



# STRONG BEGINNINGS STATE EVALUATION 2022-2023 ANNUAL REPORT

Community Evaluation Programs  
Office of Public Engagement and Scholarship  
University Outreach and Engagement  
Michigan State University

Jamie H. Wu, PhD  
Amy Mason, MA  
Teresa Herbowicz, MS  
Holli Schlukebir, BA



University Outreach  
and Engagement

**Recommended Citation:** Wu, J.H., Mason, A., Herbowicz, T., and Schlukebir, H. (2024). Strong Beginnings State Evaluation 2022-2023 Annual Report. East Lansing, MI: Michigan State University.

## STATE EVALUATION AND THIS REPORT

---

The Strong Beginnings pilot is undergoing an external evaluation led by Community Evaluation Programs at Michigan State University's (MSU) Office of University Outreach and Engagement, under a three-year contract with MDE. The statewide evaluation is distinct from local and regional data collection led by Clinton County RESA as MDE's contractor. The local data collection activities are designed to support programs in meeting MDE requirements. The statewide evaluation led by MSU is designed to assess whether program elements are working as intended to improve child and family outcomes. The statewide evaluation began in January 2021 alongside the pilot program. Its results will inform MDE's decisions about whether and how to roll out Strong Beginnings statewide. This report documents major findings from Strong Beginnings pilot year 3 (2022–23). It has three major sections: population served, child learning outcomes, and family engagement outcomes. Each section describes its data sources and methodology and then presents major findings.

### TABLE OF CONTENTS, FIGURES, AND TABLES

#### **Strong Beginnings Project Overview (3)**

- Purpose (3)
- History and Funding (3)
- Program Design (4)

#### **Population Served (4)**

- Table 1. Strong Beginnings Child Demographics (5)
- Table 2. Strong Beginnings Child Demographics by ISD (5)
- Table 3. Family Income Levels by ISD (5)
- Table 4. Child Eligibility Factors by ISD (6)
- Figure 1. 2022-2023 Strong Beginnings Site Locations by ISD (6)

#### **Child Learning Outcomes (6)**

- Child Observation Record (COR Advantage) Results (7)
  - Figure 2. Average COR Advantage Child Development Scores by Pre- and Post-Test (7)
- Teaching Strategies GOLD (TSG) Results (7)
  - Figure 3. Average TSG Child Development Scores by Pre- and Post-Test (8)

#### **Family Engagement Outcomes (8)**

- Family Contact Logs (9)
  - Figure 4. Content of Family Contact Messages (9)
- Family Event Offerings (10)
  - Figure 5. Offered Family Event Hours by Event Type (10)
- Family Satisfaction Surveys (10)
  - Figure 6. Family Satisfaction with Instructional Quality (11)
  - Figure 7. Family Satisfaction with Communication (11)
  - Figure 8. Family Satisfaction with Strong Beginnings (11)
- Staff Focus Groups (12)
- Teacher Focus Groups (12)
- Family Liaison Focus Groups (13)

#### **Conclusion (14)**

#### **References (15)**

## STRONG BEGINNINGS PROJECT OVERVIEW

---

### PURPOSE

In January 2021, the state of Michigan launched Strong Beginnings, a preschool program for low-income three-year-old children. This program serves as the state's first attempt to test a public preschool model for three-year-olds. Mounting evidence has suggested that preschools can have tremendous benefits for children's cognitive and social development[1]-[2] and that equitable access to preschools helps close achievement gaps.[3]-[4] Most public preschools offer free education for low-income children when they reach age four.[5] However, research has found that performance gaps are already well established by age three[6] for children from low-income backgrounds, who tend to start school far behind more advantaged children.[7] Meanwhile, evidence supports the conclusion that two years of preschool are better than one. A study of thousands of children in New Jersey's state-funded preschool, for example, discovered that students who attended for two years had larger test score gains than those who attended for one year—gains that lasted through fourth and fifth grades.[8]

Building upon the success of Michigan's Great Start Readiness Program (GSRP) for low-income four-year-olds, Michigan initiated Strong Beginnings to extend the benefits of high-quality preschool education to low-income three-year-olds. The goal for both programs is to give children access to high-quality preschool education. Both programs aim to enable children from low-income backgrounds to build the cognitive and social skills they need to start school as ready to learn as children from more affluent backgrounds. The enrollment process and management structure of Strong Beginnings align with those of GSRP. However, Strong Beginnings is designed independently by Clinton County Regional Educational Service Agency (RESA) and has features targeted to the needs of three-year-olds.

### HISTORY + FUNDING

In 2017, planning for Strong Beginnings began with funding from the federal Department of Education's Race to the Top initiative. Program design continued with a grant from the national Preschool Development Grants Birth through Five program.

The Michigan Department of Education (MDE) launched the Strong Beginnings pilot program in January 2021 by selecting its first cohort of four intermediate school districts (ISDs): Berrien RESA, Heritage Southwest ISD (formerly Lewis Cass), Northwest Education Services (formerly Traverse Bay Area ISD), and Wayne RESA. In the Spring 2021 semester, the four "legacy ISDs" operated 10 Strong Beginnings classrooms at 10 school sites. In the first full school year after the pandemic, 2021-22, the same legacy ISDs added two more classrooms. A total of 177 Cohort 2 children were served in 12 classrooms during 2021-22. The same management and site structure continued in 2022-23, with a total of 178 Cohort 3 participants.

