the level-effect from the pooled multiple imputation analysis.

Parameter	Estimate	Standard Error	t-value	df	<i>p</i> -value
Intercept	51.592	24.025	2.147	13285.252	.032
Time	0.802	0.483	1.662	579.768	.097
Sankofa	-2.363	7.238	-0.327	918.208	.744
Grade 3	28.086	7.955	3.531	5172.853	< .001
Cohort 21	-13.52	25.658	-0.527	14845.346	.598
Cohort 22	-23.51	26.231	-0.896	12292.034	.37
Cohort 23	-28.322	26.466	-1.07	18933.062	.285
Cohort 24	-19.766	25.37	-0.779	16073.355	.436
Cohort 25	-21.373	26.006	-0.822	13313.136	.411
Cohort 26	-5.305	25.733	-0.206	11697.662	.837
Var(RI)	516.560				
Var(RS)	0.272				
Cov(RI, RS)	0.452				
Residual	234.676				

Table D8

Parameter table for Sight Words for the slope-effect from the pooled multiple imputation analysis.

Parameter	Estimate	Standard Error	t-value	df	<i>p</i> -value
Intercept	52.264	24.066	2.172	13167.553	.030
Time	0.995	0.677	1.47	578.192	.142
Sankofa	-0.634	8.258	-0.077	922.069	.939
Grade 3	28.086	7.955	3.531	5172.885	< .001
Cohort 21	-13.52	25.658	-0.527	14845.376	.598
Cohort 22	-23.51	26.231	-0.896	12292.049	.370
Cohort 23	-28.322	26.466	-1.07	18933.143	.285
Cohort 24	-19.766	25.37	-0.779	16073.439	.436
Cohort 25	-21.373	26.006	-0.822	13313.139	.411
Cohort 26	-5.305	25.733	-0.206	11697.690	.837
Time:Sankofa	-0.384	0.908	-0.423	753.557	.672
Var(RI)	516.551				_
Var(RS)	0.272				
Cov(RI, RS)	0.452				
Residual	234.750				

Table D9

Parameter table for Decodable Words for the level-effect from the listwise deletion analysis.

Parameter	Estimate	Standard Error	t-value	df	<i>p</i> -value
Intercept	23.080	16.603	1.39	18.498	.181
Time	0.354	0.206	1.718	111.974	.088
Sankofa	0.056	2.527	0.022	127.236	.982
Grade 3	19.079	9.912	1.925	19.501	.069
Cohort 21	-14.788	19.516	-0.758	18.407	.458
Cohort 22	-33.025	25.809	-1.28	19.585	.216
Cohort 23	-21.799	22.693	-0.961	18.934	.349
Cohort 24	-13.278	19.13	-0.694	18.692	.496
Cohort 25	-3.122	20.127	-0.155	18.019	.878
Cohort 26	5.309	18.053	0.294	17.904	.772
Var(RI)	366.95				
Var(RS)	0.005				
Cov(RI, RS)	-0.702				
Residual	13.572				

Table D10

Parameter table for Decodable Words for the slope-effect from the listwise deletion analysis.

Parameter	Estimate	Standard Error	t-value	df	<i>p</i> -value
Intercept	21.708	16.59	1.309	18.475	.207
Time	-0.311	0.337	-0.923	132.109	.358
Sankofa	-2.86	2.766	-1.034	132.388	.303
Grade 3	18.989	9.902	1.918	19.473	.070
Cohort 21	-14.093	19.509	-0.722	18.417	.479
Cohort 22	-30.277	25.816	-1.173	19.63	.255
Cohort 23	-18.989	22.71	-0.836	19.024	.413
Cohort 24	-11.15	19.137	-0.583	18.757	.567
Cohort 25	-4.222	20.12	-0.21	18.032	.836
Cohort 26	4.246	18.05	0.235	17.932	.817
Time:Sankofa	0.978	0.399	2.453	132.192	.015
Var(RI)	351.502				
Var(RS)	0.004				
Cov(RI, RS)	-0.579				
Residual	13.567				

Table D11

Parameter table for Decodable Words for the level-effect from the pooled multiple imputation analysis.

