

TLC³ Nova Scotia EXECUTIVE SUMMARY

The purpose of TLC³ Nova Scotia was to pilot a prevention and promotion model in which a speech and language pathologist would work with families to promote speech, language and cognitive development of young children within a community setting. The TLC³ initiative was implemented within the programming offerings of the Dartmouth Family Resource Centre (DFRC) located in Dartmouth North of the Halifax Regional Municipality.

TLC³ Nova Scotia's vision was an approach to programming that would weave its way through all elements of the DFRC's operations. Central to this approach was a speech and language pathologist (S-LP) working on a team basis with non-clinicians, including parent facilitators, within a community setting.

The TLC³ program mix covers the whole spectrum of child development from birth to age 5. *Baby Talk* was developed for moms and babies (0 to 6 months). *Parent-n-Tot* focuses on the next stage of development through the toddler stage. These two programs are supplemented by the *You Make The Difference* program which is appropriate for all parents. The final programming piece is the Pre-school to prepare children and their parents for entry into grade primary (kindergarten) the following year.

TLC³, however, is more than programming. It is based on a set of principles that include:

- A focus on prevention and promotion not intervention
- Speech and language development and literacy permeating all programming
- The constant presence and accessibility of the S-LP to families and staff
- The centrality of parents as Community facilitators of programming
- Consistency in staff and facilitator training
- Provision of opportunities for families to network and interact
- Seeking out opportunities to build and strengthen community partnerships

By about the end of the third year, the TLC³ vision was realized. TLC³ principles had become integrated across the DFRC resulting in a harmonization of the Centre's program offerings and a common approach to delivery. A team of DFRC staff, TLC³ staff (including the Preschool) and Community facilitators were working with families towards the common goal of promotion and prevention in the area of speech and language development and literacy. The ongoing presence of the S-LP provided the community with access to expertise and guidance on a daily basis through informal conversations and by parents observing and adopting modeling techniques, within a safe community setting.

Program Description and Evaluation Findings

Baby Talk

The *Baby Talk Program*, a modification of the *Keys for Care-giving Program* (Barnard, 1984), was offered 7 times, with 36 parent-child dyads attending. Of these, 24 mother-child dyads participated in the evaluation. Pre and post behaviour ratings were completed for each participating mother-child dyad. Specific behaviours included caregiver's sensitivity to baby's cues; establishing joint attention; general indicators of engagement and positive social interaction; and responsiveness during feeding episodes. Quality control measures were built in to ensure reliability of measures.

Pre- and post-test summary scores were analyzed using independent means t-tests. Results showed significant positive gains from pre-test to post-test on all measures except the summary score for mother-child interaction during feeding. It is not surprising that there was no change in the interactions-during-feeding score as this summary measure was high for all dyads to begin with: each mother was providing a safe and comfortable environment for feeding their infants in pre-test.

The results suggest that the *Baby Talk* program is successful in helping mothers of infants to increase their sensitivity and responsiveness to their children's cues and to provide input in a manner that is facilitative of language learning.

You Make the Difference

You Make the Difference, a parent training program with a mother-child interactive component, was offered 6 times with 25 parents and their children attending. Each group of participants met nine times over approximately a three-month period. The focus of the program is on having parents understand the value of allowing their children to lead an interaction; adapt to the particulars of a given interaction; and add new experiences and language to fit the interactions. A key component of this program is the videotaping of parent-child interactions to assist parents in assessing their success in applying the program. *You Make the Difference* was evaluated using a rating scale, a language sample and a thematic analysis of interviews.

Rating Scale: Ten mothers agreed to have their videotaped interactions with their 12 children (ages 3 months to 5 years at the start of the program) analyzed for the evaluation. Pre-test and post-test ratings for each measure (15 total) of the on-line rating scale were analyzed using independent means t-tests. Four of the measures showed significant positive gains post intervention: the frequency of face-to-face interactions; parental naming of objects and actions; parental expansions of child utterances; and parental use of strategies to highlight important words. It is notable that three of the four significant changes were in the frequency of use of language that was appropriate to the child's immediate experience and focus of attention. No other differences were significant.