Beginning in 2022-23, the Michigan School Aid Act became the funding source for Strong Beginnings moving forward. Additional funds were carried over from the Clinton County RESA's oversight of the program in 2022-23. The program will expand to six additional ISDs, for a total of 10 ISDs operating 28 classrooms consistently for the next three years.

## PROGRAM DESIGN

Like GSRP, Strong Beginnings targets children whose family income is less than 250% of the federal poverty level (FPL). Children from the lowest-income families are enrolled first. Three eligibility factors automatically place children in the lowest income bracket, regardless of actual income: if the child has a qualifying IEP (individualized education program), is experiencing homelessness, or is in the foster care system. If two children have the same percentage of FPL, a set of additional eligibility factors are used as “tie-breakers”: disability, abuse or neglect, home language other than English, severe challenging behavior, environmental risk, and low parental education. Programs can request permission to enroll “over-income” children if seats are available after all children below 250% of FPL have been enrolled. Again, priority goes first to the lowest-income children and then to those with more eligibility factors.

Best practices recommend that ISDs implement a common application process with Head Start. Children who qualify for both Head Start and Strong Beginnings are referred to Head Start. However, families may choose to enroll instead in Strong Beginnings if seats are available.

Strong Beginnings programs are required to offer a minimum of 120 days of programming spread over a minimum of 30 weeks. Since research indicates that dosage matters, programs are encouraged to exceed these minimum amounts of instructional time. During the pilot period, all programs were required to operate full school day programs, following the schedule of the local school. Programs must meet Michigan early childhood quality standards, including a minimum teacher to child ratio of 1 to 7. Validated child assessments and regular program self-assessment help to ensure program quality.

Family support is a fundamental part of Strong Beginnings. Programs offer family engagement programming such as family open houses and parenting workshops. Teachers conduct home visits and parent-teacher conferences. Unique to Strong Beginnings is the presence of a family liaison social worker in every program site sometime during the week. Family liaisons primarily assist families in meeting their perceived needs by, for example, providing information about food banks, housing assistance, job fairs, and other community resources. They also support teachers in engaging families with their children’s learning.

## POPULATION SERVED

---

Data on the demographics and eligibility factors of children in the Strong Beginnings pilot come from ISD submissions. Of the 178 children who participated in Strong Beginnings in 2022–23, 57% were female. As Table 1 shows, somewhat less than half of participants were White, and a little less than one-third were African American or Black. The next largest groups were Arabic and multi- or biracial. Table 2 lists demographics by ISD.

As Table 3 shows, Strong Beginnings is, as intended, serving children whose family income puts them at risk of educational failure: 97% of children enrolled in 2022–23 came from families whose income was equal to or less than 250% of FPL.

Table 4 outlines the incidence of the six eligibility factors used to determine enrollment

priority. Environmental risk is consistently the largest category, both statewide and in each ISD. MDE defines environmental risk as one or more of the following conditions: loss of a parent due to death, divorce, incarceration, military service, or absence; teen parent; homelessness; residence in a high-risk neighborhood; or pre- or postnatal exposure to toxic substances.

**Table 1. Strong Beginnings Child Demographics (Total= 140)**

	# of Children	% of Children
<b>Gender</b>		
Female	101	57%
Male	77	43%
<b>Race/Ethnicity*</b>		
White	81	46%
African American or Black	52	29%
Arabic	25	14%
Multi- or Biracial	17	10%
Hispanic	3	2%

\* Total % does not equal 100% due to rounding.

**Table 2. Strong Beginnings Child Demographics by ISD**

Grantee	Michigan	Berrien RESA	Heritage SW ISD	Northwest ES	Wayne RESA
# of Children	178	28	45	47	58
Female	57%	64%	62%	45%	59%
Male	43%	36%	38%	55%	41%
White	46%	21%	71%	85%	5%
Black or African American	29%	57%	18%	0%	48%
Arabic	14%	0%	0%	0%	43%
Multi- or Biracial	10%	11%	11%	15%	3%
Hispanic	2%	11%	0%	0%	0%

