

NOVA SCOTIA PYRAMID MODEL

Executive Summary Report 2020-21



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Promoting Social & Emotional Competence in Nova Scotia's Young Children
Favorisant la compétence socio-émotionnelle des jeunes enfants de la Nouvelle-Écosse



Early Childhood
Collaborative
Research Centre

ACKNOWLEDGEMENTS

Land Acknowledgements

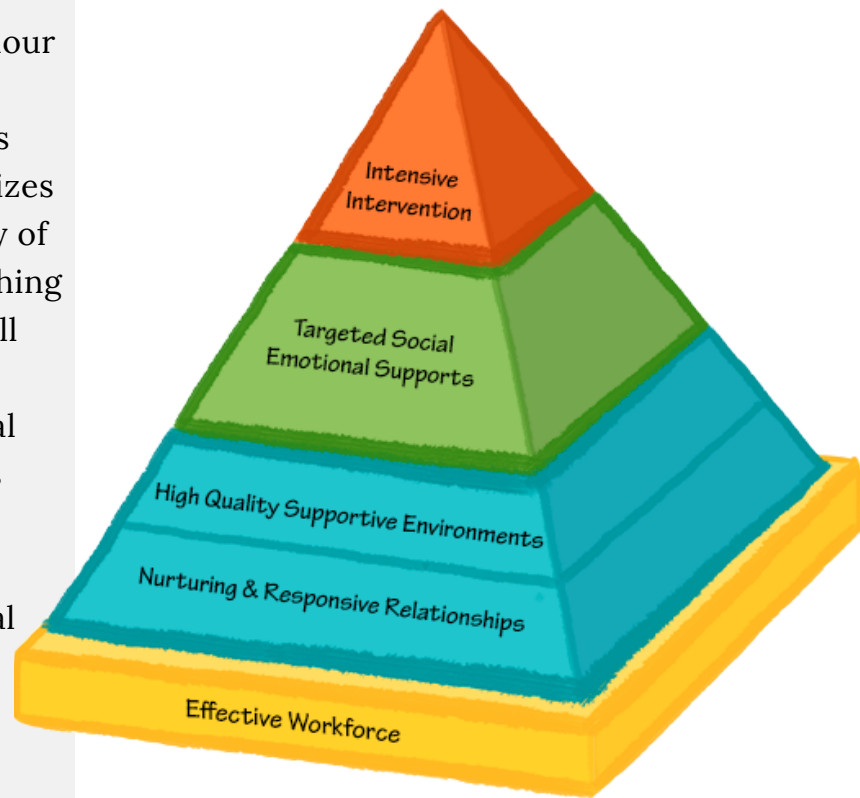
It is important to begin this report with an acknowledgment that Nova Scotia is in Mi'kma'ki, the ancestral and unceded territory of the Mi'kmaq people. This territory is covered by the "Treaties of Peace and Friendship" which Mi'kmaq and Wolastoqiyik (Maliseet) people first signed with the British Crown in 1725. The treaties did not deal with the surrender of lands and resources but in fact recognized Mi'kmaq and Wolastoqiyik (Maliseet) title and established the rules for what was to be an ongoing relationship between nations.

We also pay respect to the histories, contributions and legacies of African Nova Scotian communities which have been here for over 400 years.

INTRODUCTION

The Pyramid Model for Supporting Social Emotional Competence in Infants and Young Children is an evidence-based, positive behaviour support framework for educators to promote social and emotional development and address challenging behaviours.¹ The framework organizes evidence-based practices to build the capacity of educators to support all children using a coaching approach to professional development and skill development. The goal of the Pyramid Model initiative is to support the social and emotional health of all children across the province. This development helps children:

- identify and understand feelings
- accurately read and comprehend emotional states in others
- manage strong emotions
- regulate behaviours
- develop empathy for others establish
- sustain relationships²



Nova Scotia began implementing the Pyramid Model in 2018 at select Regulated Child Care (RCC) centres across the province, and later throughout 2019–2021, the province expanded the implementation of the Pyramid Model into select Pre-primary Programs (PPP) across the province (see [here](#) for previous evaluation report). In April 2021, the Pyramid Model program transitioned from a pilot to a program, and is now housed with Nova Scotia Early Childhood Development Intervention Services (NSECDIS).

