



When Children Succeed, We Break the Cycle of Poverty

A BLUEPRINT FOR SUCCESS IN NEW BRUNSWICK SCHOOLS

Project Evaluation Report – Year One

Prepared by Dr. Cynthia Hatt, Project Evaluator

When Children Succeed: A Blueprint for Success in

NB Schools is a collaborative project established to make a difference for children living in poverty in Saint John. Recognizing the effect poverty has on a child's success in school, the project's partners (Living Saint John, BCAPI, ASD-S and EECD¹) have committed to funding additional Kindergarten – Grade 2 teachers in the schools serving Saint John's priority neighbourhoods. These are:

North – Centennial, Hazen White-St. Francis, Princess Elizabeth

South – Prince Charles, St. John the Baptist/King Edward

East – Glen Falls

South – Seaside Park

“

**How great is it
that you leave at
the end of the day
and say, “I made a
difference today”?**

KINDERGARTEN TEACHER
IN A SAINT JOHN PRIORITY
SCHOOL

¹BCAPI - Business and Community Anti-Poverty Initiative; ASD-S – Anglophone School District South; EECD – NB Department of Education and Early Childhood Development. Living Saint John and its Social Innovation Fund provided by the provincial government.



In the 2018-2019 school year, three teachers were added to each school with the exception of Glen Falls which received two. By adding the additional teachers, projected pupil-teacher ratios, based on September 2018 enrollments, ranged from a low of 1:8.3 to a high of 1:16 (two classes only). However, over the year, as students transferred in, more classes approached or surpassed the 1:16 ratio. For 2019-2020, a different staffing model has been followed.

- The schools were first staffed by the school district using the funding model established by EECD and the NBTF collective agreement.
- Additional teachers were added from the project funding so that each school would have a K-2 pupil-teacher ratio of 1:12. (This ratio was calculated for the K-2 population, not by class or grade level.)
- Further consideration was given to each school based on the poverty level of the neighbourhood, the number of EAL and refugee students and the number of students requiring personalized learning/behaviour plans and/or identified by early intervention services.

Based on this formula, schools will receive 1.5-4.5 more teachers for 2019-2020 than would have been provided in the district staffing model, resulting in pupil-teacher ratios of 1:9-1:12. This distributes the additional resources more equitably across the seven schools and should alleviate the variations in pupil-teacher ratios experienced this year. [Note, however, that some classes will still be larger than 16 pupils due to limited classroom space. In these instances, the additional teachers provide a co-teaching or intervention support model.]

One of the mandates of the project is to provide EECD with information related to the development and use of a differentiated funding formula. Additional work is required to establish the poverty rate of students within each school with a greater degree of specificity.



A number of measures have been undertaken to determine the impact of the additional teachers. This preliminary report will focus on the following data sources:

Oral Language Data, Benchmarks (Numeracy and Literacy), Attendance Data and Teacher and Parent Surveys.

At present, school-wide and district results are available. Data entry is underway so that individual students can be tracked year-to-year. These schools have a very transient population, making it difficult to ascertain the full effect of the project. With individual student data, we will be able to identify students who benefit from a full-year in the project, versus students who transfer in to a school part-way through the year. Looking ahead, it will be important to identify students who are in the project for all three primary years, K-2.

I. ORAL LANGUAGE

In interviews with classroom teachers, oral language is continually mentioned as an area requiring ongoing support. Students have limited experiences and thus, often lack vocabulary and language structures necessary for success in school. Lower teacher-pupil ratios allow teachers to have more time to interact with individual students. Some teachers mentioned using this time to “play” with children in centers, thereby demonstrating how to interact with other children and with materials. Others spoke of allowing more time for conversations during transition times in the morning and at recesses. On a teacher survey completed at the end of the year, 86% responded with Agree or Strongly Agree to the statement: Compared to previous years, I spent more time in conversations with individuals and small-groups.

Pre- and post-measures are available for a sentence recall task in which students are required to listen to a sentence and repeat it back. It is an indication of vocabulary and grammatical structures within a student’s control. Kindergarten students were assessed using the Fluharty Preschool Speech and Language Test. Grade 1 students were assessed using the CELF-4 (Clinical Evaluation of Language Functions). Because these are norm-referenced tests, it is possible to compare scores to a standard based on a much larger population. Results are based on students for whom both pre-and post-scores were available. Those identified as EAL, absences and transfers in and out were not calculated. Scaled scores of 7-13 are considered “average.”