**Table 3. Family Income Levels by ISD**

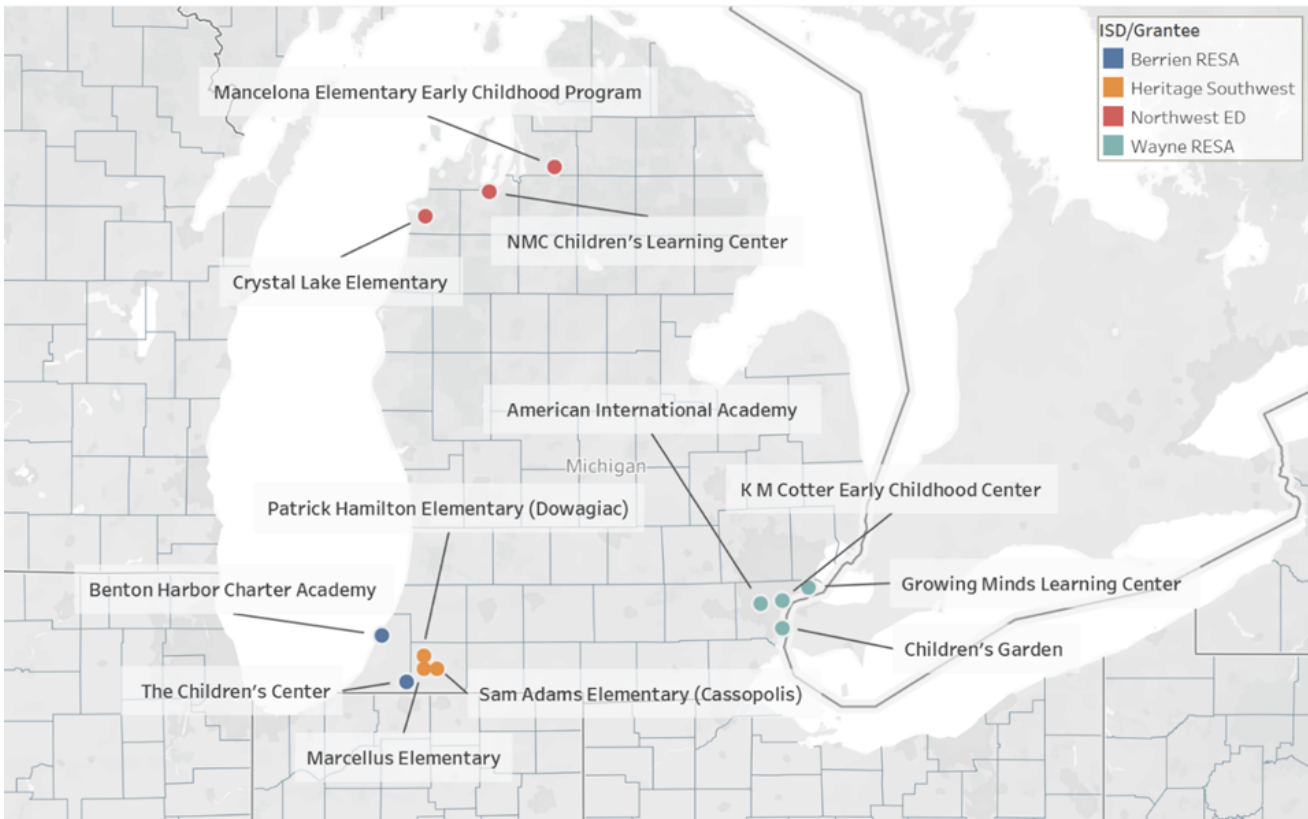
Grantee	Michigan	Berrien RESA	Heritage SW ISD	Northwest ES	Wayne RESA
# of Children	178	28	45	47	58%
0 - 50% FPL	29%	29%	38%	4%	43%
51 - 100% FPL	17%	29%	16%	13%	17%
101 - 150% FPL	19%	14%	16%	30%	14%
151 - 200% FPL	20%	21%	13%	28%	17%
201 - 250% FPL	12%	7%	9%	23%	9%
251 - 300% FPL	2%	0%	4%	2%	0%
300+% FPL	1%	0%	4%	0%	0%

**Table 4. Child Eligibility Factors by ISD**

Grantee	Michigan	Berrien RESA	Heritage SW ISD	Northwest ES	Wayne RESA
# of Children	178	28	45	47	58
Environmental Risk	52%	61%	33%	43%	71%
Home Language Non-English	17%	7%	2%	2%	45%
Low Parental Education	14%	18%	16%	11%	14%
Disability/Delay	11%	7%	24%	13%	2%
Abuse/Neglect	10%	4%	9%	19%	7%
Severe/Challenging Behavior	3%	0%	4%	4%	2%

Note: Total percentages may not equal 100% due to rounding.

**Figure 1. 2022-2023 Strong Beginning Site Locations by ISD**



## CHILD LEARNING OUTCOMES

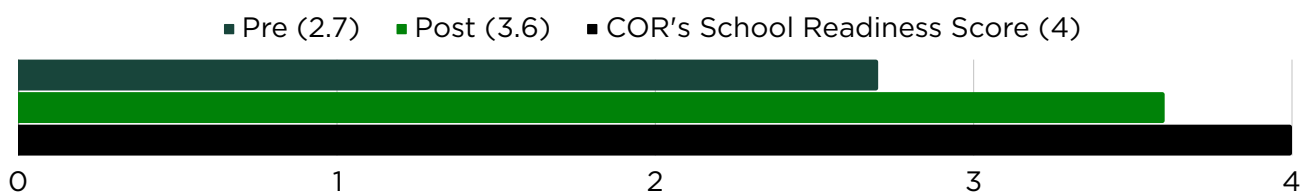
To track child learning outcomes, ISDs used one of two assessment tools, both based on classroom observations of children's behaviors: Child Observation Record (COR Advantage) and Teaching Strategies GOLD (TSG).

## CHILD OBSERVATION RECORD (COR ADVANTAGE) RESULTS

In 2022–23, Heritage Southwest ISD and Wayne RESA used COR Advantage for child assessment in their seven Strong Beginnings classrooms. COR’s 34 items assess eight content areas: approaches to learning; social and emotional development; physical development and health; language, literacy, and communication; mathematics; creative arts; science and technology; and social studies. In addition to these content areas, COR Advantage includes two items to assess English language proficiency. A student’s COR Advantage score is determined by their teacher’s observations of the student, as they mark changes in the child’s performance in the High/Scope COR Advantage software; the software is specific to developmental markers for children ages zero to five.[9] Instead of measuring children against developmental markers for a specific age, COR Advantage determines their School Readiness for starting kindergarten; to be ‘ready,’ a child must “have an average score of 3.75 in each category and an overall average of 4.0 or higher.”[10] National and regional data is not readily available nor does High/Scope have standards specific to children’s ages. It is important to note that, when comparing Strong Beginnings participants to COR’s expectations for five-year-olds, Strong Beginnings students might receive another year of programming through Great Start Readiness before entering kindergarten.