Parameter	Estimate	Standard Error	t-value	df	<i>p</i> -value
Intercept	21.059	18.783	1.121	10729.922	.262
Time	0.609	0.427	1.426	381.727	.155
Sankofa	0.193	6.207	0.031	567.036	.975
Grade 3	22.581	6.584	3.43	1721.356	.001
Cohort 21	-9.538	20.193	-0.472	9143.931	.637
Cohort 22	-12.677	20.569	-0.616	8899.393	.538
Cohort 23	-18.328	20.814	-0.881	11279.789	.379
Cohort 24	-10.168	19.943	-0.51	10123.685	.610
Cohort 25	-11.456	20.679	-0.554	6163.314	.580
Cohort 26	0.174	20.931	0.008	3397.933	.993
Var(RI)	321.102				
Var(RS)	0.287				
Cov(RI, RS)	-0.537				
Residual	149.570				

Table D12

Parameter table for Decodable Words for the slope-effect from the pooled multiple imputation analysis.

Parameter	Estimate	Standard Error	t-value	df	<i>p</i> -value
Intercept	20.77	18.831	1.103	10368.144	.270
Time	0.526	0.588	0.895	397.56	.371
Sankofa	-0.55	6.946	-0.079	636.642	.937
Grade 3	22.581	6.584	3.43	1721.357	.001
Cohort 21	-9.538	20.193	-0.472	9143.956	.637
Cohort 22	-12.677	20.569	-0.616	8899.422	.538
Cohort 23	-18.328	20.814	-0.881	11279.823	.379
Cohort 24	-10.168	19.944	-0.51	10123.708	.610
Cohort 25	-11.456	20.679	-0.554	6163.33	.580
Cohort 26	0.174	20.931	0.008	3397.941	.993
Time:Sankofa	0.165	0.789	0.209	465.186	.834
Var(RI)	321.100				_
Var(RS)	0.287				
Cov(RI, RS)	-0.536				
Residual	149.593				

Appendix E Parent Survey

NdCAD SANKOFA READING PROGRAM PARENT EVALUATION

Your Name	:	Date:			
Child's Nan	n				
Are you pa	rticipating in Parent Power?	Yes No			
or each chil Sankofa Rea	nore than one child in the Sank d. We would like to know about ding Program.	t <u>each individual child</u>	<u>'s</u> progi	ress afte	er participating in the
	u noticed <i>an increase in your control of the program</i> in the following areas				
	Behavior/Attitude		Yes	No	Don't Know/Haven't Observed
Sounding of	out words				
Reading wi	thout being told to (independen	t reading)			
Continuing	to try even though reading may	be difficult			
Reading to					
Reading for					
Confidence					
Enjoyment					
	completion				
	of and respect for African cult	ure and heritage			
African pri					
Positive int	eractions with other children				
	our child have a stronger connectated in Sankofa?	ction to <i>your family</i> as	a result	t of hav	ingYesNo
	our child have a stronger connection participated in Sankofa?	ction to their communi	ity as a r	result o	fYesNo

4. Use the space below to describe any other changes you have noticed in your child.

5. Were the following components of Sankofa helpful for your child? Please write an X in the appropriate column.

Program Component	Yes	No	Not Sure
Instruction on phonemic awareness			
Instruction on 7 comprehension strategies			
Learning about African heritage			
Positive learning environment			
High expectations from Sankofa staff			
Low student/tutor ratio			
Receiving a weekly note from the tutor			

6.	Please list any other parts of the Sankofa that you found helpful for your child.			
7.	What could we do to improve Sankofa for future students?			
8.	Would you recommend Sankofa to family members or friends? Please circle your response. Yes No Not Sure			
9.	Please rate your overall satisfaction with Sankofa. Please circle one.			
	Very Dissatisfied Dissatisfied Neutral/Not Sure Satisfied Very Satisfied			
	Please tell us why you gave the Sankofa this rating.			
10.	Please use the space below to write any other comments/suggestions you have about Sankofa.			