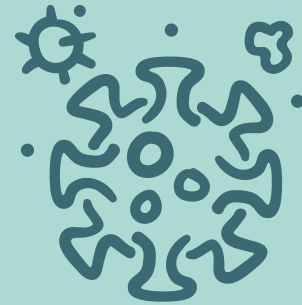
As of December 2021, the RCC cohort had forty-five educators being coached. For the PPP cohort, there are currently sixty-four educators actively being coached.

The purpose of the following executive summary is to illustrate the findings from the evaluation of the Pyramid Model implementation across Nova Scotia in response to three evaluation questions, identified and discussed in subsequent sections of the executive summary.

¹ Hemmeter, M. L., Santos, R. M., & Ostrosky, M. M. (2008). Preparing early childhood educators to address young children's social-emotional development and challenging behavior: A survey of higher education programs in nine states. *Journal of Early Intervention*, 30(4), 321–340. <https://doi.org/10.1177/1053815108320900>

² Voineau, M., & Damian. (2014). The Role of Socio-Emotional Development in Early Childhood. *Journal Plus Education*, 388–392.

PYRAMID MODEL IN NOVA SCOTIA THROUGH THE LENS OF THE PANDEMIC



As a result of the pandemic and public health directives, adaptations to the implementation of the Pyramid Model was required throughout 2020 and 2021. The adjacent timeline entails a detailed overview of the adaptations required to continue supporting and implementing the Pyramid Model across the province during this time.



Timeline of COVID-19 in Nova Scotia

March & April 2020

Nova Scotia reports its first three cases of COVID-19. PPP, RCC centres and schools are closed.

Some Pyramid Model coaching continues virtually throughout the lockdown.

June & July 2020

RCC centres re-open at 50% capacity. Families who are able to keep their children home are encouraged to do so.

September & October 2020

Schools and PPPs have re-opened. RCC centres have transitioned to 100% capacity.

TPOT observations are now able to be completed outside. In-person coaching has resumed.

Some coaches are having difficulties entering programs and conducting TPOTs due to varying guidelines at centres. Virtual coaching continues for some.

As of July 31st, masks are now required in all indoor public places.

January & February 2021

Schools and PPPs have re-opened as scheduled. RCC centres continue to operate.

Rolling school closures still occur in response to local cases.

November & December 2020

Nova Scotia has entered its second wave of COVID-19. School and PPP closures are scattered across the province in response to local cases.

RCC centres continue to operate.

May & June 2021

On May 19th, the province announced that the lockdown would be extended and schools and PPPs would remain closed for the rest of the school year.

RCC centres were required to drop to 60% capacity.

On May 28th, it was announced that on June 2nd all schools and PPP would re-open.

April 2021

Nova Scotia has entered its third wave of COVID-19, schools and PPPs have closed across the province.

RCC centres are to stay open during the lockdown at limited capacity.

Children over 2 years old are required to wear a mask.

September 2021

Schools and PPPs have re-opened as scheduled. RCC centres continue to operate at full capacity.

Children under 5 are not required to wear masks unless they attend PPP.

Some TPOT observations due in June were postponed until September at the request of educators.

October 2021 - January 2022

Nova Scotia has entered its fourth wave. In response to the Omicron variant, schools extended the holiday break. PPP educators did online learning for one week.

Rolling closures still occur in response to considerable cases of local spread.

ADAPTATIONS TO THE PYRAMID MODEL AND ECE EXPERIENCES DURING COVID-19

Inclusion Coach Experience

The abrupt closure to RCC centres and PPPs in March 2020 resulted in a change to the Pyramid Model in Nova Scotia. Working from home, Inclusion Coaches were required to shift their coaching process to a virtual format, without programs being open. The re-opening of RCC centres and PPPs in the context of COVID-19 led to many changes for educators and how Inclusion Coaches provided support. Once Inclusion Coaches could return to in-person coaching, they then had to adapt their approach to adhere to public health restrictions, to maintain classroom cohorts and increase the duration of visits to minimize frequency.

“ —

...I feel like during the pandemic we were a good sounding board for them as well. It gave them an outside person who was really there to support them unlike other services that come in just to support individual children and they utilize a lot of time with myself by honestly venting basically about COVID and how it's affecting their classroom and things they do.

— Inclusion Coach

— ”

“ —

I can only say this the way it was if I didn't have positive reinforcement from what I was trying to do from the pyramid coach I wouldn't have had any and at that time I needed it... it is very helpful because I think—lots of things in the Pyramid you say 'oh yeah, of course I knew that' but it gives you something to refer back to...