Children in the seven classrooms in Heritage Southwest ISD and Wayne RESA were observed near the beginning (“pre”) and near the end (“post”) of Strong Beginnings year 3. Although COR Advantage is a validated measure to assess child growth, results from validation studies conducted by the MSU team suggest that child growth should be assessed and monitored using only the average total score and not the eight domain scores.[11]–[12] Figure 2 therefore provides the average pre- and post-test COR Advantage scores for the seven Heritage Southwest and Wayne sites. It shows a substantial increase in average scores between the beginning and end of the 2022–23 school year. The average total pre-test score for Strong Beginnings participants was 2.7, while the post-test score was 3.6.

**Figure 2. Average COR Advantage Child Development Scores by Pre- and Post-Test (n = 99-101)**



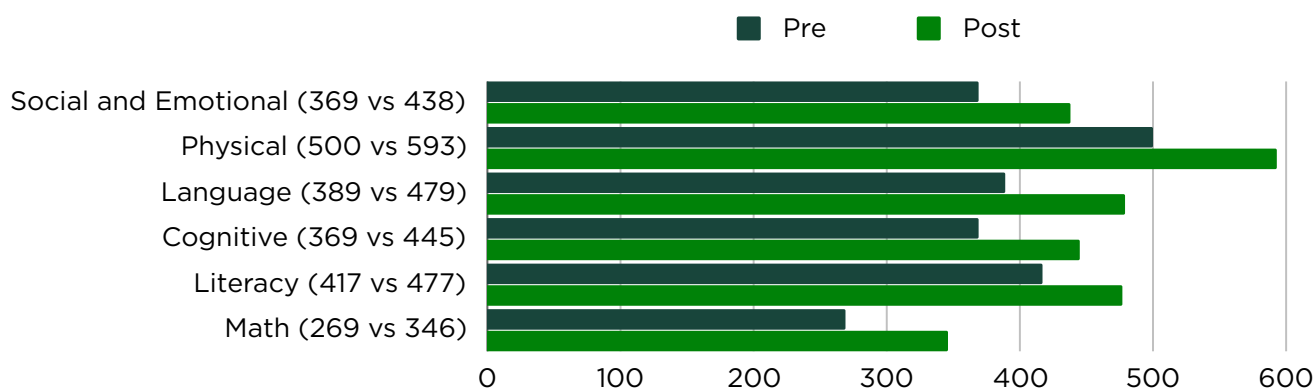
## TEACHING STRATEGIES GOLD (TSG) RESULTS

The five Strong Beginnings classrooms operated by Berrien RESA and Northwest Education Services used TSG for child assessment in the 2022–23 school year. TSG consists of four developmental domains and five content domains, plus a tenth domain used for evaluating dual-language learners. The four developmental domains are social-emotional, physical, language, and cognitive. The five content domains are literacy, mathematics, science and technology, social studies, and the arts. Like COR, a greater TSG score indicates a student is more advanced at a skill. It is designed to track skill progression for children up to the third grade, as teachers rate and record students’ progression over a time.[13] The

assessment documents note that the science and technology, social studies, and the arts domains have insufficient evidence of validity, so those domains are not included in students' average scores. The MSU evaluation therefore focuses on the four developmental and two content domains that have numerical scores, totaling students' scores in each of these domains to establish an average score. Again, children were observed near the beginning and near the end of the 2022–23 school year.

Figure 3 provides the average total scores of children in the five Berrien RESA and Northwest ED classrooms for the six TSG domains. When comparing the average pre- and post-test average scores, a substantial increase in scores is evident; however, students' gains varied based on their classroom and ISD. To meet or exceed TSG's standards for three-year-olds, students' scores must fall into a specific range by domain as shown in Figure 3.[14]The average pre-test scores for Strong Beginnings participants were 369 social-emotional, 500 physical, 389 language, 369 cognitive, 417 literacy, and 269 math. Students' average pre-test domain scores were below TSG's expected scores for their age group for all domains except physical development. The average post-test scores increased to 438 social-emotional, 593 physical, 479 language, 445 cognitive, 477 literacy, and 346 math. Students' average post-test domain scores for all six domains meet TSG's expected scores for three-year-olds.

**Figure 3. Average TSG Child Development Scores by Pre- and Post-Test (n = 66-68)**



**Note:** TSG's Standard Expected Scores for Three-Year-Olds are **Social and Emotional** 376-463, **Physical** 482-593, **Language** 381-524, **Cognitive** 381-481, **Literacy** 446-509, and **Mathematics** 298-376 [15]

## FAMILY ENGAGEMENT OUTCOMES

Family engagement is an integral part of the Strong Beginnings design. Instructional staff are responsible for engaging families in their children's learning. Mechanisms for this involvement include required home visits, regular parent-teacher conferences, family engagement events, provision of home learning materials and activities, and more. Families are invited to volunteer in classrooms, get involved in advisory boards, and advocate for their children's education.