Center for Applied Research and Educational Improvement, University of Minnesota	7

Appendix F Example Lesson Plan

SANKOFA ACTIVITY SCHEDULE	Date: 10/18/16
Daily Lesson Plan	Todav's Youth Leader(s)
Whole Group	Group 1
(5 Minutes) Rituals: Sankofa Call & Response/Nguzo Saba	Group 2
,	Group 3
(25 Minutes) Mini-Lesson Instructor	
Comprehension Strategy/Objective: Making Connection	n5
Title: Deshawn Days Le	vel: Grade:
Activities: Story Time	
Supplies: Text	Vocabulary
*	Hood
(10-15 Minutes) Meet Indiviualized Needs	Ray
Group #1 Instructor/Assistant:	Grandmother
Learning Objective: Making Connections	_school
Activities: phonograms/ Sight words	teacher_
supplies: phonegram/Sight word car	ds
, , ,	
Group #2 Instructor/Assistant:	_
Learning Objective: Making Connection	
Activites: phonograms/ sight words	
supplies: Phonogram / sight word	pards
30 Minutes Independent Silently Reading (Practing Comprehension Si	
Learning Objective: Making Connect	1047
Activites: Silent Reading	
Supplies: <u>Leveled Text</u>	
(15 Minutes) Today's Reflection/Review questions	to text connection?
what is an example of a text	O" make ?
What Sound does the letter	1) India
(5 Minutes) Closing Ritual	

Appendix G Sankofa Observation Checklist

Observation checklist for Cohort: 16, Group: Maxfield

Table G1.

Checklist Item	Date				
	10/17/16	11/02/16	11/22/16		
1. Does it look like planned program is going on?	X	X	X		
2. Is the daily schedule posted clearly for all to see?	X	X	X		
3. Does the daily plan list the learning objectives for the session, e.g. Specific reading skills, strategies, activities and supplies?	X	X	X		
4. Are culturally rich program materials displayed in a planned and organized manner?	X	X	X		
5. Are there culturally specific leveled books displayed.	No display	X Two books in basket			
6. Did you observe rich and meaningful dialog among/within the group e.g. adult/child and/or child/child?	X	X	X Lead tutor had great connection with a couple		
7. Was I greeted when I entered the classroom? Who greeted me? Was I greeted with Hotep?	X Only lead tutors	X Tutors and students	X Student distracted everyone in room.		
8. Are you observing cultural routines and rituals?	X	X	X		
9. Are connections to child's home and community being reinforced (through verbal, visual, etc)?	X	X	X		
10. Are the separate group activities going on?	X	X Silent reading, helping with letter games/sounds	X		
11. Is it clear what type of activities are taking place in each section of the room?	X	X	X		
12. Is the sign in/attendance sheet in the same place every session?	X	X	X		
13. Is the snack in the same place every session?	X	X	X		

Tutor Responsibilities: 10/17/16 - Main focus was teaching students their phonemic sounds because most of the students were non-readers.11/2/16 – Lead tutor not participating in rituals setting up lesson groups. 11/22/16 – All fully participated in rituals.

Table G2.

Observation checklist for Cohort: 17, Group: Jackson.

Checklist Item		Date			
2	10/18/16	11/16/16	12/6/16		
1. Does it look like planned program is going on?	X	X	X		
2. Is the Daily schedule posted clearly for all to	X	X	X		
see? 3. Does the daily plan list the learning objectives					
for the session, e.g. Specific reading skills, strategies, activities and supplies?	X	X	X		
4. Are culturally rich program materials	X	V	v		
displayed in a planned and organized manner?	On small window sill	X	X		
5. Are there culturally specific leveled books displayed.	X	X Two books in basket	V		
6. Did you observe rich and meaningful dialog among/within the group e.g. adult/child and/or child/child?	X Tutors well engaged with students	X	X Lead tutor had great connectio n with a couple		
7. Was I greeted when I entered the classroom? Who greeted me? Was I greeted with Hotep?	X After prompted by tutors	X Tutors and students	X Student distracted everyone in room.		
8. Are you observing cultural routines and rituals?	X Very good	X	X		
9. Are connections to child's home and community being reinforced (through verbal, visual, etc)?	X Especially during comp time strategy	X	X		
10. Are the separate group activities going on?	X	X Silent reading, helping with letter games/sounds	X		
11. Is it clear what type of activities are taking place in each section of the room?	X	X	X		
12. Is the sign in/attendance sheet in the same place every session?	X Assist. Tutor takes attendance X	X	X		
13. Is the snack in the same place every session?	Set up before kids arrived	X	X		

Tutor Responsibilities: N/A

Observation checklist for Cohort: 18, Group: Ben E. Mays

Table G3.