— Educator

— ”

Educator Experience

The majority of educators described feeling some degree of worry, stress and overwhelm at the beginning of the pandemic, but that those feelings seem to have lessened over time. Further, the majority of educators described positive experiences with the Pyramid Model and their Inclusion Coaches. Educators reflected on the impacts of the pandemic on children's social and emotional development and challenging behaviors and though a few educators felt there was an increase in challenging behaviors, others did not feel they could attribute challenging behaviors solely to the pandemic. Additionally, a few educators acknowledged that because of their focus on social and emotional learning with the Pyramid Model, children may have coped better during the pandemic.

EVALUATION FINDINGS

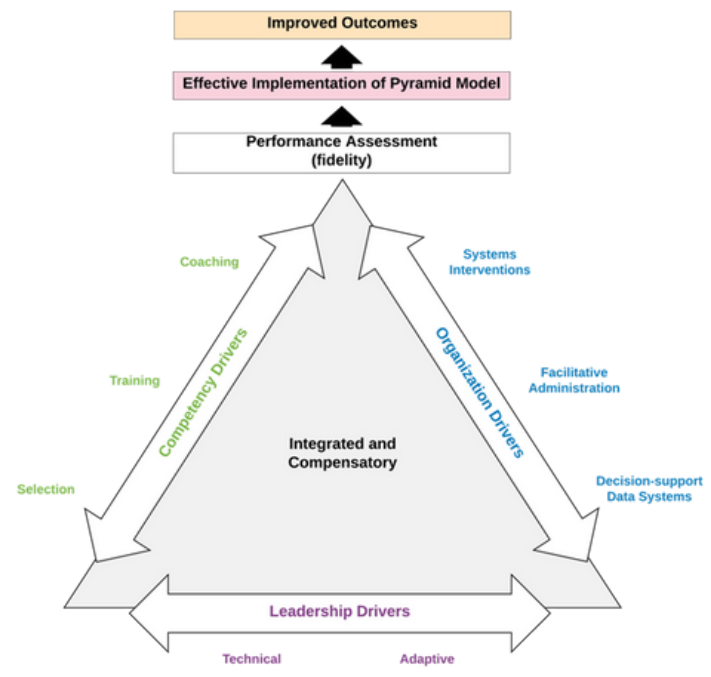
Question 1: How are the competency, leadership and organization drivers influencing the implementation of the Pyramid Model initiative?

Within all of the tiers of the Pyramid Model, data-based decision making is critical. Data-based decision making refers to the ongoing collection and use of data to inform how the Pyramid Model is being implemented in programs across Nova Scotia. The full description of tools and their respective links can be found in Appendix A.

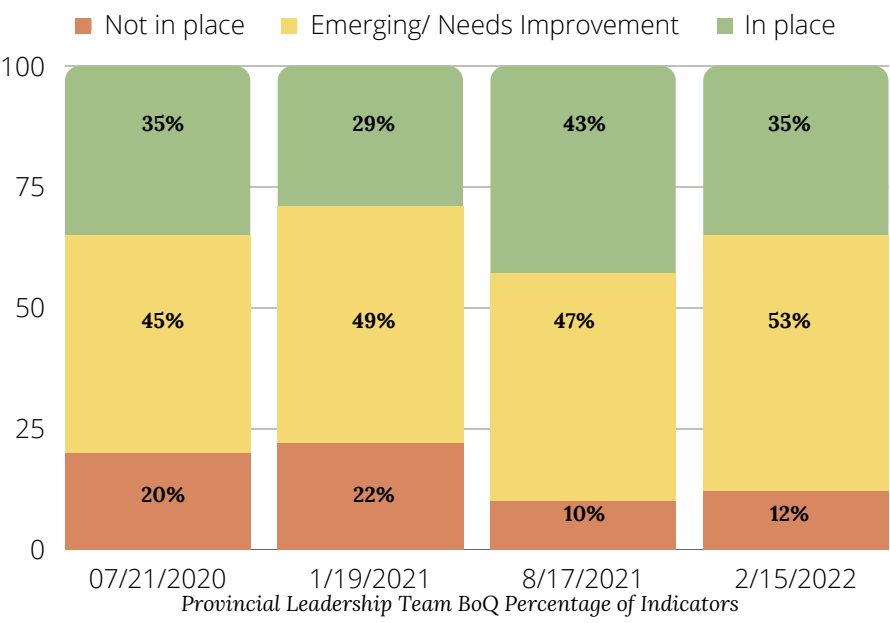
Theory of Change

The Provincial Leadership Team approved a theory of change that reflected the complex nature of the Pyramid Model implementation. A casual approach to the Pyramid Model theory of change begins with a foundation of resources available for implementation. From there, the theory of change leads into three implementation drivers: *Competency*, *Leadership*, and *Organization Drivers*.