To these mechanisms for family engagement that it shares with GSRP, Strong Beginnings adds the work of a dedicated family liaison for each program site. Sites are encouraged to



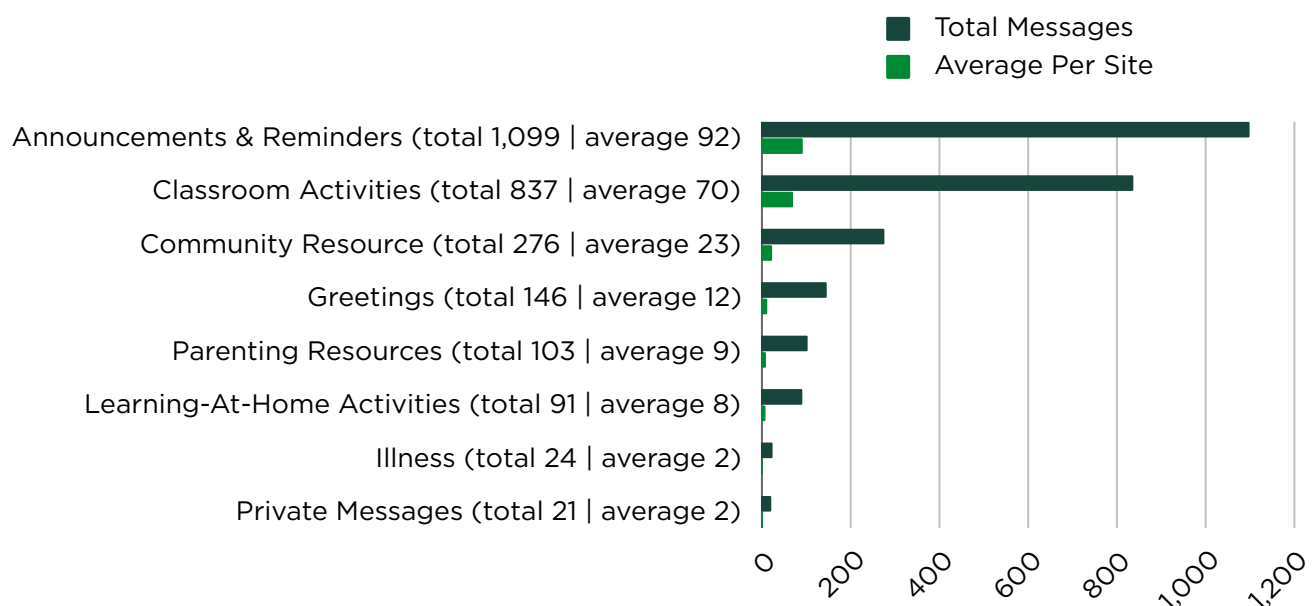
structure the role of the family liaison to meet the specific needs of local families. For example, the family liaison in a site whose neighborhood has a high proportion of immigrants may be bilingual and may refer families to English-learning programs and immigration legal support more often than a family liaison in a neighborhood where most families are native-born. Family liaisons are expected to communicate regularly with individual families to learn about their needs and connect them with needed services, such as food or housing assistance and employment programs. Having referred families to services, family liaisons are required to follow through to see if the services met the need and, if not, to come up with another solution. Family liaisons also serve as sounding boards and coaches to help families meet their needs and advocate for their children.

During 2022-23, the MSU evaluation team used four tools to assess the effectiveness of Strong Beginnings family engagement efforts conducted by both instructional staff and family liaisons: family contact logs, family event attendance lists, family satisfaction surveys, and staff focus groups. Findings of each data collection method are described below.

### FAMILY CONTACT LOGS

Family contact logs tracked messages sent electronically by teachers, family liaisons, and other program staff. The platforms used for communication include email, Brightwheel, ClassDojo, Facebook, Kangarootime, Kaymbu, Remind, and WhatsApp. The messages were captured in a database developed by MSU. Research staff reviewed the contents to classify them by date, ISD, classroom, technology platform, and content category. The staff reviewed the content and created eight content categories into which messages were sorted. Any one message can contain content in multiple categories. Figure 4 shows how many messages were sent by staff in each of the eight content categories. The number in parentheses for each category represents the average number of messages in that category sent from the 12 sites. Announcements or reminders and news about classroom activities were by far the largest categories.

