Impacts of Creative Play and Bridges Residency

In Partnership with Children's Theatre Company and Bethune Arts Elementary

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Executive summary

From 2023-2024, Wilder Research (Wilder) collaborated with the Children's Theatre Company (CTC) to evaluate the effects of CTC's arts programming for students at Bethune Arts Elementary School. CTC's curriculum is divided by grade level: pre-k and kindergarten students participate in the Creative Play program, which focuses on social-emotional learning or SEL (e.g., executive functioning, emotional literacy, and social awareness). Third and fourth graders are involved in the Bridges program, which helps students improve their writing (e.g., mechanics, style, organization).

To gain insight into the impact of CTC programming for students, Wilder and CTC used three methods: classroom teacher Round Table discussions, a caregiver survey, and teaching artist observation data. Key findings include:

- **Classroom teachers viewed CTC programming as worthwhile and aligned with classroom goals**, noting in Round Table discussions that CTC programming bolstered the educational and developmental goals they have for their students and that CTC offered ideas and guidance for incorporating arts-based learning into their regular classroom teaching.

  The ways they drill into emotion have been helpful – not just mad and sad, but nervous and frustrated. It lets the kids have space to explore those emotions. – Teacher

  The breathing exercises have carried over to classrooms and the kids like it. There's alignment with social-emotional learning – deep breathing, quick stops, practicing breathing strategies. – Teacher

- **Caregivers appreciated the opportunity for their child to participate in arts-based learning with CTC**, with nearly all caregivers (97%) saying that their child looks forward to arts and theater programming at Bethune, that Bethune's school-based arts and theater programming is beneficial for their child, and that arts and theater programming helps develop their child's social-emotional skills.

  My daughter has gained confidence and now aspires to be an actor! She loved trying new things and getting to be silly. – Caregiver

- **Teaching artist observation data showed improvement for students in regard to social-emotional development and educational goals**; improvement was seen across social-emotional measures such as social awareness, executive functioning, and emotional literacy, as well as across the fundaments of writing and storytelling like organization and mechanics.

Please see the Appendix for more information about these data collection methods and how Wilder analyzed the data to identify these findings.

Introduction

From 2023-2024, Wilder Research (Wilder) collaborated with the Children's Theatre Company (CTC) to evaluate the effects of CTC's arts programming for students at Bethune Arts Elementary School and identify areas for improvement. The curriculum is divided by grade level: pre-k and kindergarten students participate in the Creative Play program, which focuses on social-emotional learning or SEL (e.g., executive functioning, emotional literacy, and social awareness). Third and fourth graders are involved in the Bridges program, which helps students improve their writing (e.g., mechanics, style, organization).

To guide this work, Wilder and CTC identified four evaluation questions:

1. How do students benefit from CTC programming?

2. To what degree is arts learning integrated into Bethune classrooms?

3. What do classroom teachers learn and implement in regards to arts-based teaching approaches?

4. To what degree do families appreciate or benefit from CTC programming?

Methods

To gain insight into these questions, Wilder and CTC used three methods of data collection. Please see Figure 1 for how the evaluation questions align with each method.

Classroom teacher Round Table discussions

Wilder hosted two 45-minute "Round Table" discussions with teachers whose classes participated in the residency. Discussions were held in February and May 2024. Discussions centered on programmatic aspects of the residency, including what's going well and areas for improvement, but also addressed residency alignment with classroom developmental and learning goals. Please see Appendix A1 and A2 for summaries from both Round Table discussions.

Caregiver survey

Wilder and CTC were interested in hearing from caregivers (e.g., parents, guardians) of Bethune students. Caregivers were asked to complete a survey that focused on the overall impacts of arts and theater programming at Bethune, caregiver familiarity with Children's Theatre Company programming and family nights, and program impacts for students.

Caregivers had the opportunity to complete the survey at a Bethune community event and were also sent the survey link through a caregiver group chat. Twenty-nine caregivers completed the survey. Please see Appendix A3 for the survey. There may be some response bias in these results in that caregivers who are relatively engaged (attending a school event or participating in a group chat) were invited, while caregivers who may be less engaged did not have the same opportunity.

Teaching artist observation and grading data

As part of the programming, Children's Theatre Company teaching artists completed observation reports throughout the school year (October 2023-May 2024) for Creative Play and Bridges programming. Please see Appendix A4 and A5 for the observation rubrics used (Creative Play and Bridges respectively).

For Creative Play, teaching artists observed each student in every session, assessing three components within each overarching SEL category: Executive Functioning, Emotional Literacy, and Social Awareness. Additionally, student participation during each session was also observed. In the Bridges program, students wrote a story at four different points throughout the year, and their work was graded on a scale of 1-4 (from "needs improvement" to "excellent") across five storytelling components: Ideas, Organization, Style, Mechanics, and Creativity.

Wilder reviewed and analyzed teaching artist grading data from Creative Play and Bridges residency sessions. Eighty-five students involved in Creative Play and 71 students involved in Bridges were included in the analysis. To learn more about how the data were analyzed please see Appendix B1 and B2.

1. Research question and activity alignment

Evaluation question	Classroom teacher Round Table discussions	Caregiver survey	Teaching artist observation and grading data
1. To what degree is arts learning integrated into Bethune classrooms?	Alignment/not between residency and overall student goals	Balancing arts learning with traditional education	
2. How do students benefit from CTC programming?	Student engagement in residency over time	Caregiver perceptions of benefits of arts learning	Social emotional learning (executive functioning, emotional literacy, social awareness); Writing skills (ideas, organization, style, mechanics, creativity)
3. What do classroom teachers learn and implement in regards to arts-based teaching approaches?	Instances of teachers implementing arts-based approaches in classrooms		
4. To what degree do families appreciate or benefit from CTC programming?		Family engagement in CTC out-of-school programming and other arts opportunities	

This report presents findings from all three methods. It's important to recognize that when interpreting evaluation results, many factors may influence participant experiences beyond a single program component or the program itself. It is challenging to attribute participant outcomes entirely to the program with complete certainty.

Findings

Arts learning integration benefitted Bethune Elementary students and families

Caregivers and teachers see value in integrating arts and theater programming in their children's classroom curriculum, which helps students engage in the classroom and reach developmental and learning goals.
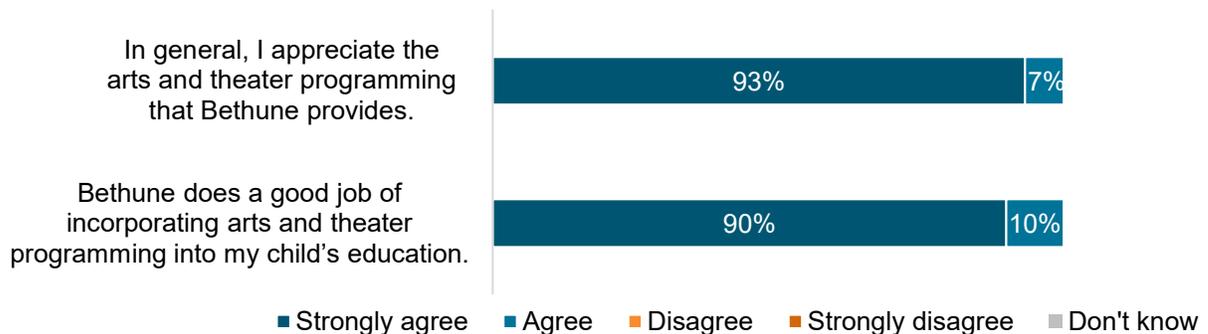
It was evident through conversations with teachers that CTC programming is helpful for engaging students, especially those who are less engaged by traditional pedagogies. Teachers also noted that these creative approaches support them in achieving developmental and learning goals in their classroom. For example, via CTC programming, students were able to experience "real-world learning" where they connect what they learn to aspects of their own development and have a safe space to practice new skills. For teachers, this was a valuable addition to their classrooms each week.

> *I like the acting part. It helps kids come out of their rabbit holes. – Teacher*
>
> *I can see kids becoming more willing to share, act, or try. [The] spotlight is on them [which] can be intense, but [I] have seen progress with that since fall. – Teacher*
>
> *The ways they drill into emotion have been helpful – not just mad and sad, but nervous and frustrated. It lets the kids have space to explore those emotions. – Teacher*
>
> *My kids are so little they haven't learned how to regulate. ... This is a good way for them to learn how to settle down. – Teacher*

All surveyed caregivers appreciated arts and theater programming provided by Bethune and said that the school does a good job at incorporating this type of programming into the school curriculum. (Figure 2).