Kindergarten	Pre-test	Post-test
Raw Score/10	4.6	5.5
Scaled Score	8.8	9.1
Percentile Rank	A score of 9 = 37%	
Grade 1	Pre-test	Post-test
Raw Score/72	30.9	38.2
Scaled Score	7.5	7.9
Percentile Rank	A score of 8 = 25%	

The Renfrew Action Picture Test was administered in the fall to Kindergarten and Grade 1 students. It will be used again in the fall with Grade 1 and Grade 2 students and will provide information on individual students' progress in the areas of vocabulary and grammar.

II. BENCHMARK DATA

Reading Benchmarks

Reading benchmarks are identified for each grade level (K-3) as the level of text a student should be able to read at various points in the year. Text level is defined on a gradient (A-Z) according to a levelling system developed by Irene Fountas and Gay Su Pinnell in the 1990s. Text complexity is defined by factors such as sentence length and complexity, number of high-frequency words, difficulty of vocabulary, degree of picture support and types of punctuation. The Fountas and Pinnell levelling system is accepted by educational jurisdictions and the education publishing industry throughout Canada and the US.

Reading results can be examined in a few different ways. First, the average text level achieved by students at each grade-level can be compared with the previous year. Second, the percentage of students reading at grade-level can be compared with the previous year. Third, the number of students at each text-level can be compared with the previous year. Finally, the growth of each student can be examined.

When teachers discuss the effects of the smaller classes or additional teachers on their instruction they most often describe literacy.



Formative assessment was so much more useful this year. Before I found it overwhelming. With two less groups I can respond to their needs.

.....

I am getting guided reading and writing every day.

.....

Data collection is so key. I really see the growth. They are reading much quicker than before, [at levels] not typical this time of year.

.....

Not a day we write that I can't sit with every kid.

Despite the consistent references to seeing improvement through data collection and small-group work, there are inconsistencies in progress from grade-to-grade and school-to-school. It is encouraging to see the gains at kindergarten compared to 2017-2018, particularly considering the downward trend across the district. The little change, or decreases, seen at grade 1 and grade 2 may be due to the gap in achievement which increases as children move from grade to grade. We will have a better understanding when we track individual students and examine the progress made by cohorts of students. These results are similar to the December benchmarks with the greatest gains made in kindergarten. The priority schools are actually performing better than the district decrease of 6% (June 2019 compared with June 2018) at Grade 1 and matching the district decrease in Grade 2. An explanation of this downward trend across all grade levels throughout the district should be pursued by the district and province.

Kindergarten Reading Benchmarks (Grade Level = Text Level C and above)

There is some discrepancy as to the kindergarten benchmark with Text Level B often considered grade-appropriate. The positive outcome here is that there is a greater percentage of students reading at the upper-range of the expected level, i.e., a 10% increase in the number of students reading at Level C.

	2018	2019	+ / (-)
Priority School Text Level	3.7 (Approaching Level C)	4.3 (Just past Level C)	+ .6
Priority School % at Grade Level	53% at Text Level C (77% at Text Level B)	63% at Text Level C (79% at Text Level B)	+ 10% (+ 2%)
District % at Grade Level	67% at Text level C (86% at Text Level B)	64% at Text Level C (85% at Text Level B)	- 3% (-1%)

Grade 1 Reading Benchmarks (Grade Level = Text Level G and above)

Grade 1 levels have remained relatively unchanged with distribution among the levels comparable to 2018.

	2018	2019	+ / (-)
Priority School Text Level	7.6 (Approaching G)	7.7 (Approaching G)	+ .1
Priority School % at Grade Level	56%	55%	- 1%
District % at Grade Level	72%	66%	- 6%

Grade 2 Reading Benchmarks (Grade Level = Text Level K and above)

	2018	2019	+ / (-)
Priority School Text Level	11.6 (Approaching K)	11.6 (Approaching K)	No change
Priority School % at Grade Level	62%	58%	- 4%
District % at Grade Level	76%	72%	- 4%

Grade 2 experienced the largest decrease in the percentage of students reading at grade level, even though the average text level remained the same. There were a few less students reading at the very earliest levels (Pre A to C). One school which experienced a substantial decrease from last year had increased

enrollments in Grade 2 throughout the year, lessening the effect of the project. However, the other school with a fairly substantial decrease maintained small class-sizes throughout the year. Again, there is no correlation between math and literacy gains/decreases and will require further school level analysis. What is consistent, however, are the gains made at the kindergarten level and the increasing challenge of improving results as students progress from grade to grade.