**Figure 4. Content of Family Contact Messages**



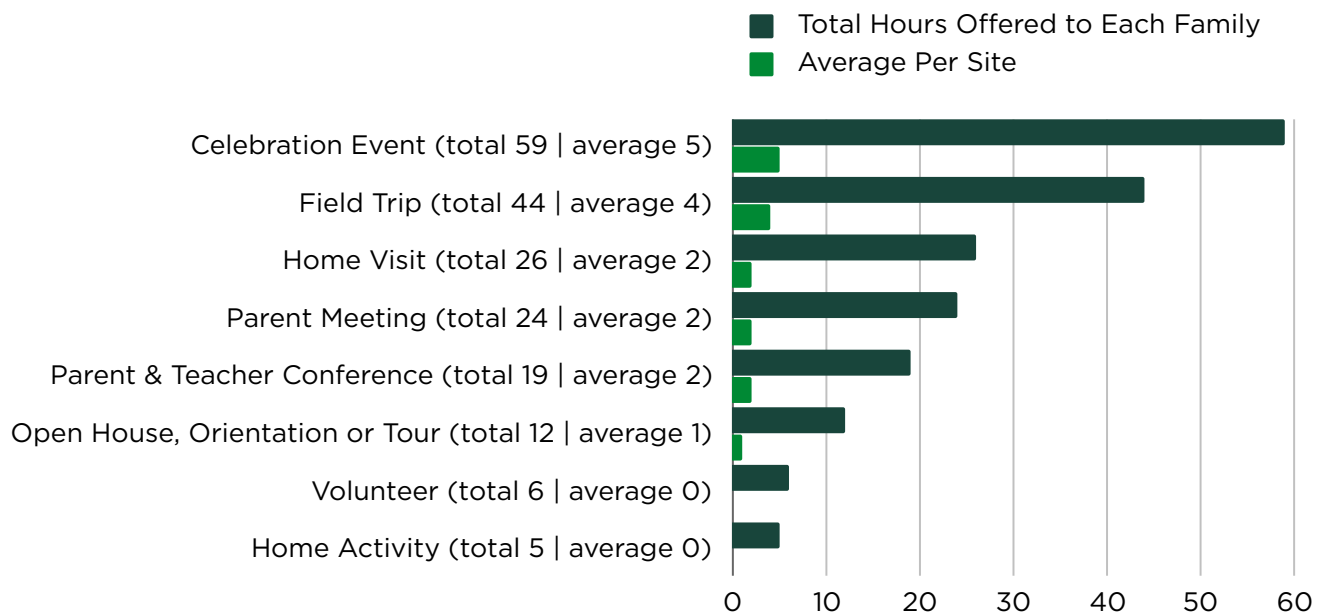
## FAMILY EVENT OFFERINGS

Families were offered participation in a total of 195 in-person hours of events across the 12 sites during Year 3. The events are categorized as shown in Figure 5. Celebration events, the largest category, include holiday celebrations and end-of-year events. These events would draw the families of many participating children at one time. Field trips, the next largest category, may also have drawn many families at once. Some other categories, particularly home visits and parent and teacher conferences, would typically engage only one family at a time; further, it is expected

that only one or two adults would participate in these events. Volunteering in the classroom would also be a low-volume activity, as typically only one or two adults at a time would be engaged in reading to children, for example, or helping with art activities. Parent meetings might involve many or a few families; these are workshops in which program staff share information or engage families in a shared activity such as scrapbooking. Home activities were teacher-created activities related to a child development skill and sent home for families to complete with their child; the event hours represent the estimated time planned for the activities.

Wayne RESA, whose four sites served the largest number of children, provided a little more than half of the total event hours, dominating all categories except home activities. This finding may indicate that Wayne sites were more intentional in offering events to involve families. Another explanation is that families in this urban county might be more likely to travel to events than could families in other ISDs, and therefore the programs offered more in-person activities.

**Figure 5. Offered Family Event Hours by Event Type**



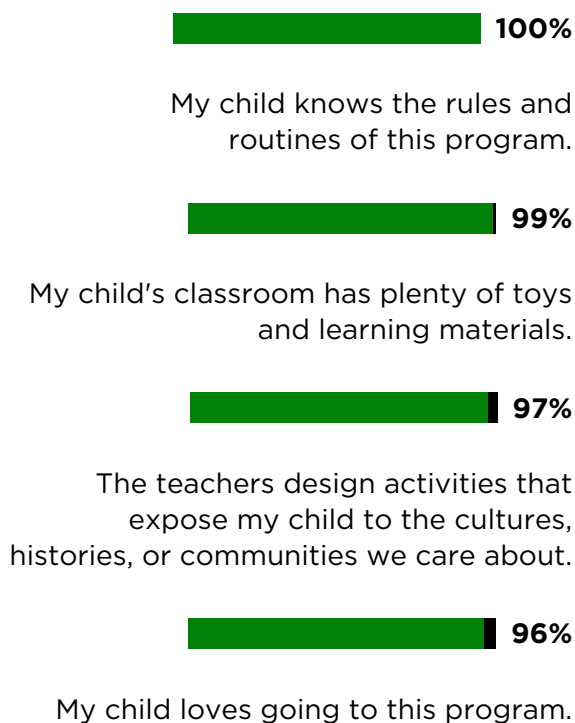
## FAMILY SATISFACTION SURVEYS

The MSU team developed a family satisfaction survey to measure the perceived effectiveness of sites' family engagement efforts. The survey asked families to rate each of 8 items using a

4-point scale ranging from strongly disagree to strongly agree. The items fell into two categories: instruction and communication. The survey was fielded online using Qualtrics in May 2023. Lead teachers were asked to email a survey link to all families of participating children in their classrooms. Of the 140 family respondents who returned usable surveys, 83% were mothers, and 65% indicated their child was not the first in the family to attend preschool.

The results were overwhelmingly positive. Figure 6 shows the percentages of family respondents who agreed or strongly agreed with the five items rating instructional quality. The average positive response to instructional quality statements was 98%. Figure 7 shows the percentages of family respondents who agreed or strongly agreed with the three items rating the quality of staff communication. The average positive response to these three items was 97%. A final item asked family respondents to rate their overall satisfaction with their Strong Beginnings program on a five-point scale. Again, the responses were overwhelmingly positive: 94% were satisfied or very satisfied, as shown in Figure 8. Less than 1% (0.7%) chose dissatisfied or very dissatisfied.

**Figure 6. Family Satisfaction with Instructional Quality (n = 140)**



**Figure 7. Family Satisfaction with Communication (n = 140)**



**Note:** For Figures 5-6, satisfaction is measured by % choosing 'Agree' or 'Strongly Agree.'

**Figure 8. Family Satisfaction with Strong Beginnings (n = 140)**

▪ Satisfied or Very Satisfied: 94%    ▪ Neutral: 6%



## STAFF FOCUS GROUPS

The MSU evaluation team conducted focus groups with teachers and family liaisons to learn what support they received for family engagement, how they supported children and families, and how they thought the family engagement efforts were being received. For both sets of focus groups, invitations were issued by email to all staff in the relevant position. Two MSU researchers conducted each focus group: one facilitated the discussion and the other took notes. Following standard principles of qualitative content analysis,<sup>[16]</sup> the researchers recorded the discussions, with respondents' permission, and later transcribed them. A third researcher who was not involved in the discussions reviewed the transcripts to identify themes. The major findings are summarized below.