> *They [my children] have learned about social topics that impact their lives but talk about them in an easy way for them to understand. – Caregiver*

2. Caregiver report of arts integration at Bethune (N=30)

In general, I appreciate the arts and theater programming that Bethune provides.
93%   7%

Bethune does a good job of incorporating arts and theater programming into my child's education.
90%   10%

■ Strongly agree   ■ Agree   ■ Disagree   ■ Strongly disagree   ■ Don't know
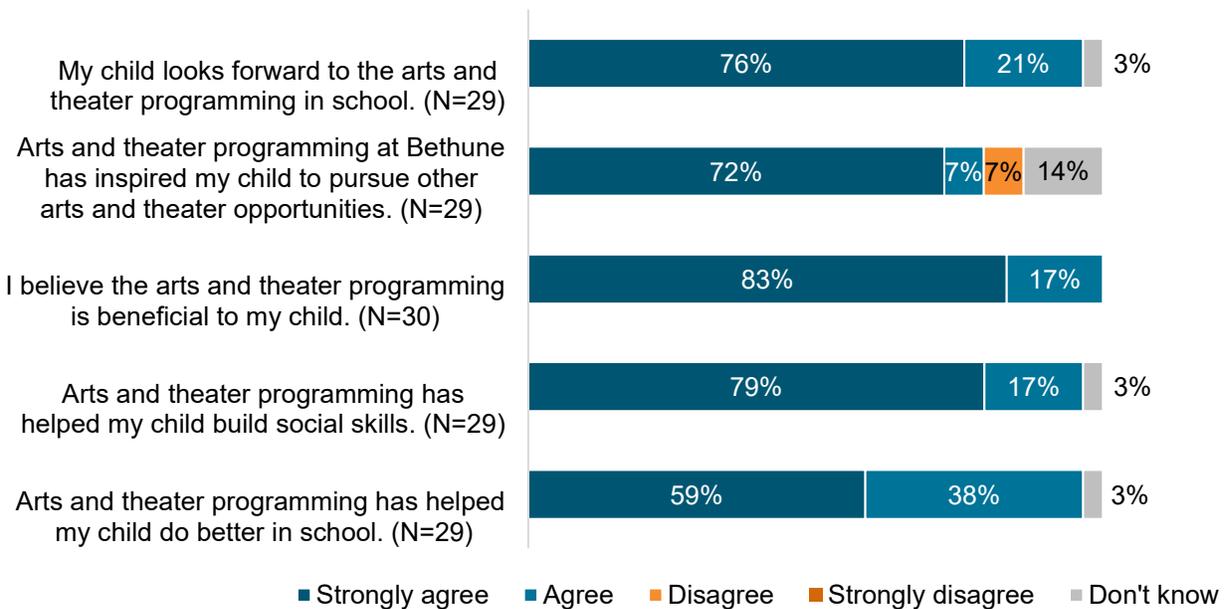
CTC programming is inspiring students to pursue arts and theater opportunities

Caregivers reported that their children look forward to the arts and theater programming at Bethune and that it has encouraged them to pursue other arts and theater opportunities, suggesting that students are engaged inside and outside of the classroom. Caregivers also mentioned that arts and theater programming supports their child's overall development. Notably, caregivers said that the programming is beneficial to their child, helps their child do better in school, and has helped their child build social skills (Figure 3).

My daughter has gained confidence and now aspires to be an actor! She loved trying new things and getting to be silly. – Caregiver

If the Children's Theatre people were [in my child's classroom], that's the first thing she wants to talk about. That's the highlight of the day. And she likes school anyway, so it's not like this is the only thing she likes, but this is definitely the peak of her day or week. – Caregiver

3. Caregiver report of benefits of arts and theater programming

	Strongly agree	Agree	Disagree	Strongly disagree	Don't know
My child looks forward to the arts and theater programming in school. (N=29)	76%	21%			3%
Arts and theater programming at Bethune has inspired my child to pursue other arts and theater opportunities. (N=29)	72%	7%	7%		14%
I believe the arts and theater programming is beneficial to my child. (N=30)	83%	17%			
Arts and theater programming has helped my child build social skills. (N=29)	79%	17%			3%
Arts and theater programming has helped my child do better in school. (N=29)	59%	38%			3%

Bethune families feel engaged with CTC

In general, caregivers reported they feel welcome at Bethune and that it is easy for them to attend Bethune family nights (Figure 4). A caveat is that there may be some response bias in these results, as those filling out the survey were either at a family night or were part of a family group chat organized by Bethune.

4. Family engagement with Bethune (N=30)

I feel welcome at Bethune.	80%	17% 3%
It is easy for me to attend family or community events at Bethune.	77%	23%

■ Strongly agree ■ Agree ■ Disagree ■ Strongly disagree ■ Don't know
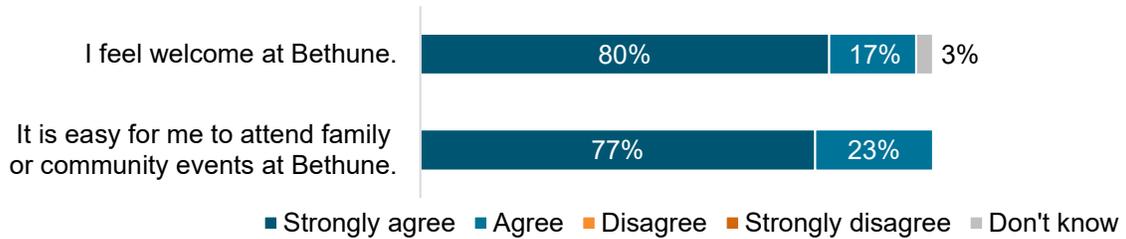
CTC programming supports social-emotional learning in the classroom

Teachers observed that CTC programming emphasizes social-emotional learning (SEL), which they consider valuable for students and aligns with their classroom curriculum. While CTC SEL content is primarily geared toward younger students, teachers said that older students also need these skills and hope SEL can be more explicitly integrated into the curriculum for older students in the future.

When caregivers were asked about what their child has gained from CTC programming, the majority noted that their child developed skills related to SEL, such as improved communication and increased confidence.

> *[My daughter] loves school, but she's been shy and she always has been. That's just kind of her personality. But since she's been doing the Children's Theatre program, I feel like it's really increased her confidence and it's definitely increased her feeling that she is okay with or she even wants to get out in front of people and say what she has to say. – Caregiver*
>
> *My daughter has learned and gained [skills in] showing compassion and being very supportive. – Caregiver*

Creative Play students show improvement in SEL as their involvement in programming increases

The data collected by teaching artists align with feedback from caregivers and teachers, affirming that students are developing SEL skills through Creative Play (pre-k and kindergarten) programming. Teaching artists observed students during each Creative Play session and evaluated them in three SEL categories: Executive Functioning, Emotional Literacy, and Social Awareness. Each category included three rating statements (e.g.,
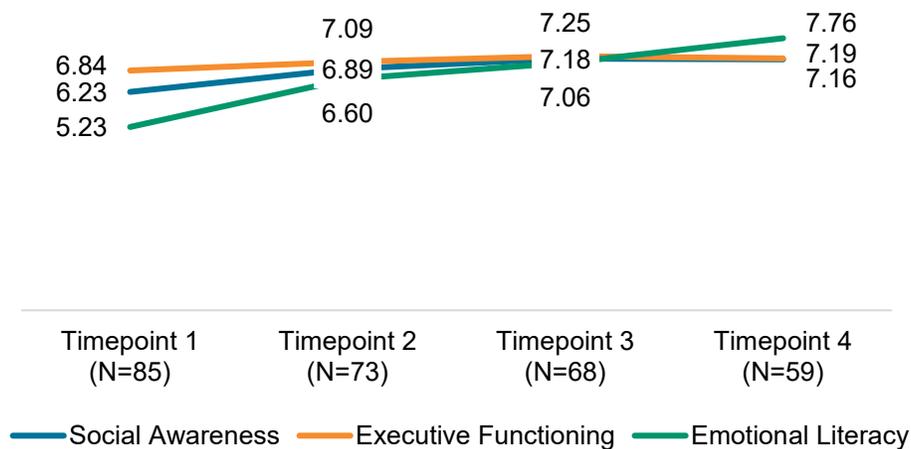
"student completes simple tasks or assignments when directed"), and students were rated as "rare," "occasional," or "consistent" for each statement. The rubric used can be found in Appendix A4. For analysis, the three statements within each SEL category were summed to calculate a final score for each student. These scores range from 3 to 9, with 9 representing the highest observed SEL levels.

The data were analyzed at four different "timepoints" to track changes in student SEL development over time. Each timepoint refers to an individual student's time in programming, not the overall length of the program. For example, if Student A's first day in programming was on October 1, then that is their Day 0. If on October 31, Student B has their first day in programming, then that is Student B's Day 0 and Student A's Day 30. As needed, please refer to Appendix B1, which provides an in-depth explanation of the analysis process and methodology.

Timepoint 1 refers to data collected between 0-41 days; Timepoint 2 between 42-97 days; Timepoint 3 between 98-146 days; and Timepoint 4 between 147-210 days. Please note that if a student is included in Timepoint 2, for instance, it means that teaching artists collected data about the student 42-97 days after their initial Creative Play class. This refers to time passed since their Day 0, not that the student had 97 class days.

On average, ratings for Creative Play students in the three SEL areas increased over timepoints (Figure 5). The area of Emotional Literacy saw the most improvement over the timepoints.

5. SEL average for Creative Play students from Timepoint 1 to Timepoint 4

	Timepoint 1 (N=85)	Timepoint 2 (N=73)	Timepoint 3 (N=68)	Timepoint 4 (N=59)
Social Awareness	6.23	6.89	7.18	7.16
Executive Functioning	6.84	7.09	7.18	7.19
Emotional Literacy	5.23	6.60	7.06	7.76

For kindergarteners in particular, Emotional Literacy had a fairly large jump (2.84 points) from Timepoint 1 to Timepoint 4 (Figure 6).