The following table depicts the variations between schools gains and decreases for percentage of students reading at grade-level. Only one school had decreases at all levels.

Gain/Decrease	Kindergarten	Grade 1	Grade 2
+ >10%	2 schools (+43%, +33%)	3 schools (+13%, +19%, +27%)	1 school (+23%)
+ 1% to 10%	2 schools (+5%, +9%)	None	2 schools (+3%, +5%)
- 1% to 10%	3 schools (-5%, 2@ -7%)	2 schools (-5%, -10%)	2 schools (-2%, -6%)
> -10%	None	2 schools (both -23%)	2 schools (-16%, -27%)

Schools often report that it is difficult to compare one year to the next as the cohort of students can be a very different population. For example, a grade-one class might have a large group of students with significant learning needs while a grade-two class might have more students working at grade-level. When the needier grade-one class moves to grade-two their results could be below the previous year's grade-two results, despite making significant growth in grade-two. There is one cautionary note, however, that the transient population of these schools means that a grade-two group is not necessarily the same students who were in grade-one the previous year.

Percentage of Students Meeting End-of-Year Literacy Benchmarks by Cohort		
School	Kindergarten 2017-18 → Grade 1 2018-19	+ / (-)
1	49% → 57%	+8%
2	56% → 70%	+14%
3	21% → 33%	+12%
4	82% → 89%	+7%
5	18% → 36%	+18%
6	59% → 44%	(-15%)
7	75% → 60%	(-15%)

School	Grade 1 2017-18 → Grade 2 2018-19	+ / (-)
1	67% → 54%	(-13%)
2	43% → 51%	+ 8%
3	20% → 37%	+ 17%
4	70% → 70%	None
5	59% → 55%	(- 4%)
6	67% → 56%	(- 11%)
7	65% → 74%	+ 9%

We are better able to understand the progress of students when we look at the growth in reading levels made by each student from December benchmark to June benchmark. An expected trajectory in order for students to achieve and remain reading at grade-level would be to progress two-to-three reading levels in kindergarten, and three-to-four reading levels in Grades 1 and 2. In most cases, the priority schools are meeting or accelerating that progress.

School	Kindergarten	Grade 1	Grade 2
1	1.9	3.9	4.1
2	3.9	4.5	4.1
3	1.5	2.7	4.8
4	3.1	4.7	3.1
5	3.1	2.9	3.2
6	December data not available	2.9	3.8
7	December data not available	3.5	2.3

Numeracy

Numeracy benchmarks are collected by the district twice a year, in December and June. Numeracy benchmarks are based on a set of outcomes students must achieve by the end of the year. The assessment was developed provincially and is a set of tasks corresponding to grade-level curriculum outcomes on a variety of strands (e.g., number sense, patterns, number facts and operations). The assessment is administered in a conference-style format individually with each student.

Results are slightly better than the previous year, and for kindergarten and grade 1 show gains of 1-2 percentage points above the district trend. In December, the priority schools were 4-6% points above the district trend at Kindergarten and grade 2, and 1 percentage point below the district trend at grade 1. Kindergarten continues to be the grade at which we are seeing the greatest gains.

Kindergarten	2017-18 % correct	2018-19 % correct
Priority Schools	83%	87%
District	87%	90%
Grade 1	2017-18 % correct	2018-19 % correct
Priority Schools	70%	71%
District	76%	75%
Grade 2	2017-18 % correct	2018-19 % correct
Priority Schools	72%	69%
District	75%	73%

The average scores are better understood, as well, when the decreases and gains are seen at each school. There are variations in the degree of gains/decreases. A summary is as follows:

Gain/Decrease	Kindergarten	Grade 1	Grade 2
+ >10%	2 schools (+14%, +23%)	1 school (+13%)	1 school (+18%)
+ 1% to 10%	2 schools (+5%, +9%)	4 schools (+2%, +5%, 2 @7%)	1 school (+6%)
- 1% to 10%	2 schools (-2%, -7%)	None	3 schools (-3%, 2@ -6%, -10%)
> -10%	1 school (-16%)	2 schools (-11%, -20%)	1 school (-17%)

With the exception of Grade 2, more schools had increases than gains. One school had gains at all levels, while one school had a decrease at all levels. Only one school had gains and decreases at the same grade-levels for both numeracy and literacy and so it is difficult to explain gains and decreases by specific classroom or school contexts. More analysis of school-level data will be forthcoming in the fall.