Language Sample: A one-minute sample of each of three play activities for 10 parents and their 10 children were analyzed focusing on their communicative interactions. Codes

included conversational management components (e.g., initiation of a topic), use of various communicative intents (e.g., request, comment), facilitative moves of the parent (e.g., expansion of a child's utterance), and degree to which parents and children were engaged in the same activities at the same time. The SALT program was used for both transcribing the sample and the tallying the frequency of specific measures: proportion of adult to child utterances; proportion of child topic initiations and mothers following their lead; the average number of mother utterances that were produced for a topic; the proportion of mothers' imperatives and requests to her total utterances, measures of directiveness; and the proportions of comments and imitations to total mother utterances, measures of responsiveness. Results showed no significant changes for any of the measures except the amount that mothers talked about a particular topic. It should be noted that the videotaping likely negatively impacted mothers' behavior.

Thematic Analysis of Interviews: Interviews of about 15 minutes were held with four mothers who completed *You Make the Difference*. Five themes emerged from the analysis:

- All mothers reported that they were more relaxed with their children since completing the program, and less likely to control their children's behavior;
- All mothers reported that they benefited from the opportunity to interact with other parents;
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- Three of four mothers demonstrated their understanding that children can learn through play and in unstructured settings;
- There were aspects of the program that were particularly helpful, and others that were not so easy.

These mothers reported to have gained insights into their own behavior as well as their children's and that they enjoyed interacting with their children more when they follow these strategies.

Parent and Tot Program

The *Parent and Tot* Program, modified from the Parent-Child Mother Goose program developed by Lottridge (1998), is designed to teach mothers and their children a set of nursery rhymes, songs and stories in a fun parent-child interactive group environment. The Parent and Tot program was offered 9 times, with an overall enrollment of 23 parents. Each time the program was offered, parents met once a week for 2 hours, for a period of 8 weeks. The program was evaluated using a parent questionnaire and a parent diary.

Parent Questionnaire: Thirteen mothers completed pre- and post questionnaires that collected data on: the frequency with which they sang or rhymed with their children, their children sang and rhymed and their children requested singing and rhyming; the contexts in which they and their children sang, rhymed, read and told stories; parental rating of their own enjoyment of singing/rhyming and story reading.

The resultant data suggest a general trend towards increased frequency of singing, rhyming and story telling/reading, and expanding contexts in which such activities take place. The frequency of singing and rhyming especially, seems to be positively impacted by the program. In general, however, the enjoyment mothers felt when they engaged in these activities changed little from beginning to end of the program. This could be because they tended to report that they enjoyed these activities very much even before the program.

Parent Diary: Diaries adapted from the 1-2-3 Go program in St. Remi were administered to three parents pre and post. Measures mothers were asked to report on included the number of times they read, sang or rhymed to their children each day for a week; and in each of 10 possible contexts (e.g., bath time, bed time). Reliability of the data however is questionable as the diaries may have been completed by memory after a few days rather than on a day-by-day basis. Results differed for each mother. Mother #1 reduced the number and contexts in which she both sang and told stories to her child. Mother #2 reduced her singing and rhyming, but increased her story reading and telling. Mother #3 increased her frequency and contexts of use of both singing/rhyming and story telling/reading.

TLC³ Language-Enhanced Pre-School

The TLC³ Preschool Program promoted language and literacy development by:

- The SLP training all staff in the Hanen program "*Learning Language and Loving It*". This program teaches strategies for enhancing the language and literacy learning environment of preschool classrooms.
- The SLP working on an on-going basis with staff to generally improve the language and literacy learning environment and support the development of each child.
- Encouraging parental involvement through a variety of techniques including home visits, invitations to participate, and institution of a book lending library.

The effectiveness of the preschool program was evaluated through an assessment of the developmental abilities of children, a parent questionnaire, and an evaluation of parent involvement.