## TEACHER FOCUS GROUPS

The evaluation team conducted two teacher focus groups in Fall 2022: 12 teachers participated in the first group and 18 in the second; three participated in both. Participants, who included both lead teachers and assistant teachers, represented all four ISDs and all 12 Strong Beginnings sites.

Asked about the supports that helped them do their work, teachers from six of the 12 classrooms cited interactions with other staff: teaching partners, family liaisons, early childhood specialists, and directors in Strong Beginnings, as well as GSRP staff in the same building. One teacher noted, "I can't put [support for teaching] in one place. It's a collective unit." Other support mentioned by individual teachers included the ability to interact with families in person again as COVID-19 restrictions eased. One teacher said that creating a regular routine for the children was a helpful strategy.

**"If we can get [social-emotional regulation] under control," said a Strong Beginnings teacher, "the learning will come."**

When asked what factors were most important for children's future success, teachers representing seven of the 12 classrooms named social-emotional skills. "If we can get [social-emotional regulation] under control," said one, "the learning will come." Teachers said that they saw more emotional outbursts than usual this year, so that they had to step in more often to support children in interacting with each other. To help children with social-emotional skills, some teachers said they taught problem solving or supported language development. One teacher said she finds ways children can help one another throughout the day, such as by zipping their coats. Others talked about enlisting families in social-emotional learning by, for example, educating parents to work with their child at home.

Another factor important to children's future success, cited by teachers from two classrooms, was family engagement. Some teachers said that they want families to work at home on the skills children learn at school. Others wanted families to attend program activities. One teacher said that families should be taught what family engagement means and then be led to reflect on how their family needs to engage. One teacher explained, "According to their needs. Not according to what I think they need but according to their needs, their children's needs. What would it take for us to help them, as a community, for this family to thrive?"

Teachers described many ways in which they fostered family engagement. They said that

field trips, drop-off and pick-up times, and classroom events are opportune times to speak with families. Teachers representing seven classrooms said they used apps to share pictures and videos of the children, discuss children's daily needs, and communicate about upcoming events. Some sites held monthly meetings in which families could learn from staff and interact with other families. Some teachers said that they sent home activity ideas and materials such as weekly reading logs or packs of books for school breaks. One teacher asked families to sign up once a month to read to the children during class. Several teachers acknowledged that some parents are more difficult to engage than others. They described obstacles some families face, such as long work hours or erratic work schedules.

## **FAMILY LIAISON FOCUS GROUPS**

The MSU team conducted family liaison focus groups in Fall 2022 and Spring 2023. All 12 family liaisons were invited. Nine participated in the first focus group. Of the five who participated in the spring group, four had also participated in fall. The fall group was asked questions similar to those of the teacher focus group: what professional support they received, how they supported children, what factors were most important for student success, and how family engagement was going this year. In Spring 2023, the family liaisons were asked about the amount of time they spent with families, how the process of goal setting went with families, what additional work they found themselves completing, and how they were supported by their ISD.

In the fall group, family liaisons briefly mentioned site directors and resource guides as factors that supported them in their work. Asked to name factors that were important for children's future success, they named the environment of the child, social-emotional development, problem-solving, and family support. One family liaison said that meeting families' basic needs, such as food and shelter, must come before addressing other needs, such as home support for children's learning. When the fall group was asked how they supported children, family liaisons described providing easily accessible resources, such as food and clothing, at the program site; meeting with teachers; and sharing information with families on food pantries, clothing drives, and utility assistance. One family liaison said she was challenged to choose activities families would find meaningful in the post-COVID era. Others said they partnered with GSRP for field trips, attended home visits with teachers, and surveyed families to aid in planning.

In the spring, family liaisons said they had connected with many families. Several indicated that they used apps to share resources with all families but also provided tangible resources, such as a table with non-perishable food or children's clothing for families to take. Some family liaisons said they spent time helping families cope with separations or divorce; they talked about specific ways they supported the mothers and their children by being a "sounding board" to mothers about how to coparent and support children who developed behavior issues after marriage changes. Two liaisons noted that being physically present during pick-up and drop-off times was especially important in identifying teachers and families who had recently experienced trauma.

**One liaison described their relationship with parents in this way: "We're here to work on behalf of the child and for the child, and you are here as a parent to advocate."**

The group members also discussed work they did during the year that was a bit atypical.

Assisting families and staff in processing difficult events that occurred at program sites was one common area of work. For example, one family liaison assisted staff and the family in emotionally processing the arrest of a family member in the parking lot at pick-up time. Family liaisons also spent time encouraging families to advocate for themselves and teaching them how to do it.

Asked how they were supported to do their work, family liaisons in the spring group cited monthly meetings with their supervisors. They also said they met regularly with early childhood specialists and teaching staff to discuss how to collaborate to support families.

## **CONCLUSION**

---

Of the 178 children enrolled in Strong Beginnings in Year 3, 97% came from families earning less than 250% of FPL. About 71% had at least one non-income-related risk factor. Thus, Strong Beginnings met its mandate to target children whose backgrounds could hinder their school readiness. Approximately 54% of Strong Beginnings children were non-White.

Findings on the academic readiness of three-year-old children derived from classroom observation instruments should be interpreted with caution. Although not displayed here, we did notice that the results of the COR Advantage and TSG observation tools show great variation among sites and ISDs. This variation suggests that different teachers are using the tools differently. Additional training in use of the observation tools could ameliorate this difficulty.