III. SOCIAL SKILLS AND BEHAVIOR

Anecdotally, administrators report fewer behaviour incidents at K-2 levels. The district format for collecting quantitative behaviour data was introduced in 2017-2018 and was not collected consistently from school to school. Therefore, comparisons cannot be made between a baseline and Year 1 of the project. However, 2018-2019 saw full implementation and should be able to serve as a baseline going forward.

A teacher survey yielded the following responses to items regarding discipline.

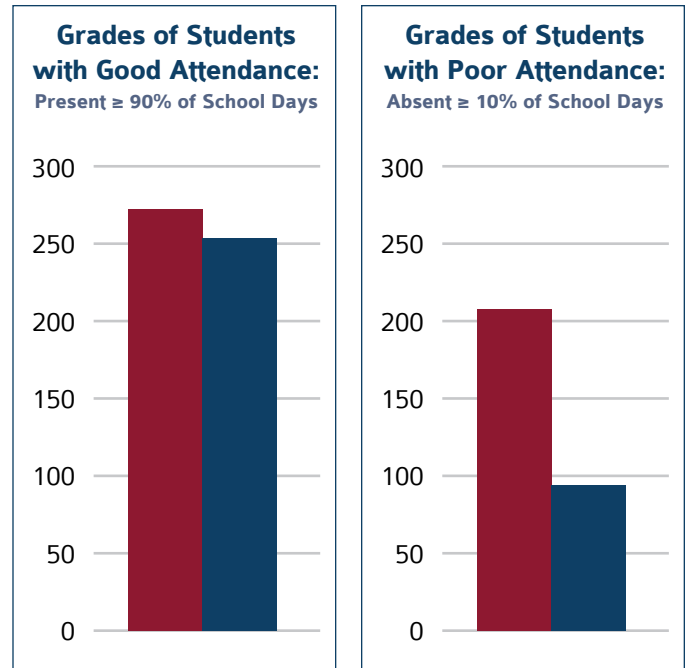
68% of teachers Agree or Strongly Agree
I spent more time teaching rather than managing the classroom.

82% of teachers Agree or Strongly Agree
I was able to be more pro-active with student behaviour problems.

IV. ATTENDANCE

Priority schools struggle with a number of students defined as having poor attendance, i.e., missing more than 10% of the available schools days. On average, 25% of K-2 students in priority schools would be described as having poor attendance, compared to a district average of 9%. If students are not present at school they cannot benefit from small-class sizes and intervention support.

School	Kindergarten % Absenteeism	Grade 1 % Absenteeism	Grade 2 % Absenteeism
1	29	25	25
2	20	17	17
3	44	32	32
4	22	33	33
5	29	39	39
6	23	13	13
7	21	16	16



These graphs depict the number of students meeting expectations or not on the overall average of all grades on their report cards grouped by good and poor attendance. The taller bar in each graph represents average grades (in all subject areas) of 1 or 2 (i.e., not meeting grade-level expectations). The shorter bar represents average grades of 3 or 4 (i.e., meeting expectations). Strikingly, those with poor attendance much less often would have averages that meet expectations.

Teachers and administrators describe following up on absences with phone calls and letters. However, attendance at these grade-levels is a parental issue, and often symptomatic of other family issues. Attendance for the priority schools will be a district focus in 2019-2020 and will undoubtedly require the support and cooperation of other community groups and agencies.

V. PARENT SURVEY

The attendance issues experienced at priority schools might lead one to believe that parents do not have a good relationship with the school, or perhaps that children resist going to school. We often create stereotypes that parents in priority neighbourhoods may have had poor experiences at school, and thus carry a negative attitude toward school into adulthood. The results of a parent survey completed in April 2019 prove differently.