6. SEL average for Creative Play students from Timepoint 1 to Timepoint 4 for kindergarten
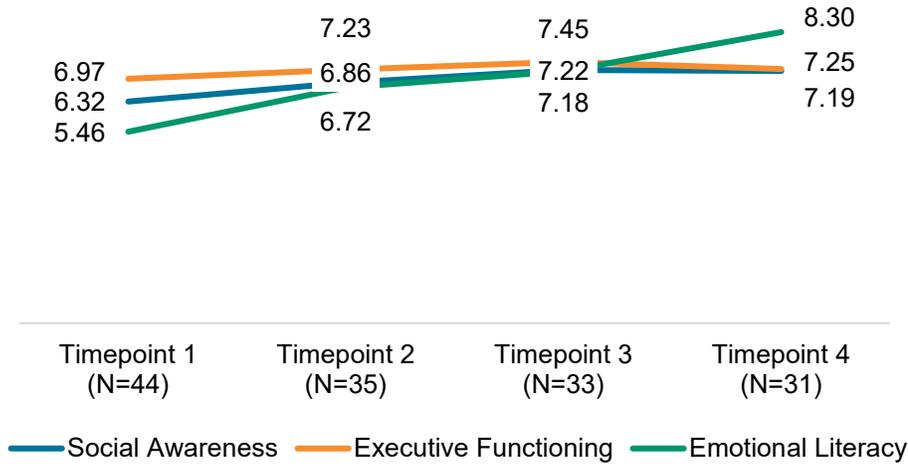
In addition, teaching artists noted that students made progress in exhibiting confidence and pride, identifying and communicating emotions, showing concern and care for fellow students, and demonstrating leadership skills (e.g., modeling positive behavior, guiding others, and speaking up).

These observations are further supported by "matched analysis" of the observation data. For matched analysis, we reviewed individual student changes from timepoint to timepoint when the data is available. For e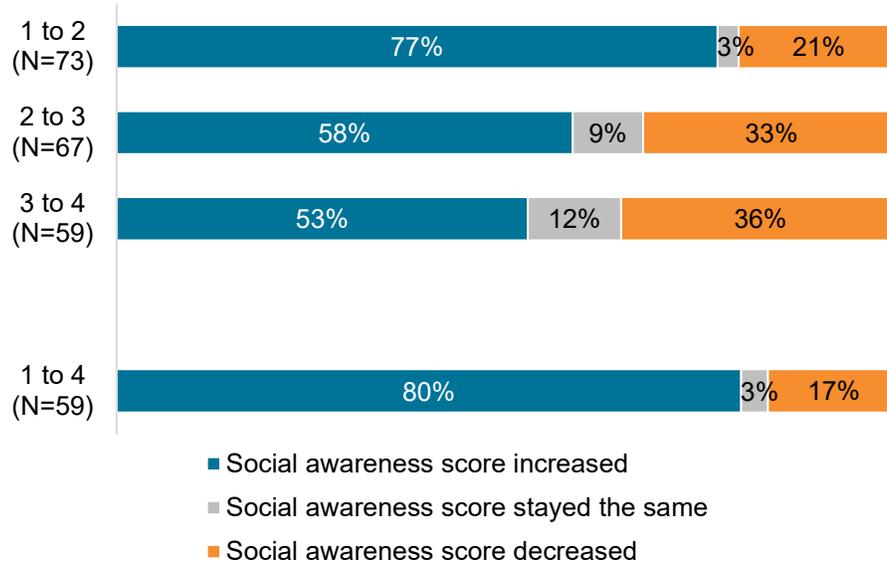xample, to see if their score increased, stayed the same, or decreased, a student would need to have observation data in both Timepoint 1 and Timepoint 2. Figures 7-9 show student score changes in each SEL area between timepoints, and also from the first timepoint to the last timepoint.

As seen in Figure 9, Emotional Literacy shows the biggest student improvements over time, with 100% of students who were observed in both the first and last timepoint increasing their score. Executive Functioning shows the fewest gains, with about half of students improving from Timepoint 1 to Timepoint 4, and the other half decreasing or staying the same. This suggests Executive Functioning may be an area for CTC to continue to focus on during programming. For each element, the highest percentage of students increasing their score was from Timepoint 1 to Timepoint 2, and then tapered off in subsequent comparisons, suggesting that the initial exposure to CTC programming may be particularly important for student impact.

7. Student Social Awareness score changes

Timepoint:

1 to 2 (N=73)	77% — 3% — 21%
2 to 3 (N=67)	58% — 9% — 33%
3 to 4 (N=59)	53% — 12% — 36%
1 to 4 (N=59)	80% — 3% — 17%

- ■ Social awareness score increased
- ■ Social awareness score stayed the same
- ■ Social awareness score decreased

8. Student Executive Functioning score changes

Timepoint:

1 to 2 (N=73)	60% — 6% — 34%
2 to 3 (N=67)	55% — 15% — 30%
3 to 4 (N=59)	39% — 15% — 46%
1 to 4 (N=59)	56% — 9% — 36%

- ■ Executive functioning score increased
- ■ Executive functioning score stayed the same
- ■ Executive functioning score decreased
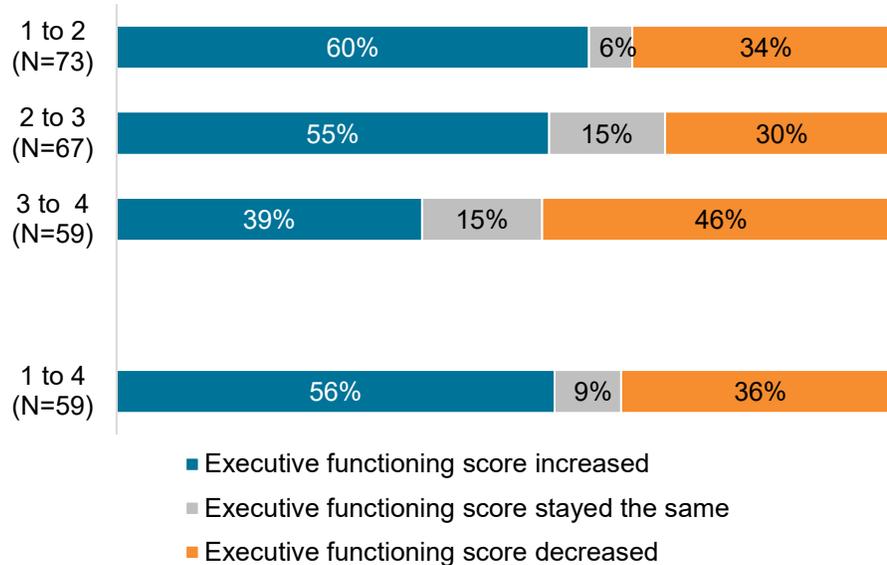
9. Student Emotional Literacy score changes

Timepoint:

- ■ Emotional literacy score increased
- ■ Emotional literacy score stayed the same
- ■ Emotional literacy score decreased
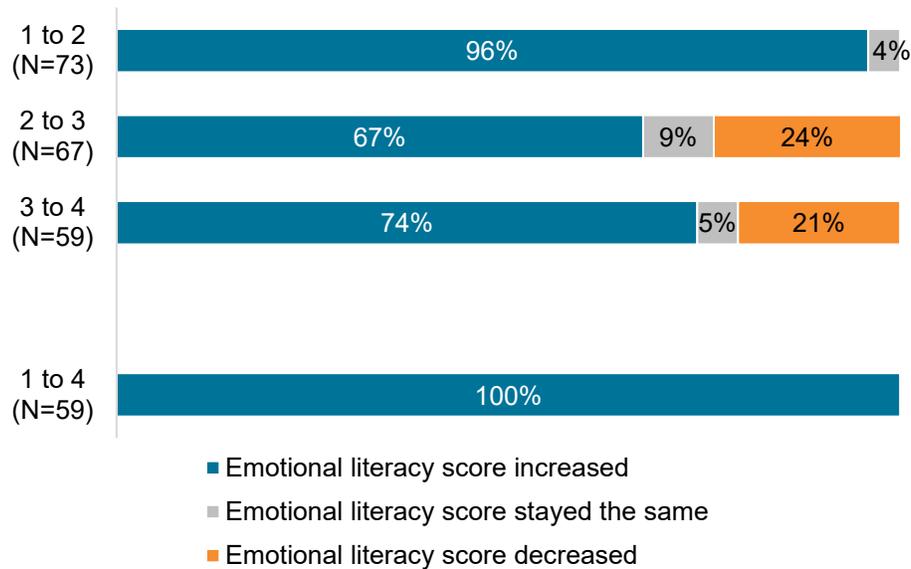
Teaching artists also noted some behavioral issues or students struggling to engage with programming, with some students at times not engaging at all. This type of participation was also assessed during each session by the teaching artists, using a grading scale that included the categories: "dysregulated," "disengaged," "observing," and "active." The participation category was further divided into five subcategories of participation behaviors (e.g., participating in daily mindfulness exercises). Each student was scored in these subcategories and their scores averaged to produce a final participation score ranging from 0 to 15, with 15 representing the highest level of participation. This assessment can be found in Appendix A4 for reference.

Overall, students in pre-k and kindergarten demonstrated similar levels of participation, with an average score towards the higher scoring range (see Figure 10).

10. Overall participation score averages for Creative Play by grade

	Student average
Pre-K (N=142)	12.73 (of 15)
Kindergarten (N=143)	12.53 (of 15)

Kindergarten students had the most fluctuation of participation over the school year, with higher levels of participation around Timepoints 1 and 3, with a -1.09-point difference from Timepoint 1 to Timepoint 4 (Figure 11). This suggests that mid-year and end-of-year changes and activities, such as teacher turnover and student mobility, affected student participation in the programming.