Families' perceptions of the instruction their children received and of the program's communications with them were overwhelmingly positive. Family members participated in 195 in-person hours of program-sponsored events. Both teachers and family liaisons described many efforts they made to engage families.

These child outcome and family engagement findings suggest that Strong Beginnings is implemented as designed to support participating three-year-olds and their families. More data from future years of Strong Beginnings and from participants' performance in GSRP, kindergarten, and beyond may strengthen our understanding of the academic impacts. As Strong Beginnings scales up, the ability of ISDs and program sites to implement the model with fidelity and maintain high program quality will be crucial to continued success.

## REFERENCES

---

- [1] Camilli, G., Vargas, S., Ryan, S., Barnett, W. (2010, March). Meta-Analysis of the Effects of Early Education Interventions on Cognitive and Social Development. *Teachers College Record*, 112(3). <https://doi.org/10.1177/016146811011200303>
- [2] Gorey, K. M. (2001). Early Childhood Education: A Meta-Analytic Affirmation of the Short- and Long-Term Benefits of Educational Opportunity. *School Psychology Quarterly*, 16(1). <https://doi.org/10.1521/scpq.16.1.9.19163>
- [3] Temple, J. A., Ou, S., Reynolds, A. J. (2022). Closing Achievement Gaps Through Preschool-to-Third-Grade Programs. *Frontiers in Education*, 7. <https://doi.org/10.3389/educ.2022.871973>
- [4] Tucker-Drob, E. M. (2012). Preschools Reduce Early Academic-Achievement Gaps: A Longitudinal Twin Approach. *Psychological Science*, 23(3). <https://doi.org/10.1177/0956797611426728>
- [5] Friedman-Krauss, A. H., Barnett, W., Hodges, K. S., Hodges, K. A., Weisenfeld, G., Gardiner, B., Merriman Jost, T. (2023). The State of Preschool 2022: State Preschool Yearbook. *National Institute for Early Education Research*. [https://nieer.org/wp-content/uploads/2023/09/YB2022\\_FullReport.pdf](https://nieer.org/wp-content/uploads/2023/09/YB2022_FullReport.pdf)
- [6] Farkas, G., & K. Beron. 2004. The Detailed Age Trajectory of Oral Vocabulary Knowledge: Differences by Class and Race. *Social Science Research*, 33: 464-97. <https://doi.org/10.1016/j.ssresearch.2003.08.001>
- [7] Copple, C. & Bredekamp, S. (Eds.). (2009). Developmentally Appropriate Practice in Early Childhood Programs (3rd ed.). *National Association for the Education of Young Children*. <https://www.naeyc.org/sites/default/files/globally-shared/downloads/PDFs/resources/position-statements/PSDAP.pdf>
- [8] Barnett, W.S., Jung, K, Youn, M., & Frede, E.C. (2013). Abbott Preschool Program Longitudinal Effects Study: Fifth Grade Follow-Up. *National Institute for Early Education Research*. <https://nieer.org/research-report/201311apples205th20grade-pdf>
- [9] Wakabayashi, T., Claxton, J., Smith, E. V. (2019, February). Validation of a Revised Observation-Based Assessment Tool for Children Birth Through Kindergarten: The COR Advantage. *Journal of Psychoeducational Assessment*, 37(1). <https://doi.org/10.1177/0734282917732491>
- [10] Kaymbu Help Center. (2021, June 4). School Readiness Report. *Growth & Planning Reports*. <https://help.kaymbu.com/hc/en-us/articles/1500012221401-School-Readiness-Report/articles/1500012221401-School-Readiness-Report>
- [11] Akaeze, H. O., Wu, J. H., Lawrence, F. R., & Weber, E. P. (2023). Validation of the Child Observation Record Advantage 1.5 Assessment Tool for Preschool Children: A Multilevel

Bifactor Modeling Approach. *Journal of Psychoeducational Assessment*, 41(5), 556-574.  
<https://doi.org/10.1177/07342829231158671>

[12] Akaeze, H. O., Lawrence, F. R. & Wu, J. H. (2022). Resolving Dimensionality in a Child Assessment Tool: An Application of the Multilevel Bifactor Model. *Educational and Psychological Measurement*, 83 (1), 93-115. <https://doi.org/10.1177/00131644221082688>

[13] Lambert, R. G. (2020, October). *Technical Manual for the Teaching Strategies GOLD® Assessment (2nd Edition)*. [https://teachingstrategies.com/wp-content/uploads/2020/09/2020-Tech-Report\\_GOLD\\_B-3\\_V4.pdf](https://teachingstrategies.com/wp-content/uploads/2020/09/2020-Tech-Report_GOLD_B-3_V4.pdf)

[14] MyTeachingStrategies® Support Portal (2018, July 18). Scaled Score Ranges of Widely Held Expectations (as of October 2020). *What are the scaled score ranges of widely held expectations in reports in GOLD reports?*  
<https://teachingstrategies.my.site.com/portal/s/article/What-are-the-scaled-score-ranges-of-widely-held-expectations-in-reports>

[15] MyTeachingStrategies® Support Portal (2018, July 18). Scaled Score Ranges of Widely Held Expectations (as of October 2020). *What are the scaled score ranges of widely held expectations in reports in GOLD reports?*  
<https://teachingstrategies.my.site.com/portal/s/article/What-are-the-scaled-score-ranges-of-widely-held-expectations-in-reports>

[16] Zhang, Y., & Wildemuth, B. (2009). Qualitative Analysis of Content. Applications of Social Research Methods to Questions in Information and Library Science. *Libraries Unlimited*.