464 surveys were returned representing 766 students, or a 60% return rate. *[Note: some parents may have returned more than one as they were asked to complete one survey for each child in Kindergarten, Grade 1 and Grade 2.]*

97% of respondents Agree or Strongly Agree with the statements:

I feel welcome at my child's school.

.....

My child enjoys school.

The average response to each item is as follows:

4=Strongly Agree 3=Agree 2=Disagree 1=Strongly Disagree

- 1. I feel welcome at my child's school. **3.6**
- 2. My child enjoys school..... **3.6**
- 3. When my child has difficulty learning, there is enough help at school. **3.4**
- 4. I have enough information about my child's learning. **3.3**
- 5. My child's work is usually:
 Too Easy **9%** Just Right **87%** Too Difficult **4%**

Parent engagement was discussed frequently with administrators this past year. Two schools had ongoing initiatives in which parents were invited in on a regular basis for shared experiences with their children in classrooms. All schools held parent sessions and a variety of curriculum nights. It should be noted that parent engagement does not always mean attendance at school events. Teachers expressed frustration over the number of times there was missing homework, unsigned notes, papers ignored in backpacks and lost school books. Developing these habits and getting children to school every day are perhaps the most important indicators of parental engagement.

Interviews with teachers highlighted the positive relationships they were trying to build with families, as well as the children's enjoyment of school.

“

You have to have the mindset... you look at these families and parents and see hope and see how much they love their kids... Every day is a new day. We don't go backwards. We go forward.

.....

When they leave on Friday they say, "How many days til I come back?"... It's rewarding to know we've created that safe environment and they want to be here with us.

.....

Undoubtedly these are challenging schools in which to work but they are sites of invested educators building important relationships.

.....

We say it's challenging but I think at the same time it's extremely rewarding. At the end of the day no matter what the challenge was you feel you are truly making a difference in the lives of these kids. They are developing that bond, that trust. We are giving them something they are not getting elsewhere.

.....

No amount of kindness or kind act or effort is going to be lost on these children. That's a core belief and it's integral to the culture of our school.

KEY LEARNINGS AND RECOMMENDATIONS

1. Stakeholders in this project agree that effects will be best seen over the 3-year commitment to this initiative, as students benefit from the cumulative growth from kindergarten – Grade 2. At present, the greatest gains are being seen in Kindergarten with little change in Grade 1 and unfortunately, decreases in Grade 2 when compared to 2017-2018 (the year prior to the project). Tracking individual growth of students benefiting from the three years will be necessary and requires a database beyond that available through the school-district.

It is recommended that discussions take place with community partners to facilitate the creation of a database enabling further statistical analysis.

2. School-level analysis will take place this fall with administrators and teachers to better understand this data. Qualitative data suggests that schools are making good use of informal assessment and grouping of students for small-group instruction. Their insight is required to understand both the growth and challenges they are experiencing. Qualitative data suggests the following factors as key – teacher collaboration and confidence, early identification and intervention and flexible learning groups.

It is recommended that quantitative and qualitative data be used to identify 'best-practice sites' and that descriptions of these practices be generated. The findings should become an integral part of priority school staff professional development.

3. Attendance remains a challenge for priority schools. Despite positive perceptions of parents toward the schools the commitment to good attendance is low and the effect on achievement is evident. The school district is committed to making attendance in these schools a focus for the 2019-2020 school year.

It is recommended that input regarding barriers to attendance be sought from parent discussion groups, perhaps with the assistance of a neighbourhood community leader.

It is recommended that community groups and other government departments be involved in discussions with school district personnel. From interviews with teachers they would suggest the need to seek support from agencies outside the school as chronic absenteeism tends to be indicative of other family issues.

4. Parent involvement was a focus for administrators this past year and new initiatives were started. Schools found events most successful when parents experienced a learning event with their child(ren) rather than a formal 'training' session.

It is recommended that parent involvement remain a focus this year with conversations focusing on how schools can provide these informal learning sessions for parents.

5. Some classes experienced an increase in enrollment over the year, reducing the effects of the project. The transient nature of the schools' populations result in ever-changing class sizes throughout the year.

It is recommended that procedures be put in place to more closely monitor changing enrollments. The project allows flexibility for schools to adapt their model if required (e.g., small-classes, grade-level groupings, intervention support) to address changing class-sizes.