11. Overall participation score averages for Creative Play by timepoint (N28 - N44)
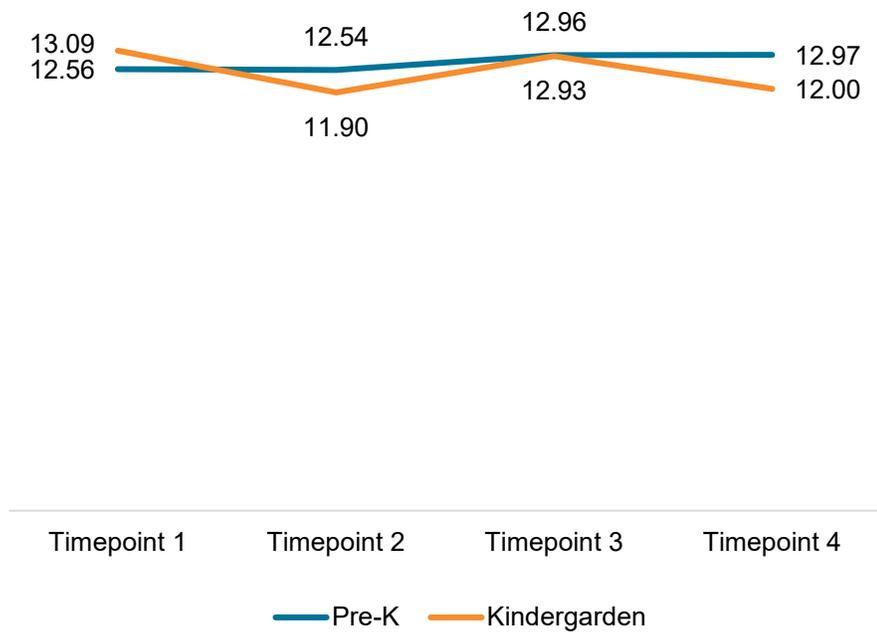
The matched analysis data between the timepoints show some fluctuation among kindergarteners throughout the year, with no meaningful change from Timepoint 1 to Timepoint 4 (Figure 12). For pre-k students included in the matched analysis, participation trends were evenly split, with half showing an increase and the other half remaining the same or decreasing (Figure 13).

12. Kindergarten student participation score changes between timepoints
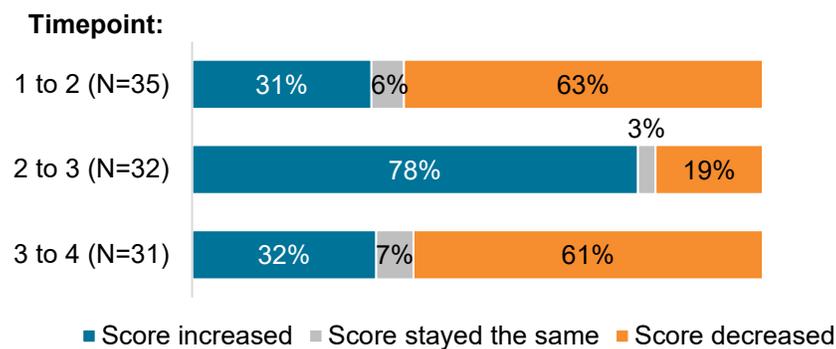
13. Pre-K student participation score changes between timepoints

Timepoint:

	Score increased	Score stayed the same	Score decreased
1 to 2 (N=38)	50%	8%	42%
2 to 3 (N=35)	63%	9%	29%
3 to 4 (N=28)	43%	18%	39%
1 to 4 (N=28)	50%	4%	46%

■ Score increased ■ Score stayed the same ■ Score decreased
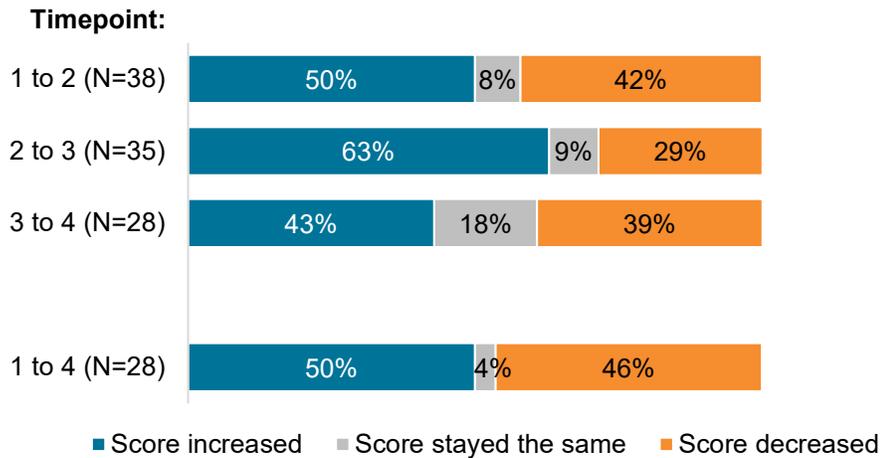
The Creative Play assessment included space for more comments and context beyond numerical ratings. Many comments offered by teaching artists spoke to successes with student engagement and students demonstrating SEL skills or growth, such as being focused and showing excitement to participate. These teaching artist comments aligned with feedback from teachers shared during Round Table discussions, who noted that focusing more on behavior regulation could benefit students. As one teacher said, "My kids are so little they haven't learned how to regulate. [It can be] hard to teach them that in the moment." Further, teachers pointed out that students grew more comfortable with teaching artists over time, which may have contributed to an increase in disruptive behaviors toward the end of the year.

Teachers suggested that aligning CTC's behavior expectations with classroom standards – co-created between students, classroom teachers, and teaching artists at the start of the school year – could be beneficial. However, they emphasized that a one-size-fits-all approach would not suit the diverse needs of their classrooms, making flexibility in addressing student challenges essential. For instance, teachers noted that students with an individualized education plan (IEP) or those who are English language learners may face greater difficulties in participating and engaging with the residency. Additionally, attendance issues were noted by teachers, saying that students who missed a week often rejoined the CTC programming unaware of the previous or current activities, making it harder for them to fully engage. If not done already, setting aside a few minutes at the beginning of programming to review what happened in the previous residency class could help reintegrate these students.

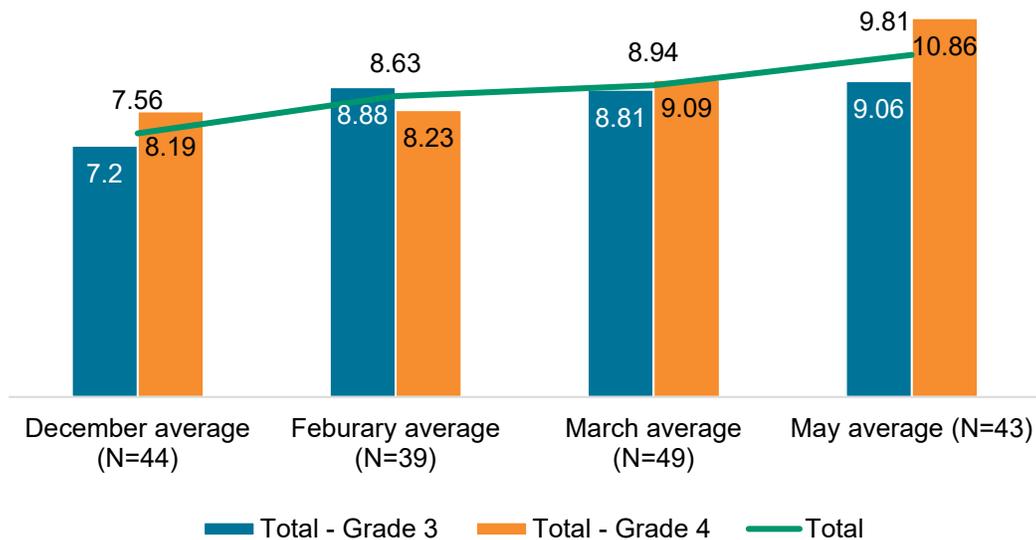> *It takes a lot longer to participate and get started for kids with special education. – Teacher*
>
> *[We had some] attendance issues. The week to week stories, sometimes kids who are absent have no idea what's going on [when they return]. – Teacher*

CTC programming helps 3rd and 4th graders develop writing and storytelling skills

Students in Bridges programming (grades 3 and 4) wrote a story at four different points in the program year. Those stories were then graded 1-4 ("needs improvement" to "excellent") by CTC teaching artists. Grading focused on five elements: Ideas, Organization, Style, Mechanics, and Creativity, resulting in a minimum score of 4 and a maximum score of 20. Wilder analyzed this data to show changes in grades over time, focusing on calculating average overall scores at each timepoint and average scores for each individual component. Students who received all 0s for any given timepoint, indicating that they were off-task or did not meaningfully participate in that activity, were not included in the average for that timepoint.

Bridges students show an increase in their writing and storytelling skills over the course of programming (Figure 14). Overall average scores increased by 2.25 points from the first grading in December to the fourth and final grading in May.

14. Overall score averages for Bridges students

Legend: ■ Total - Grade 3 ■ Total - Grade 4 — Total

December average (N=44): Grade 3 = 7.2, Grade 4 = 8.19, Total = 7.56
Feburary average (N=39): Grade 3 = 8.88, Grade 4 = 8.23, Total = 8.63
March average (N=49): Grade 3 = 8.81, Grade 4 = 9.09, Total = 8.94
May average (N=43): Grade 3 = 9.06, Grade 4 = 10.86, Total = 9.81

When reviewing by grade, fourth grade students showed a bigger increase in average total scores compared to third grade students (2.67 increase compared to 1.86 increase) (Figure 15).

15. Overall score averages for Bridges students by grade

	December average (N=44)	February average (N=39)	March average (N=49)	May average (N=43)	Overall difference from December to May
Grade 3	7.2	8.88	8.81	9.06	**1.86**
Grade 4	8.19	8.23	9.09	10.86	**2.67**

Further, Wilder completed a matched analysis by reviewing changes in individual students' scores over time. For students who participated in both the December and May activity, two-thirds increased their writing score in May compared to December, while about a quarter decreased (Figure 16). It is important to note that while the majority of students are improving in their writing abilities, over a quarter of the students' scores decreased. CTC may want to further explore which students fall into this group. Identifying any commonalities in this group may help CTC consider ways to provide targeted activities or support to help these students improve their writing and storytelling skills.