Competency Drivers are activities that help to develop, improve, and sustain the ability to implement the Pyramid Model. **Leadership Drivers** are actions and behaviors of leaders that guide and manage the support of implementation efforts. **Organization Drivers** are mechanisms to intentionally develop the supports and infrastructures needed to create and sustain a responsive environment for Pyramid Model implementation.



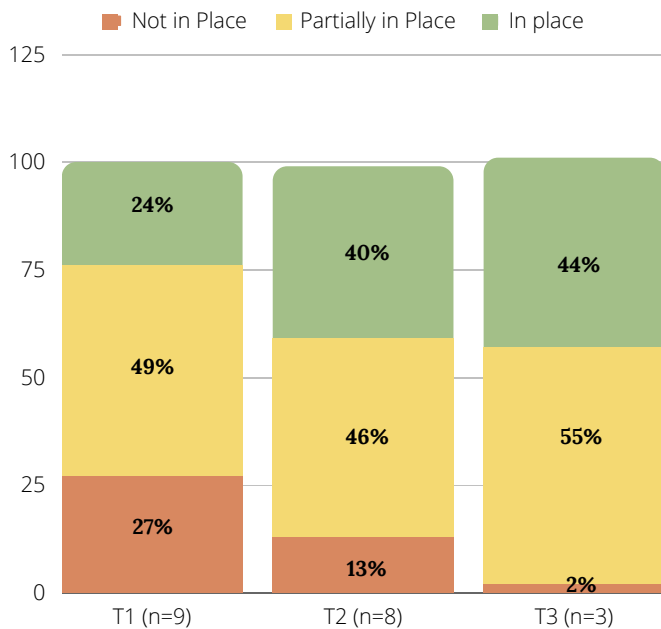
Provincial Leadership Team Benchmarks of Quality



To support the Pyramid Model implementation across Nova Scotia, the Benchmarks of Quality (BoQ) are completed. The Provincial Leadership Team has collected eight BoQ self-assessments total, four since the last reporting. Data shown in the table illustrates timepoint four to timepoint eight and reflects an increase over time in benchmarks being 'in place'. In the last two years, the Provincial Leadership Team has seen fluctuating scores based on the response to the pandemic, as well as the transition from pilot to program. Timepoint four resulted in a slight decrease in indicators 'in place' as the Provincial Leadership Team's understanding and clarity of how the Pyramid Model will be implemented as a permanent program is still being discussed.

Question 2: How has the Pyramid Model influenced change in knowledge and use of effective practice for social and emotional learning?

Coaching Practice Benchmarks of Quality



RCC Coaching Practice BoQ Percentage of Indicators
*Due to rounding, some totals may not equal 100%

Regulated Child Care Cohort Coaching BoQs

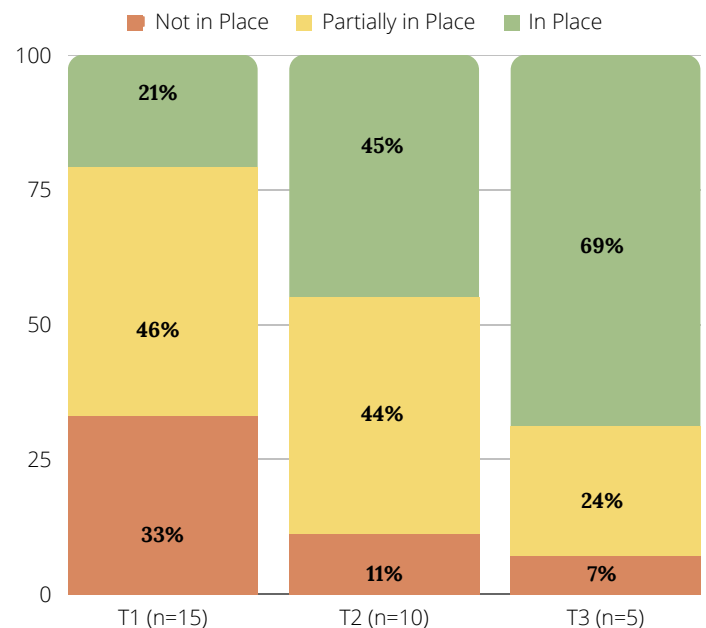
The following results are for a subsample of eight Inclusion Coaches, three of whom have completed a third BoQ, findings are preliminary only.