	Date			
10/26/16	11/15/16	12/14/16		
X	X	X		
X	X	X		
X	X	X		
X	X	X		
X	X			
X	X	X		
X	X	X		
X	X	X		
X	X	X		
X	X	X		
X	X	X		
X	X	X		
X	X	X		
	X X X X X X X X X X X X X	10/26/16 11/15/16 X X <tr< td=""></tr<>		

Tutor Responsibilities: 10/26/16 – Lead tutor lead whole group reading a modeled comprehension strategy. Lead tutor took attendance and managed snack time. 11/15/16 – Lead tutor reinforced cultural practices and made connections to children's homes during whole group reading time. Assistant tutors managed transitions and supported children's skills development. 12/14/16 – Lead tutor reviewed lessons learned from previous weeks. Culturally rich materials were set up throughout the space. Assistant tutors redirected children to stay on track and modeled good behavior.

aTable G4

Observation checklist for Cohort: 20, Group: Saint Paul City School

Cl. 11' . I.		Date		
Checklist Item	2/27/17	3/8/17	3/22/17	4/12/17
1. Does it look like planned program is going on?	X	X Lesson well thought and implemented	X	X
2. Is the Daily schedule posted clearly for all to see?	X	X	X	X
3. Does the daily plan list the learning objectives for the session, e.g. Specific reading skills, strategies, activities and supplies?	X	X	X All learning, reading strategies completed	X
4. Are culturally rich program materials displayed in a planned and organized manner?	X	X	X	X
5. Are there culturally specific leveled books displayed.	Cultural books were present but not displayed	X Books are displayed in same spot	V	X
6. Did you observe rich and meaningful dialog among/within the group e.g. adult/child and/or child/child?	X	X	X Student dis. reading strategies/ learning obj. themselves.	X
7. Was I greeted when I entered the classroom? Who greeted me? Was I greeted with Hotep?	X	X	X	X
8. Are you observing cultural routines and rituals?	X Students are shy about participating	X Students are leading call and response and Nguzo Saba	X	X

Observation checklist for Cohort: 20, Group: Saint Paul City School (Continued)

Table G4

9. Are connections to child's home and community being reinforced (through verbal, visual, etc)?	X	X	X Tutor does terrific job connecting values & principles to students' home and school lives.	X
10. Are the separate group activities going on?	X	X	X	X
11. Is it clear what type of activities are taking place in each section of the room?	X	X	X	X
12. Is the sign in/attendance sheet in the same place every session?	X	X	X	X
13. Is the snack in the same place every session?	X	X	X	X

Tutor Responsibilities: 3/22/17 – Overall wonderful job! 4/12/17 – Every student is excited about coming to the program and are even promoting the program to their peers!

Observation checklist for Cohort: 21, Group: Ben E. Mays

Table G5

Charlist Itam		Date		
Checklist Item	3/30/17	3/8/17	2/28/17	4/20/17
1. Does it look like planned program is going on?	X Tutors are implementing lesson plans effectively	X	Tutors lessons seem uncoordinated	X
2. Is the Daily schedule posted clearly for all to see?	X	X	Daily schedule not posted	X
3. Does the daily plan list the learning objectives for the session, e.g. Specific reading skills, strategies, activities and supplies?	X	X	X Learning ob. Displayed but not implemented/time management	X
4. Are culturally rich program materials displayed in a planned and organized manner?	X	X	No program materials are displayed	X
5. Are there culturally specific leveled books displayed.	X	X	No cultural leveled books are displayed	X
6. Did you observe rich and meaningful dialog among/within the group e.g. adult/child and/or child/child?	X Students are using comprehend. Strategy when discussing life at home & comm.	X	X	X
7. Was I greeted when I entered the classroom? Who greeted me? Was I greeted with Hotep?	X	X X	I was not greeted with Hotep even after prompt	X
8. Are you observing cultural routines and rituals?	X	Students are more engaged in routines and rituals	Students did not participate in rituals	X
9. Are connections to child's home and community being reinforced (through verbal, visual, etc)?	X	X	X	X
10. Are the separate group activities going on?	X	X	X	X