16. Student score changes from December to May
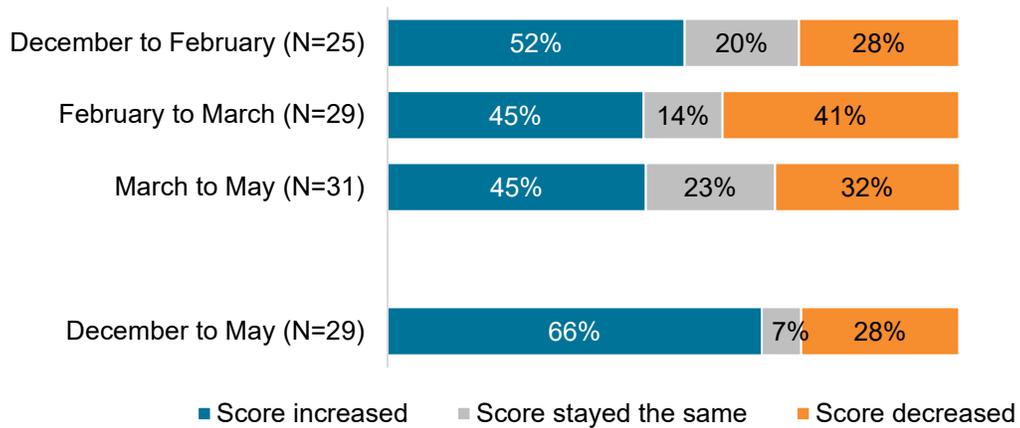
Looking at each individual element (Ideas, Organization, Style, Mechanics, and Creativity), students increased by about half a point for each (Figure 17).
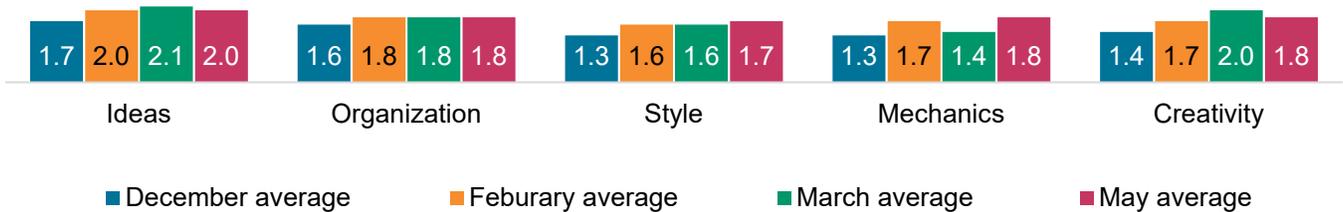
17. Individual element averages for Bridges students

	Ideas				Organization				Style				Mechanics				Creativity			
	1.8	1.9	2.0	2.2	1.6	1.9	1.8	2.0	1.3	1.7	1.5	1.8	1.3	1.8	1.5	1.9	1.5	1.7	1.9	1.9

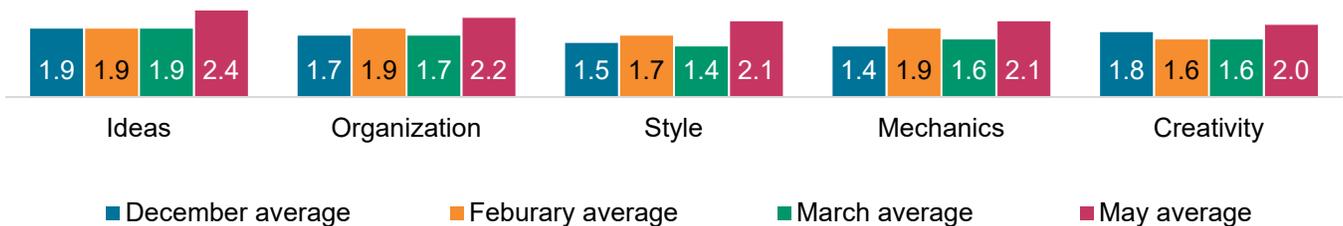■ December average (N=44) ■ Feburary average (N=39) ■ March average (N=49) ■ May average (N=43)

When examining writing elements by grade, third graders' score improvements generally stayed within a consistent range (.2 to .5 difference). However, for fourth graders, the range of improvement varied more. In particular, mechanics saw a larger improvement from December to May (.7) compared to creativity, which had a smaller increase of .2 (Figure 18).

18. Individual element averages for Bridges students by grade

Third grade

	Ideas				Organization				Style				Mechanics				Creativity			
	1.7	2.0	2.1	2.0	1.6	1.8	1.8	1.8	1.3	1.6	1.6	1.7	1.3	1.7	1.4	1.8	1.4	1.7	2.0	1.8

■ December average ■ Feburary average ■ March average ■ May average

Fourth grade

	Ideas				Organization				Style				Mechanics				Creativity			
	1.9	1.9	1.9	2.4	1.7	1.9	1.7	2.2	1.5	1.7	1.4	2.1	1.4	1.9	1.6	2.1	1.8	1.6	1.6	2.0

■ December average ■ Feburary average ■ March average ■ May average

Beyond changes in writing and storytelling skills, teachers reported that CTC programming helps students discover and appreciate different aspects of writing. For instance, one teacher mentioned that "storytelling is a good steppingstone to writing and appreciating writing." Teachers also expressed a desire for closer collaboration with CTC teaching artists in the future with a focus on further improving writing skills, which they see as an area where students could benefit more.

Bethune teachers integrated arts-based teaching into their classrooms

During Round Table discussions, teachers noted that they integrated approaches modeled during the residencies into their regular classroom teachings. Self-regulation techniques, such as breathing exercises and mindfulness practices, were primary activities adopted by teachers. Teachers and administrators said that they are seeking out opportunities to share these activities more broadly with students at Bethune, something CTC may want to keep in mind for future residency efforts. For instance, Bethune started including student-led mindfulness exercises in their weekly school-wide announcements. One teacher expressed hope for the next year to incorporate "breathing buddies" into their classroom, where students can practice breathing exercises together. Additionally, games and activities that require active participation, like Bippity Bippity Bop, were mentioned as effective ways to help regulate more dynamic emotions.

> *The breathing exercises have carried over to classrooms and the kids like it. There's alignment with social-emotional learning – deep breathing, quick stops, practicing breathing strategies. – Teacher*

> *A lot of what they [CTC] do … goes right in with what we are doing. Even the books [CTC uses] – we're trying to get the same books [in our classrooms] to go more in-depth with them. – Teacher*

Writing and reading activities from the residency were also incorporated into regular classrooms by teachers, primarily through the use of "sentence starters," referring to words or phrases that help students explore different sentence structures. Teachers expressed that using CTC recommended books was useful for social-emotional development as well.

> *I use those sentence starters for writing. … I learned those from CTC. – Teacher*

> *[I use the] reading exercises – hopefully we can use more next year. [We are] talking about having more stories geared towards kids like conflict resolution. A lot of kids struggle with keeping their hands to self, so having a lot of stories that deal with social-emotional development [would be helpful].*

Caregivers engaged with and appreciated CTC programming

In addition to classroom programming, CTC provides Bethune families with special discounts on theater tickets, exclusive Bethune family nights at CTC, and family newsletters. These contact points may explain why the surveyed caregivers had a high familiarity with CTC (Figure 19). Similarly, about half of caregivers reported that they have attended a CTC Family Night (Figure 20). Of those, nearly all said their experience at CTC was very enjoyable (Figure 21). Lastly, the majority of caregivers (66%) had received a family

newsletter from CTC and over half (58%) of those tried at least one of the at-home activities included in the newsletters (Figures 22 and 23).

19. Caregiver familiarity with Children's Theatre Company programming at Bethune (N=29)

How familiar are you with the theater programming Children's Theatre Company provides at Bethune?	%
Very familiar	52%
Somewhat familiar	41%
Not at all familiar	7%

20. Caregiver attendance previous CTC family night (N=29)

Have you ever attended a Children's Theatre Company family night?	%
Yes	55%
No	38%
Don't know	7%

21. Caregiver familiarity with Children's Theatre Company programming at Bethune (N=18)

How enjoyable was your experience at the family night?	%
Very enjoyable	89%
Somewhat enjoyable	0%
Not at all enjoyable	0%
Don't know	11%

22. Caregiver receipt of CTC newsletters (N=29)

Have you received newsletters from Children's Theatre Company about programming?	%
Yes	66%
No	24%
Don't know	10%

23. Caregiver use of at-home activities in CTC newsletters (N=19)

Have you used any of the at-home activities included in the newsletters?	%
Yes	58%
No	32%
Don't know	11%

When asked what might make it difficult to attend an event at CTC, about two-thirds of respondents mentioned timing or scheduling (Figure 24). With this in mind, CTC might consider making discounted tickets available for multiple performance times, so caregivers can choose a performance that's best for their schedules.