Data collection for the Coaching Practice BoQs is still underway. Over time, there has been steady improvement across indicators. Indicators fully 'in place' have continued to increase and most elements are at least 'partially in place'. Gaps and closures of programs may have impacted some elements of the score as a result in the change in coaching format and process due to the pandemic and alternating between face-to-face and distance coaching which had never been done before.

Pre-primary Program Cohort Coaching BoQs

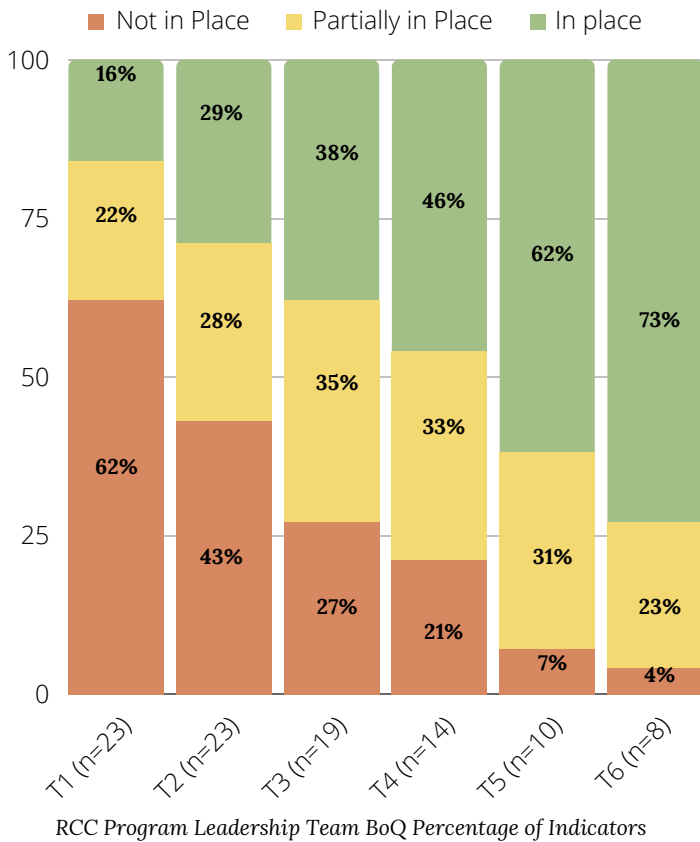
The following results are for a subsample of ten Inclusion Coaches, five of whom have completed a third BoQ, findings are preliminary only.

Similar to the RCC cohort, there has been steady improvement across indicators. Indicators fully 'in place' have continued to increase and most elements are at least 'partially in place'.