Table G5

Observation checklist for Cohort: 21, Group: Ben E. Mays (Continued)

11. Is it clear what type of activities are taking place in each section of the room?	X Students with similar reading levels are grouped together	X	X	X
12. Is the sign in/attendance sheet in the same place every session?	X	X	X	X
13. Is the snack in the same place every session?	X	X Designated Sankofa area for snack	X Snack in cafeteria at different tables	X

Tutor Responsibilities: N/A

Observation checklist for Cohort: 22, Group: Maxfield

Table G6

Charlint Itam	Date			
Checklist Item	4/11/17	5/16/17	5/22/17	
1. Does it look like planned program is going on?	X	X	X	
2. Is the Daily schedule posted clearly for all to see?	X On wall near door	X	X	
3. Does the daily plan list the learning objectives for the session, e.g. Specific reading skills, strategies, activities and supplies?	X Yes	X	X	
4. Are culturally rich program materials displayed in a planned and organized manner?	X On a small table	X	X	
5. Are there culturally specific leveled books displayed.	X	X	X	
displayed.	X	X		
6. Did you observe rich and meaningful dialog among/within the group e.g. adult/child and/or child/child?	Yes awesome group of men tutors	Many quest., much conversation, many giggles	X Wonderful conversations	
7. Was I greeted when I entered the classroom? Who greeted me? Was I greeted with Hotep?	Only staff greeted me	X Staff prompted students	X All greeted me	
8. Are you observing cultural routines and rituals?	X	X	X	
9. Are connections to child's home and community being reinforced (through verbal, visual, etc)?	Not Yet	X	X	
10. Are the separate group activities going on?	X	X	X	
11. Is it clear what type of activities are taking place in each section of the room?	X	X	X	
12. Is the sign in/attendance sheet in the same place every session?	X Yes near door	X	X	
13. Is the snack in the same place every session?	X	X	X	

Tutor Responsibilities: 4/11/17 – Bring new pack of comprehension strategies. 5/16/17 – Bring more prizes and free books.

Table G7

Observation checklist for Cohort: 23, Group: Jackson

Checklist Item	Date 5/17/17			
	4/12/17	5/17/17	5/31/17	
1. Does it look like planned program is going on?	X	X	X	
2. Is the Daily schedule posted clearly for all to see?	X On white board	X	X	
3. Does the daily plan list the learning objectives for the session, e.g. Specific reading skills, strategies, activities and supplies?	X	X	X	
4. Are culturally rich program materials displayed in a planned and organized manner?	X Window sill	X	X	
5. Are there culturally specific leveled books displayed.	X On long table near white board	X	X	
6. Did you observe rich and meaningful dialog among/within the group e.g. adult/child and/or child/child?	X	X	X	
7. Was I greeted when I entered the classroom? Who greeted me? Was I greeted with Hotep?	X Prompted by tutor	X Yes, even by name	X	
8. Are you observing cultural routines and rituals?	X	X X	X	
9. Are connections to child's home and community being reinforced (through verbal, visual, etc)?	Not Yet	Many connects made by students	X	
10. Are the separate group activities going on?	X Two small groups	X Three small groups	X	
11. Is it clear what type of activities are taking place in each section of the room?	X	X	X	
12. Is the sign in/attendance sheet in the same place every session?	X Table near white board	X	X	
13. Is the snack in the same place every session?	X Cafeteria	X	X	

Tutor Responsibilities: 4/12/17 – Bring phonemic book to tutor for lesson planning. 5/31/17 – Assessment materials.