24. Barriers to caregiver participation in Children's Theatre Company events (N=29)

Barrier	Percentage
Time/Scheduling	66%
Cost	17%
Other	10%
Location	10%
Not interested in the performances	0%
None of the above	21%
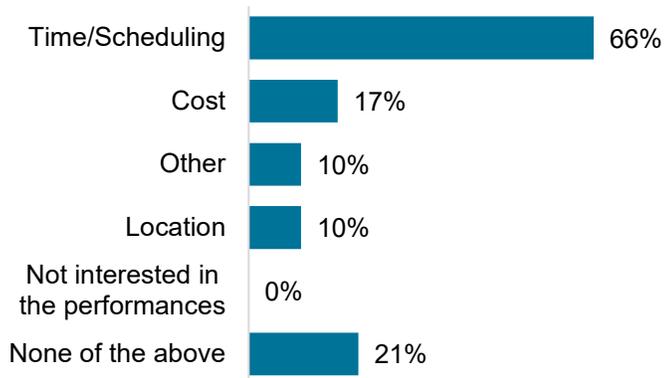
Limitations

There are limitations to keep in mind with this report. While a few limitations have been mentioned throughout the report, we have summarized them here:

- With school-based residencies like Creative Play and Bridges, it is difficult to differentiate if or how much of an impact comes from the CTC programming or from regular school curriculum and participation or even childhood development in general. For this evaluation, teachers and caregivers offered additional context and data that we believe helps paint a fuller picture of how CTC programming impacts students.

- Since teaching artists observed students during Creative Play programming, we cannot determine whether students demonstrated improvement in SEL skills outside of this context. While the data suggest that students are developing within Creative Play, we cannot generalize this growth to other areas of their academic or non-academic lives.

- The caregiver survey participants were presumably already fairly engaged with their child's school, which may skew the data. Additionally, the Ns for the survey are somewhat low in general compared to the overall school population. We offer these data as a starting place for consideration, but encourage additional evaluation and engagement efforts to explore this area if desired.

- The participation tracking scale used in the Creative Play assessment is not necessarily linear, since the category "dysregulated" does not necessarily fit on the same scale as the other options. However, if observations that include "dysregulated" are excluded from the data set, it could skew the remaining data; this makes data analysis more complex.

- Data collection in a real-world setting such as a classroom can be challenging. Due to the nature of students moving schools, being absent, or having to miss class for a variety of reasons, it can be difficult to consistently gather data for a student throughout the school year. We were able to control for some of these inconsistencies through analysis (particularly our matched analysis approach, explained on page 14), but it should still be kept in mind when reviewing findings from the observation data.

Recommendations for program improvement

Based on the findings in this report and feedback from a variety of viewpoints (teachers, caregivers, teaching artists), we offer the following suggestions for CTC to consider as it seeks to continuously improve residency programming:

- **Continue SEL focus, especially for older youth.** There is evidence that Creative Play helps build SEL skills in pre-k and kindergarten classrooms. Explicitly continuing this focus into programming for older students may have additional benefits and is something classroom teachers expressed interest in.

- **Continue focusing on executive functioning and behavioral expectations, especially for younger students.** From Creative Play observation data, executive functioning was an area that showed some growth, but not as much growth as emotional literacy and social awareness. Similarly, the participation tracking scores and feedback from teachers suggest that behavioral expectations may be an area that needs some attention.

- **Deepen collaboration with classroom teachers.** In general, teachers expressed interest in closer collaboration with teaching artists. This may mean striving for increased alignment between CTC programming and classroom curriculum, and sourcing materials and resources (books, games, activities, tip sheets, etc.) used in CTC programming so that teachers can incorporate arts-based approaches into their classrooms.

- **Continue to foster relationships with families.** In general, the caregivers surveyed were aware of CTC and had engaged with CTC efforts (newsletter activities, family nights, etc.). Expanding or deepening these opportunities may lead to additional interest and impacts outside of the classroom. In terms of barriers to attending CTC performances or events, two-thirds of caregivers indicated time and scheduling was a problem. Finding ways to be more flexible may help with this barrier, such as offering families more times to choose from or alternating days and times of events.

Recommendations for continued evaluation

To continue supporting continuous improvement of CTC programming, Wilder suggests further examination of the research questions below to ensure feedback loops are established between CTC staff and Bethune stakeholders (e.g., caregivers/guardians, students, and teachers):

1. How do students benefit from CTC programming?

2. To what degree is arts learning integrated into Bethune classrooms?

3. What do classroom teachers learn and implement in regards to arts-based teaching approaches?

4. To what degree do families appreciate or benefit from CTC programming?

In addition to continuing with the evaluation activities described in this report, we recommend that CTC continues to regularly or intermittently analyze and make use of data from Round Table discussions, teaching artist observations, and caregiver feedback. This could prompt responsive and data-based changes to residency programming throughout the school year. For example, CTC might consider using a database or Excel to expedite analysis of observation data and iterate residency schedules or approaches accordingly.

We also suggest that CTC collect feedback directly from the students via age-appropriate methods. This feedback can offer nuanced insights into the research questions since it would come from the students themselves. Potential ideas include "thumbs up/thumbs down" voting at the end of each class, discussions about what they've learned or their favorite part at the end of a semester or year, or a short survey that uses simple language and includes pictures or icons as response options.

Appendix

A. Round Table findings

A1.   Round Table 1 Summary Findings

MEMO

TO:	Ann Joseph-Douglas, Johanna Gorman-Baer, Kiko Laureano
FROM:	Ryan Ander-Evans, Maria Robinson
RE:	Round Table discussion #1 findings summary
DATE:	March 15, 2024

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Heather Britt

On February 12, 2024, Wilder Research hosted a Round Table discussion at Bethune Arts Elementary with about 15 teachers whose students have been participating in the Creative Play & Bridges residency throughout the 2023-24 school year. Developed and facilitated by Children's Theatre Company staff and teaching artists, the Creative Play & Bridges residency uses the performing arts to help students achieve developmental and learning goals, such as improving writing skills and deepening social emotional capacity.

To host this discussion, Wilder created a facilitation guide in partnership with Children's Theatre staff and teaching artists. Using this guide, Wilder staff gathered teachers' perceptions of student engagement in the residency as well as the ways in which the residency aligned with ongoing developmental and learning goals for students. Bethune teachers offered feedback in a number of areas: duration and pacing of residency classes; creative engagement and arts-based learning; differing learning modes and needs; connections to regular classroom experiences; and the school-residency partnership between Bethune and Children's Theatre. Below we summarize how teachers talked about these topics.

Duration and pacing of residency classes

Generally speaking, Bethune teachers were very positive about class duration and pacing, with one teacher saying, "The pacing is excellent," and another offering, "The pacing is great – my kids are engaged." Some teachers noted that the duration of residency classes recently changed so that the classes are now longer than they used to be – which has posed some challenges. One of these teachers said, "It's hard to navigate getting the kids to stay focused. Towards the end [of the residency class], the kids don't want to be engaged." Another teacher echoed this sentiment, saying, "An hour is a long time for kids to do something that is different from classroom routine."

For the most part, teachers who noted that classes felt long or that their students had difficulty staying engaged in them were speaking on behalf of younger students. On the other hand, a teacher whose students are older said, "It would be helpful to get a little more time for the older kids." These findings suggest that perhaps teaching artists can block time differently in classes with younger students to account for the longer

duration, and that they can lean into deeper or more intensive activities with older students who more readily stay engaged for the entire class period.

Creative engagement and arts-based learning

Overall, Bethune teachers appreciated teaching artists' use of creative approaches to help students achieve developmental and learning goals. Some teachers observed that creative activities are effective at engaging their students, with one teacher noting, "I like the acting part. It helps kids come out of their rabbit holes." Another teacher said, "I can see kids becoming more willing to share, act, or try. The spotlight is on them – which can be intense – but have seen progress with that since the fall."

Beyond engagement, teachers noted that teaching artists' use of arts-based approaches is helpful for connecting to student learning and developmental goals; this was true for younger students and older students. About older students, one teacher commented, "The storytelling is a good steppingstone to writing and appreciating writing." About younger students, one teacher offered, "The ways they drill into emotion has been helpful – not just mad and sad, but nervous and frustrated. It lets the kids have space to explore those emotions." Similarly, another teacher noted, "My kids are so little they haven't learned how to regulate. ... This is a good way for them to learn how to settle down."

Differing learning modes and needs

While many teachers noted the positives of residency classes regarding duration and pacing of classes as well as the use of arts-based approaches, some teachers offered that the classes were not always inclusive of students with Individualized Education Programs. As one teacher noted, "It takes a lot longer to participate and get started for kids with special education services." Another teacher asked, "How can the residency support students with different abilities?"

Connections to regular classroom experiences

Bethune teachers saw a lot of connections between the residency and their regular classroom teaching, with many noting the ways that activities in the residency have translated into their classrooms or otherwise have aligned with their classroom curriculum. Numerous teachers talked about the usefulness of breathing exercises: "The breathing exercises have carried over to classrooms and the kids like it," "There's alignment in social emotional learning – deep breathing, quick stops, practicing breathing strategies." Beyond the breathing exercises, many teachers noted that the residency has been aligned with the social emotional goals they have for students. As one teacher said, "Social emotional learning alignment is good – along with reading and telling stories, thinking about how characters feel and what is going on with them." Another teacher offered, "A lot of what they do is in alignment with literacy, language, emotions – it goes right along with what we are doing [in the classroom]. Even the list of books – we're trying to get the books to go more in-depth with the curriculum."

A handful of teachers offered some suggestions for strengthening the residency's connections to regular classroom experiences. One teacher said they'd like to collaborate more directly on building writing skills, saying that much of the residency to-date has focused on oral storytelling. Another teacher noted that some flexibility in residency activities or topics could be useful, such

as the residency having 2-3 different pathing options depending on how teachers' classroom planning changes or evolves. Lastly, one teacher mentioned the difficulty of connecting the residency to classroom experiences for younger students, saying, "Some of the regulation pieces are a little hard because the structure in our classrooms is different … With younger children, we are very structured and consistent when managing our classroom. When they go into situations that are less structured and consistent [like the residency], my kids can go 'whoosh!' [referring to becoming dysregulated]."