PPP Coaching Practice BoQ Percentage of Indicators

Program-Wide PBS Benchmarks of Quality



Regulated Child Care Cohort Program Leadership Team Benchmarks of Quality

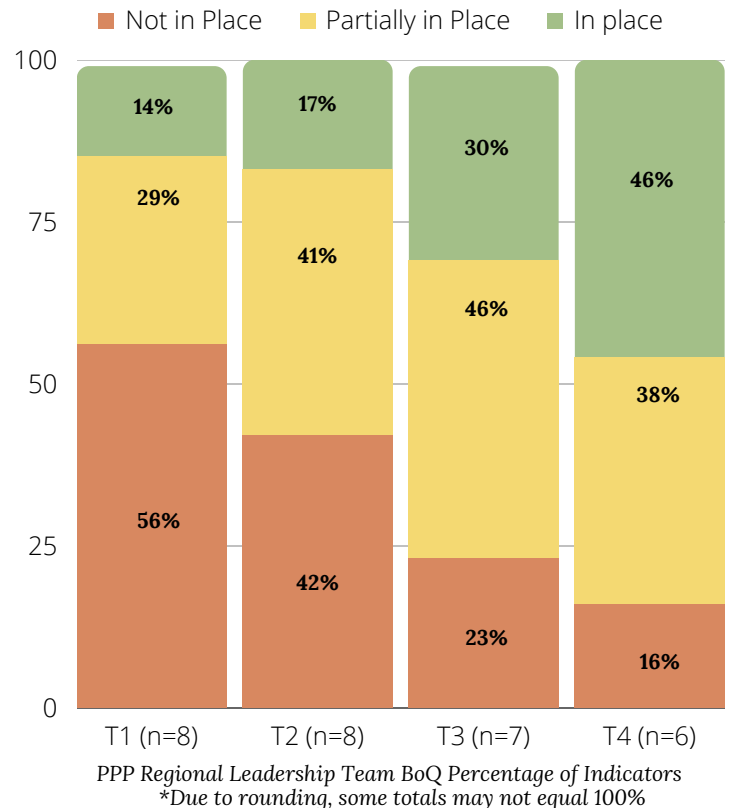
Data has been collected from the RCC Cohort up to six timepoints. All twenty three programs originally participating have a second BoQ. From there, timepoints three through six have varying numbers of programs due to attrition or data not being submitted on time.

There has been steady progress made on the RCC Cohort Program BoQs. Indicators 'in place' continued to increase while indicators 'not in place' have decreased. Looking at the average indicators in place across program elements, all elements at time five and six were at least 'partially in place'.

Pre-primary Program Cohort Regional Leadership Team Benchmarks of Quality

Within the PPP Cohort, there are eight Regional Leadership Teams. All leadership teams have completed at least two BoQ self-assessments thereafter, sample size decreases with time three and four due to one Regional Leadership Team beginning at a different time than the rest, and data not being collected every six months.

For the PPP cohort, BoQs continue to improve, and indicators 'in place' are increasing while indicators 'not in place' are decreasing. The PPP cohort has demonstrated increased scores overall and has allowed for more consistent data collection. This may allow for greater understanding of the meaningfulness of the fluctuations in the patterns in the data.



Question 3: How is the Pyramid Model implementation being supported by Inclusion Coaches and programs?

Coaching Logs

Regulated Child Care Cohort Coaching Logs

Currently there are coaching logs for eighty-three RCC cohort educators. Across this cohort, the length of time being coached ranges from two to thirty-three months (2.75 years). The average length of time spent in observations and debriefs decreased since the beginning of the pandemic.



The three most common observation strategies were *Observed* (31.4% of visits), *Other Help in the Classroom* (11.4% of visits) and *Modeled* (11.3% of visits).



The three most common debrief strategies were *Reflective Conversation* (26.9% of visits), *Goal Setting/Action Planning* (17.2% of visits), and *Supportive Feedback* (14.3% of visits).



The average number of visits per cycle was 1.9, indicating that cycles are typically completed within two coaching visits.



As of December 2021, the average number of goals written across this educators in this cohort was 4.9 with a completion rate of 84.2%, a decrease of 8.8% since the 2020 reporting.

Pre-primary Program Cohort Coaching Logs

Currently there are coaching logs for seventy-five PPP educators. Across this cohort, the length of coaching ranges from one month to twenty-five months (~ 2 years). For this cohort, the average length of time spent in observation decreased and debrief sessions increased since the beginning of the pandemic.



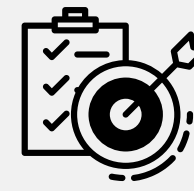
The three most common observation strategies were *Observed* (23.9% of visits), *Collected Data* (12.9% of visits), and *Reflective Conversation* (12.4% of visits).



The most common debrief strategies were *Reflective Conversation* (21.5% of visits), *Supportive Feedback* (17.9% of visits), and *Goal Setting/Action Planning* (13.0% of visits).



The average number of visits per cycle was 1.7, indicating that cycles are typically completed in two coaching visits.