Direct Assessment of Children: Children were tested following completion of Kindergarten, one year after completion of the preschool program. Children who completed the TLC³ preschool program were compared to those who did not go to any preschool (controls). Measures assessed included language skills of children, particularly those strongly predictive of academic success (vocabulary, narrative ability, phonological awareness) and emergent literacy skills.

Two years of data were collected and analyzed. In the first year, the performance of 13 TLC³ children and 14 controls were compared. In the second year, data from an additional 11 TLC³ children and 1 control was included. In the first year, the TLC³ preschool group scored significantly better on the expressive vocabulary measure (EOWPVT-R), naming more pictures than the control group. They also scored

significantly better on the syllable-tapping task, an early measure of phonological awareness skill. Analyses of the narrative samples also showed positive effects for the TLC³ preschool group in Year 1, but not in the combined data analysis. In Year 1, children from the TLC³ preschool produced significantly longer narratives (i.e., included more sentences in their stories) and included significantly more emotional states when telling their stories. Descriptions of emotional states are included more frequently in stories that are better structured. The results of the analysis in Year 1 suggest that TLC³ has provided an advantage for at least some children, in areas that are intimately related to educational success: vocabulary, narrative skill and phonological awareness.

Parent Questionnaire: Data analyzed from a parent questionnaire indicate that parents of TLC³ children reported reading with their children, on average, a little more than once a day, which was significantly more than the control parents reported reading with their children. No other measures were rated statistically differently. This finding suggests that the TLC³ program may have encouraged parents in this important literacy activity.

Parent Involvement: In the three years since the partnership began, between 18 and 20 parents participate in various activities in the school, many on an on-going or repetitive basis. This is in sharp contrast with the Preschool run at the Boys and Girls Club prior to TLC³ when no parental involvement was encouraged or occurred.

Program Impact

Effectiveness of a Community-Based Model

The TLC³ initiative has shown that speech and language pathologists can work effectively in prevention and promotion within a community setting; and that their work can be enhanced and their reach expanded through working on a team basis with non-clinicians.

TLC³'s success has opened the door to other clinicians working within the community. The *Growing Together* initiative, for example, has expanded on the TLC³ model to introduce a developmental child psychologist and public health nurse working on a team basis with non-clinicians in prevention, promotion and intervention.

TLC³ has also led to the recent roll-out of TLC⁴, a joint federal-provincial undertaking across Nova Scotia. The TLC³ S-LP and university collaborator sit on the provincial advisory group for TLC⁴ which will see a speech and language pathologist established in each of the province's four regions, housed in a family resource centre. These S-LPs will be shared with other sites within their respective regions and in this way the principles of TLC³ will be expanded throughout the province. This is a significant legacy of the collaboration between Hincks-Dellcrest, DFRC, the Community of Dartmouth North, Department of Community Services and Dalhousie University.

Impact on Parents and Families

The value of having an S-LP within a community setting accessible on a daily basis cannot be overemphasized. With waiting lists of a year and a half to access speech and

language clinics, the availability of the S-LP at the DFRC has provided many parents with much appreciated intermediate support.

The S-LP's constant availability to talk informally with parents and children, her approach to teaching through modelling of appropriate behaviours and her quiet insistence that the key principles of TLC³ be integrated throughout all the DFRC parenting whether or not it is directly related to the TLC³ initiative, have all contributed significantly to the Centre's impact on the promotion of language and literacy development among parents of children from birth upwards.

Modelling appropriate behaviours and interactions between mom and baby is a central feature of the TLC³ approach and has had a powerful impact on both staff and families. Speaking softly to children, talking for the baby ('I'm hungry' rather than 'your baby's hungry') has been found to be a more effective approach than 'telling.' Modeling has become an integral part of the Centre's operations and occurs through informal interactions with the S-LP and other staff on a daily basis as well as in formal programming.

Community facilitators have 'bought-in' to the TLC³ principles and their passion and enthusiasm for the TLC³ approach has spilled over to even the most hard to reach and isolated parents. This was enabled through the collaboration between the IWK Health Centre and the *Growing Together* initiative and has involved Community Home Visitors visiting new parents in their home to introduce them to the principles of TLC³.