School-residency partnership

The few teachers who talked about the partnership between Bethune and Children's Theatre were very positive, saying they appreciated the intentionality and communication that teaching artists brought to the residency. As one teacher offered, "We really mapped it [the residency] out. We met in the beginning of the year and have it all planned. They send us a lesson plan at the beginning of the week, which is lovely." Another teacher appreciated the consistency of the teaching artists who work with their students, saying "It's nice to have the same teaching artists. The kids are excited about that continuity."

Summary and moving forward

To close the Round Table discussion, we asked teachers to discuss with each other the biggest successes and biggest challenges with the residency so far. Here is what each small group shared after discussing with each other:

- "The most important success is the kids are seeing they can tell stories fluently. The challenge is how to put that onto paper – the writing skills are not there yet."
- "For me, student voice and inclusivity are so important. Every one of my kids has the opportunity to talk. The teaching artists are so patient and it's really good for me to learn from that."
- "The success is the books – how much we enjoy them and how intentional they are. The kids are so engrossed in the stories. We wish we could stay in the moment of the story and explore that more. Sometimes it does feel a bit rushed."
- "The challenge is the writing portion. How do we make it equitable for kids – accessible for kids who struggle, but paced well enough for kids who excel at writing?"

These responses offer a clear direction forward for the Creative Play & Bridges residency at Bethune Arts Elementary, providing a succinct overview of the residency's strengths and weaknesses to date. Wilder observes that the challenges presented in these responses are not necessarily unique to the residency or Bethune – these are challenges that many professionals in our education systems are dealing with and trying to address. This suggests that Children's Theatre is, on the whole, delivering a worthwhile residency experience to Bethune students in the eyes of their teachers; otherwise, we might expect some more basic or fundamental feedback in these responses regarding how the residency could be improved.

A2. Round Table 2 Summary Findings

MEMO

TO: Ann Joseph-Douglas, Johanna Gorman-Baer, Kiko Laureano
FROM: Ryan Ander-Evans, Maria Robinson
RE: Round Table discussion #2 findings summary
DATE: June 27, 2024

On May 14, 2024, Wilder Research hosted a follow-up Round Table discussion at Bethune Arts Elementary with 13 staff whose students participated in the Creative Play & Bridges residency throughout the 2023-24 school year. Developed and facilitated by Children's Theatre Company staff and teaching artists, the Creative Play & Bridges residency uses the performing arts to help students achieve developmental and learning goals, such as improving writing skills and deepening social emotional capacity. Altogether, teachers and staff who attended the discussion worked with students in grades kindergarten through 5th grade.

To host this discussion, Wilder created a facilitation guide in partnership with Children's Theatre that built on key themes from the initial Round Table discussion. Using this guide, Wilder staff gathered teachers' perceptions and ideas regarding challenges in the residency and how to address them, extending learning from the residency into regular classroom experiences, and how to start next year's residency to continue the momentum of this year's successes.

Bethune teachers offered feedback in three main areas: residency class schedules and transitions, expectations for students during residency classes, and extending learning from the residency classes into their classrooms.

Residency class schedules and transitions

At the first Round Table discussion, Bethune teachers were generally positive about class schedules and transitions, though some mentioned that classes felt too long for younger students. At the second Round Table discussion, one teacher said they appreciated changes that teaching artists had made to class schedules since the first discussion, offering, "We switched the order of activities [during classes] which was very helpful on the part of the teaching artists."

That being said, when we asked about residency challenges at the second Round Table discussion, some teachers still mentioned class schedules and transitions as an area for improvement. A few teachers mentioned that transitioning to residency classes after students were with specialist staff (rather than their regular teacher) was difficult for some students. As one teacher said, "For some grades we have specialists before CTC. Sometimes it gets hard for kids to go from one thing to another with

different adults and not have time to adjust to the change in activities. Having time to be with teachers and decompress before they go to a different thing would be helpful." Similar to the first discussion, another teacher mentioned that an hour-long class is too long for younger students, suggesting that CTC decreases class duration to 45-50 minutes.

Expectations for students during residency classes

Some teachers mentioned a desire for behavior expectations during residency classes that align with their classroom behavior expectations, with one teacher saying that in residency classes students sometimes "get away with" more disruptive or off-task behaviors than in their classroom. Some teachers said they would like to determine behavior expectations with teaching artists at the beginning of the school year and maintain those expectations throughout the year. Two teachers offered that behavior expectations for their classrooms are student-led, suggesting that teaching artists could likewise lead a process with students to identify behavior expectations for residency classes. That being said, regarding behavior expectations in residency classes, one teacher wanted to note that throughout the school year "effort has been made from the Children's Theatre side" to correct disruptive behaviors and that students were "now much calmer" in residency classes.

Beyond behavior expectations, staff noted that students had gotten more comfortable with teaching artists throughout the school year, suggesting this may have contributed to more disruptive behaviors (as well as deeper engagement with residency activities). That being said, a few teachers mentioned that students are "trying their best" with behavior expectations and that teaching artists should still continue to offer varying and responsive ways for students to participate in residency classes, rather than enforcing strict, one-size-fits-all expectations for students.

Extending learning from the residency into regular classroom experiences

Regarding the connection between residency classes and regular classroom teaching, some teachers reiterated findings from the first Round Table discussion—that the residency classes offer opportunities for students to practice social-emotional skills and that breathing and mindfulness activities from the residency have been particularly useful in their regular classes. In fact, staff mentioned that as part of Bethune's morning announcements, students take turns leading a school-wide mindfulness activity. One teacher mentioned that next year they plan to introduce "breathing buddies" in their class as another way to extend this residency activity into the classroom.

Further, some teachers mentioned the benefit of incorporating higher-energy activities from the residency in their classroom, such as theater games like bippity-bippity-bop, as a way for students to express and explore bigger or more dynamic feelings. A few teachers mentioned that they would like support from teaching artists regarding how to help students lead these activities for each other (that is, with minimal adult direction).

Summary and moving forward

To close the second Round Table discussion, we asked teachers and staff to each answer one of two questions: 1) What is the most important change that Children's Theatre should make to the

residency, or 2) What would you recommend that Children's Theatre plans for the first residency class next year?

Many teachers underlined the importance of setting behavior expectations for residency classes, with one teacher emphasizing, "It's important to set those expectations either for the residency overall or for each residency classroom. Starting the year off right away [with behavior expectations] lays a good foundation to build on." Teachers also reiterated that they would like to partner with teaching artists to design these expectations and that they want teaching artists to continue efforts from this past year regarding residency behavior expectations. As one teacher said, "Keep the changes we've made in place, like 'coming in calm.'" Beyond behavior expectations, some teachers noted the importance of continuing relationships between teaching artists and students, with one teacher saying, "It's helpful that teaching artists will be following the kids. They don't have to build relationships from scratch."

Overall, staff at the second Round Table were satisfied with how the residency went this past school year, praising the ways that teaching artists interacted with students and how the residency activities readily mapped onto their regular classroom goals. Looking forward to next year's residency, Children's Theatre and Bethune have some questions to answer together, such as how to balance ideal and practical schedules for residency classes, the ways that Children's Theatre staff can support teachers to use arts-based activities in their classrooms, and how to create and maintain behavior expectations for residency classes that complement or build on teachers' expectations for their students.

A3. Caregiver Survey

Children's Theater Company – Parent Survey

Thank you for taking the time to do this survey!

Children Theater's Company and Bethune are partnering with Wilder Research to learn more from parents about their experiences with the arts and theater programming provided at Bethune. We are interested in learning from parents about their thoughts and experience with the program. This will help Children's Theater Company as they work to improve the program for your child and other children in the future.

This survey is voluntary, confidential, and will take about 5 minutes. As a thank you for your time, we will give you a $5 gift card.

Please indicate how much you agree with each of these statements.

	Strongly agree	Agree	Disagree	Strongly disagree	Don't know
1. In general, I appreciate the arts and theater programming that Bethune provides.	☐1	☐2	☐3	☐4	☐8
2. Bethune does a good job of incorporating arts and theater programming into my child's education.	☐1	☐2	☐3	☐4	☐8
3. It is easy for me to attend family or community events at Bethune.	☐1	☐2	☐3	☐4	☐8
4. I feel welcome at Bethune.	☐1	☐2	☐3	☐4	☐8
5. I believe the arts and theater programming is beneficial to my child.	☐1	☐2	☐3	☐4	☐8
6. Arts and theater programming has helped my child do better in school.	☐1	☐2	☐3	☐4	☐8
7. Arts and theater programming has helped my child build social skills.	☐1	☐2	☐3	☐4	☐8
8. My child looks forward to the arts and theater programming in school.	☐1	☐2	☐3	☐4	☐8
9. Arts and theater programming at Bethune has inspired my child to pursue other arts and theater opportunities.	☐1	☐2	☐3	☐4	☐8

10. How familiar are you with the theater programming Children's Theater Company provides at Bethune? *You may know it as Creative Play (High-5 – K), Early Bridges (Grades 1-2), Neighborhood Bridges (3-4), Art and Activism (5th grade), or CTC family nights.*

☐ Very familiar
☐ Somewhat familiar
☐ Not at all familiar

There are more questions on the backside of this page!   Page 1 of 2

11a. Have you received newsletters from Children's Theater Company about programming?

☐ Yes ➡ 11b. Have you used any of the at-home activities included in the newsletters?

☐ No
☐ Don't know

    ☐ Yes
    ☐ No
    ☐ Don't know

12a. Have you ever attended a Children's Theater Company family night?

☐ Yes ➡ 12b. What was the last performance you attended?