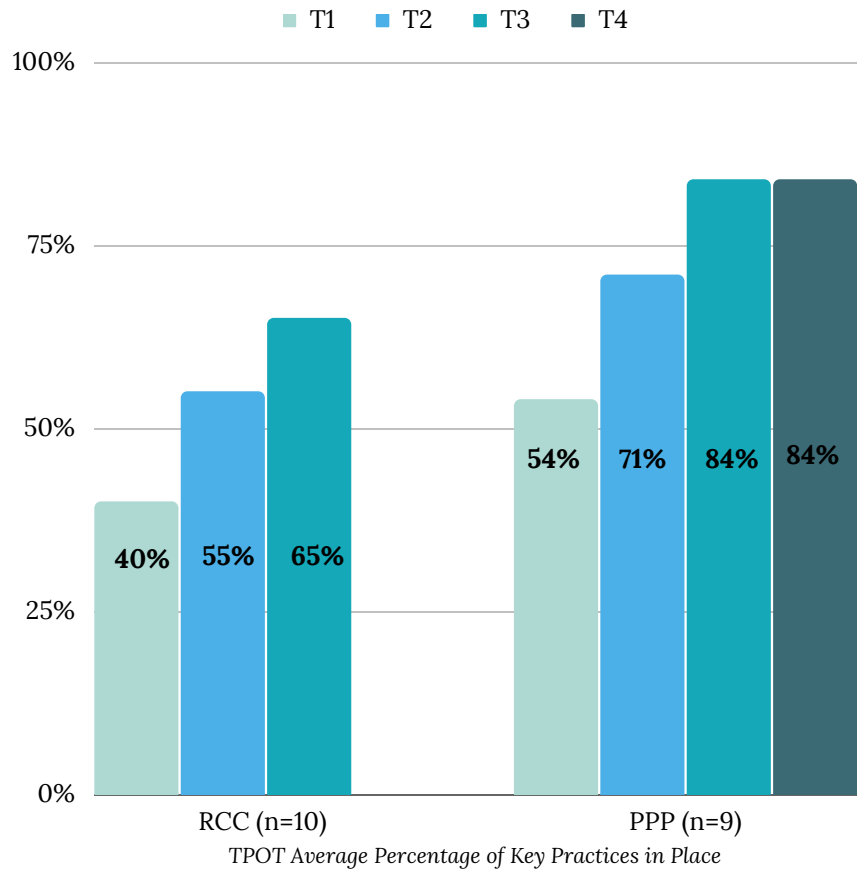
As of December 2021, the average number of goals written across the educators in this cohort was 6.3 with a completion rate of 98.9%. This is an increase of 12% since the 2020 reporting.

TPOT

Regulated Child Care Cohort TPOT

The results represent a subset of ten RCC Cohort educators who have three timepoints to date.

In general, progress is being made and key practices 'in place' are increasing over time. Overall, it appears that the RCC cohort was more interrupted during COVID-19, with slower implementation of key practices and fewer educators at fidelity ($\geq 80\%$). The average number of red flags per timepoint have consistently decreased over time.

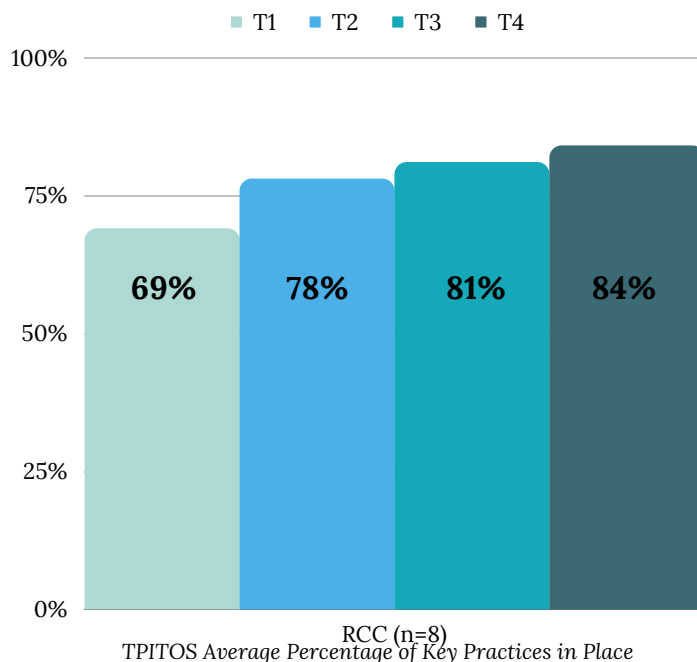


Pre-primary Program Cohort TPOT

The results represent a subset of nine PPP cohort educators who have four timepoints.

Much like the the RCC Cohort, progress is being made and scores are increasing over time. The PPP cohort has demonstrated increased scores overall, had more consistent data collection timing (fall/spring), and more educators at fidelity ($\geq 80\%$). The average number of red flags have consistently decreased over time.