Impact on Community

The TLC³ initiative has also challenged the Community's views on what constitutes good child-rearing practices. Parents are learning that parent-child play is both a normal part of parent-child behaviour and an effective method for promoting early childhood learning and language development.

The Preschool established as part of the TLC³ initiative has been well received both by its partner, the Dartmouth Boys and Girls Club, and also by the parent community. In previous preschools, parents only had a peripheral involvement. The TLC³ Preschool has drawn parents into its daily activities and enhanced their appreciation for learning, along with that of their children. It has also helped parents develop a comfort level with the school system, and shown them how to advocate on behalf of their children. This is particularly significant given that many of the Preschool parents carried negative memories from their own school experience.

The impacts of TLC³ have also spilled over into the greater community as evinced through changes made to the non-preschool aspects of the Dartmouth Boys and Girls Club; the programming philosophy at the Parent Resource Centre (satellite Centre of the DFRC); and programming at the Dartmouth North Community Library to name only a few. The TLC³ initiative has touched many more organizations throughout the province through the S-LP attending and/or running workshops and her presence on boards (Family Literacy Association of Nova Scotia; TLC⁴ advisory committee).

Impact on the DFRC

The TLC³ initiative has also contributed significantly to a maturing of the DFRC organization. The advisory committee in place to develop and oversee the TLC³ initiative was made up of a number of highly skilled and committed individuals (both professionals and parents) who, for the most part stayed with the initiative over the entire five-year period. Their commitment to realizing the vision of the initiative's potential saw them through several crises, and resulted in the DFRC becoming a leader among family resource centres in the province.

There are many other ways in which the TLC³ initiative has had an impact. Not only has participating in the initiative enriched the lives of staff and advisory committee members, for example, it has also contributed to the learnings of university graduate students from a variety of disciplines who took part in the formal evaluation of TLC³, or were invited to the DFRC as part of their practicum.

Key Findings and Lessons Learned Relating to Sustainability

By the end of the fifth year of TLC³, the advisory committee was able to ensure the sustainability of all components of the TLC³ initiative. The key to its sustainability was integrating the TLC³ ways of working, its principles and vision through all aspects of the DFRC. By the end of the pilot, all staff at the Centre had come to 'own' the principles and had infused them into all their interactions with families and the community – not just those tied to TLC³.

It took time however to solidify the TLC³ vision. Not only did the TLC³ team have to work through the challenges of severing a key partnership and establish a new one, they had to struggle through an internal re-organization of the DFRC and associated staff discord. The first three years of the pilot consisted of a lot of hard work to establish their presence within the DFRC and build the present team of partners.

It took an equal amount of time and attention to develop a common understanding of the TLC³ principles among all DFRC staff – child development staff, Community facilitators and Preschool staff. This is an important lesson; a parallel lesson is that programs cannot be imposed. They need time to grow so that staff can come to 'own' them. By the fourth year, staff had come to understand the TLC³ approach. By then everybody had 'caught on'; everybody owned the principles and boundaries between programs had disappeared.

An important factor in maintaining the TLC³ vision over this extended period was the steadfast support of the TLC³ advisory committee. Their commitment to the goals of the initiative and their support of the S-LP/Coordinator went a long way to ensuring the success of the initiative.

Other supporting factors that have contributed to the sustainability of TLC³ were the strategic efforts on the part of the advisory committee members - in particular their arranging a presentation on the TLC³ initiative to key government departments and advocating the necessity of maintaining and expanding the initiative. The gentle

reminders from the Hincks-Dellcrest Institute to focus on collaborations as a strategy for sustainability were also helpful.

The unique relationship between DFRC and the Department of Community Services – based on mutual respect and appreciation of what each other brings to the relationship – cannot be overestimated when considering sustainability. The relationship also offers other organizations an important lesson. Community-based organizations would be well advised to take the time to explore areas of commonality with government, putting aside the ‘we’ versus ‘them’ approach that is found within many not-for-profit groups. A healthier approach, as demonstrated by DFRC, is to find, and work with, champions within government.