☐ No
☐ Don't know

_____

12c. How enjoyable was your experience at the family night?
    ☐ Very enjoyable
    ☐ Somewhat enjoyable
    ☐ Not at all enjoyable

13. What are some factors that may prohibit you from attending performances or classes at Children's Theater Company? (Check all that apply)
☐ Time/Scheduling
☐ Location
☐ Cost
☐ Not interested in the performances
☐ Other factor (please specify) _____
☐ None of the above

14. In your own words, what do you think your child has learned or gained through Children's Theater Company programming at Bethune?

_____

_____

_____

15. Do you have any suggestions or feedback on the arts and theater programming available at Bethune?

_____

_____

_____

Thank you for completing this survey! Please return to receive your $5 gift card.

A4. Creative Play Assessment Tool

Date: _____   Classroom_____

Student: _____   Student Code_____

SOCIAL EMOTIONAL LEARNING		Rare	Occasional	Consistent
Executive Functioning	Student completes simple task or assignment when directed.			
	Student demonstrates impulse control (raising hand before speaking, waiting their turn, etc)			
	Student can re-focus or re-join class activities when distracted or dysregulated.			
Emotional Literacy	Student can identify and name emotions specifically, beyond using judgement language ("good" or "bad")			
	Student can recognize, understand, and label emotions as expressed by themselves and others			
	Student can describe how feelings relate to thoughts, actions, situations and events.			
Social Awareness	Student listens to and engages with peers.			
	Student collaborates with classmates on group activities.			
	Student navigates interpersonal conflicts or differences of opinion safely and respectfully.			

PARTICIPATION TRACKING		Disengaged	Observing	Active	Dysregulated
Student participates in (to the best of their ability)….	… daily mindfulness exercises				
	… acting and embodiment activities				
	… group discussion and reflection conversations				
	… turn taking activities				
	… independent activities				

Additional observations:

A5. Neighborhood Bridges Writing Evaluation Sheet

children's theatre company

Neighborhood Bridges Writing Rubric – based on 2020 Academic Standards in ELA (October 2023)				
Score	**Level 4 Excellent**	**Level 3 Good**	**Level 2 Emerging**	**Level 1 Needs Improvement**
Ideas	- Clear central idea that is well developed - Details expand upon the central idea throughout story - Sensory detail is used throughout - Multiple characters or narrator is developed	- Contains a clear central idea with some supporting details - Some sensory detail and descriptive language - Characters or a narrator is established	- Contains an idea but strays - Few supporting details - Mentions characters or uses narrative voice	- No clear idea - Random thought - Does not clearly establish characters or a narrator - No supporting detail
Organization	- Logical introduction, middle, and conclusion - Fully elaborated - Skillfully uses temporal words to signal event order beyond first, then, next, finally (i.e. 10 years later...)	- Clear sequence of events related to story structure - Some elaboration - Uses temporal words to signal event order (i.e. first, then, next, finally)	- Some sequencing of events - Few elaborative details - May include repetitive temporal words to signal event order (i.e. "and then... and then... then...")	- No clear sequence of events - List of unrelated statements or words - Lacks temporal words to signal event order (i.e. first, then, next, finally)
Style	- Vivid vocabulary, descriptive language throughout story - Writer's voice is obvious and strong - Complete and varied sentences - If present, dialogue enhances character and/or situation	- Varied vocabulary, some descriptive language - Writer's voice is emerging - Most sentences are complete - If present, dialogue helps develop character and/or situations	- Basic vocabulary, little to no descriptive language - A few run-on sentences - Short sentence structure with little variety - If present, dialogue replicates what we already know about character and/or situation	- Beginning vocabulary, no descriptive language - Long, run-on sentences - Many sentence fragments - If present, dialogue does not contribute to central idea of the story
Mechanics	- Capitalization, grammar, spelling, and punctuation are almost always correct and do not take away from ease of reading the story	- Capitalization, grammar, spelling, and punctuation are usually correct but generally not distracting from the story	- Capitalization, grammar, spelling, and punctuation are evident and halt the flow of the story	- Capitalization, grammar, spelling, and punctuation errors make the story difficult to read
Creativity	- Descriptive writing that includes thoughts, actions, conflict, and/or feelings to develop story events and/or characters - Setting enhances the story and vividly establishes a sense of time and place	- Writing includes some descriptive detail, thoughts, actions, and/or feelings to develop character and events - Setting is clear and details are provided	- Story is somewhat imitative - Writing uses very little descriptive language - Setting is stated, but not expanded upon	- Story is imitative - No use of descriptive language - Setting is not established

Neighborhood Bridges - Writing Evaluation Sheet

School: Grade: Teacher:

Student ID	Ideas	Organization	Style	Mechanics	Creativity	Total out of 20	Comments

page 2

B. Analysis methodology of teaching artist observations

CTC teaching artists collected observation data throughout the year for students participating in Creative Play and Bridges programming. See Appendix A4 for the observation tool. The raw data were provided to Wilder for analysis. Wilder cleaned the data set to ensure data were usable and accurate by removing duplicate entries, handling missing data, fixing errors like typos, creating a standardized format, and removing irrelevant data. Sections B1 and B2 detail our analysis methodology for teaching artist observation data.

B1. Analysis methodology: Creative Play

After each Creative Play session, teaching artists completed a grading rubric for each student. Each student was assigned a grade ("rare," "occasional," or "consistent") for statements falling under three SEL categories. Students' participation was also graded with a grading scale of "dysregulated," "disengaged," "observing," and "active." SEL and participation categories and the graded statements are listed below.

1. **Social Awareness**

   - Student listens to and engages with peers

   - Student collaborates with classmates on group activities

   - Student navigates interpersonal conflicts or differences of opinion safely and respectfully

2. **Executive Functioning**

   - Student completes simple task or assignment when directed

   - Student demonstrates impulse control (raising hand before speaking, waiting their turn, etc.)

   - Student can re-focus or re-join class activities when distracted or dysregulated

3. **Emotional Literacy**

   - Student can identify and name emotions specifically, beyond using judgement language ("good" or "bad")

   - Student can recognize, understand, and label emotions as expressed by themselves and others

   - Student can describe how feelings relate to thoughts, actions, situations and events

4. **Participation**

   - Student participates in (to the best of their ability) daily mindfulness exercises

   - Student participates in (to the best of their ability) acting and embodiment activities

   - Student participates in (to the best of their ability) group discussion and reflection conversations

- Student participates in (to the best of their ability) turn taking activities
- Student participates in (to the best of their ability) independent activities

For each observation the statements under each SEL category were summed into a score for the SEL category. The sum score for each category could range from 3-9. Similarly, the participation data was analyzed in the same way with a range of 0-15.

For each observation, Wilder calculated a sum score for the four variables of interest: Social Awareness (3 items), Executive Functioning (3 items), Emotional Literacy (3 items), and Participation Tracking (5 items). Each student was distinguished by a unique student code that identified all of their observation reports. There were 85 students in the dataset (most with multiple observations).

Most individuals in the dataset participated were observed multiple times throughout the year (7 had only one observation). The date of the first observation, the number of observations, and the number of days between observations varied across individuals. For each individual, their first observation was counted as Day 0 and the following the observations were marked by days passed since the first one. Wilder categorized observations into the four timepoints described below (Figure 25). For participants with multiple observations within each of the timepoints below, average scores were calculated across their observations within that timepoint to get one score for each measure (e.g., SEL category, participation) per participant per timepoint. Group averages were computed at each timepoint for each grade.

25. Analysis timepoints

Timepoint	Window of data collection	Number of individuals with data
1	0 to 41 days after Day 0	85
2	42 to 97 days after Day 0	73
3	98 to 146 days after Day 0	68
4	147 to 210 days after Day 0	59

In addition to averages, Wilder completed a matched analysis to review changes from timepoint to timepoint. Each pair of consecutive timepoints were compared (Timepoint 1 to Timepoint 2, Timepoint 2 to Timepoint 3, Timepoint 3 to Timepoint 4), as well as the first and last (Timepoint 1 to Timepoint 4). Students had to have data in both timepoints to be included in the matched analysis. For these students, we computed whether their scores increased, stayed the same, or decreased between timepoints.

B2. Analysis methodology: Bridges

Students in Bridges programming (grades 3 and 4) wrote a story at four different points in the program year. Those stories were then graded 1-4 ("needs improvement" to "excellent") by CTC teaching artists, focusing on five elements: Ideas, Organization, Style, Mechanics, and Creativity, resulting in a minimum score of 4 and a maximum score of 20. See Appendix A5 for the rubric. Some teaching artists gave scores of 0 despite this not being a category of the rubric. When students received all 0s for a given timepoint, their score for that timepoint was removed, as this indicated that they were off-task or did not meaningfully participate in the activity. If students received 0s on some but not all of the elements at a given timepoint, their scores were included in the analysis. There were only 4 scores that included 0 on some but not all of the elements.

Wilder focused on two primary analyses. First, Wilder calculated average overall scores at each timepoint to show general changes over time and average scores for each individual component (Ideas, Organization, Style, Mechanics, and Creativity).

In addition to score averages, Wilder completed a match analysis to review individual student score changes. Each pair of consecutive timepoints were compared (December to February, February to March, and March to May), as well as the first and last (December to May). Students had to have data in both timepoints being compared in order to be included in the matched analysis. For these students, we computed whether their scores increased, stayed the same, or decreased between these months.

Wilder Research, a division of Amherst H. Wilder Foundation, is a nationally respected nonprofit research and evaluation group. For more than 100 years, Wilder Research has gathered and interpreted facts and trends to help families and communities thrive, get at the core of community concerns, and uncover issues that are overlooked or poorly understood.

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The Children's Theatre Company's mission is to create extraordinary theatre experiences that educate, challenge, and inspire young people and their communities.