TPITOS

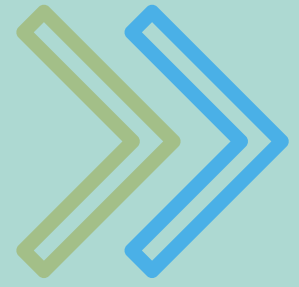


Regulated Child Care Cohort TPITOS

The results represent a subset of eight RCC Cohort educators who have four timepoints.

Generally, the average percentage of key practices 'in place' are increasing over time. Eleven of the thirteen items are at fidelity ($\geq 80\%$) by time four. The average number of red flags per timepoint has consistently been low.

CONSIDERATIONS FOR MOVING FORWARD



The following considerations for moving forward have been developed collaboratively with the Provincial Leadership Team and identify key priority focus areas to support ongoing implementation and sustainability of the Pyramid Model .

As the Pyramid Model continues to expand through the backdrop of the new Canada-wide Early Learning and Child Care agreement, the following considerations will inform the work moving forward:



Equity, diversity and inclusion

A specific focus on **equity, diversity and inclusion** can be facilitated through the extensive experiences of NSECDIS in building local community networks and collaborative partnerships, including ongoing work with Francophone communities.



Family engagement

There is an ongoing gap in understanding of **family experience** with the implementation of the Pyramid Model. Alternative methods to gather feedback from families need further attention as Pyramid Model implementation expands.



Training and onboarding

Expansion of **training in the Pyramid Model modules** will help additional stakeholders (e.g., co-educators, directors/administrators, PPP Leads, relief time staff) have the same understanding of program implementation and its benefits.



PLT/RLT membership and coaching

Broadening leadership teams should **broaden** to include external individuals like consultants, community members, early childhood professionals. Larger regions should consider having multiple teams to enable greater focus to specific programs. A structured onboarding process would help to ensure clarity regarding purpose and role of leadership teams.



Data Collection and sharing

Increasing **training in data collection** would support a consistent collection schedule and provide Inclusion Coaches and other related individuals with a better understanding of the data tools that are informing their coaching practice and use for informing decision-making in programs. Once programs reach fidelity, **additional TPOT & TPITOS** training could be provided to internal coaches within those programs to support the long-term use of the tools. Lastly, a system for **ongoing data sharing** should be developed that links and engages programs in the collaborative use of data to support program and regional decision making.

Appendix A

| Tool Name: | Description of Tool: | Timeline | Completed by: |
|---|---|------------|---------------------------------------|
| Admin Logs | <p>Admin logs provide a summary of the amount of time and how often Inclusion Coaches are engaged in conversations with program administrators, leadership teams and educators, as well as the amount of time spent in travel and prep/follow up from meetings and trainings. The Admin Logs provide an overall picture of the time, effort, and resources a particular program is requiring to implement the Pyramid Model. Admin Logs are completed once a month, tracking all activities of that month, and spreadsheets are submitted to the evaluation team.</p> | Monthly | Inclusion Coaches |
| <u>Coaching Logs</u> | <p>Coaching Logs provide a summary of the amount of time spent coaching and what types of strategies have been used. Coaching Logs are completed at each visit to the implementation program, and spreadsheets are submitted to the evaluation team</p> | Monthly | Inclusion Coaches |
| <u>Coaching Practice BoQ</u> | <p>The Coach BoQs are designed to provide details at an individual level to help Inclusion Coaches organize their work and allow for reflection of their practices and provide data at a systems level to aid monitoring and evaluation of the implementation process.</p> | Biannually | Inclusion Coaches |
| <u>Early Childhood Program-Wide BoQ</u> | <p>Designed to help programs evaluate their progress toward implementing the Pyramid Model program-wide.</p> | Biannually | Program and Regional Leadership Teams |
| <u>Provincial Leadership BoQ</u> | <p>Designed to assess the implementation of the Pyramid Model and determine action plans for future implementation.</p> | Biannually | Provincial Leadership Team |
| <u>TPITOS</u> | <p>The TPITOS tool is used to assess the implementation of the Pyramid Model practices in classrooms for children 0-3 years old.</p> | Biannually | Trained Observers |
| <u>TPOT</u> | <p>The TPOT tool is used to assess the implementation of the Pyramid Model practices in classrooms for children who are 2-5 years old.</p> | Biannually | Trained Observers |