

MONARCH CENTRE HDSA LRC INITIATIVE

FINAL REPORT

May 2011

HISTORY

In 2009, the Board of Directors of the Halton Down Syndrome Association (HDSA) determined that funds should be allocated towards an integrated, inter-disciplinary development program for children with Down syndrome. An eight-week pilot project entitled the Learning & Resource Centre (LRC) initiative was launched and completed in the spring of 2010. The HDSA Board of Directors evaluated the results of the pilot and concluded that it was a success based upon the positive impact to children and parents, the awareness raised in the community and related financial commitments from external organizations towards this initiative. The HDSA Board of Directors thus decided to launch a second eight-week program beginning in the fall of 2010.

In assessing the pilot project however, concerns were identified that impacted the future of the LRC initiative. Specifically, these concerns related to whether or not the HDSA had the required operating infrastructure and resources to effectively manage a comprehensive program development and delivery initiative; and whether or not, given the HDSA's mandate and the broad range and needs of its general membership, this particular initiative required the dedication of too much time and too many resources.

After weighing the desire to proceed based on identified benefits for children and their families against the identified concerns, on September 29, 2010 the HDSA Board of Directors concluded that this programming initiative should proceed but be entirely designed, delivered and managed by an independent third party organization.

In keeping with this decision, the Monarch Centre for Learning and Development Inc. (Monarch Centre) was contracted by the HDSA to develop, deliver and manage future developmental program sessions for the LRC initiative. The first delivery session of the program commenced on October 30, 2010 and ran for eight consecutive Saturdays, with the final session held on December 18, 2010.

MONARCH CENTRE GOALS

The Monarch Centre provided the HDSA with an eight-week multidisciplinary program using a unique, holistic approach that maximized individual development by blending established therapeutic techniques with proven teaching methodologies. The program was specifically designed with a particular emphasis on the unique learning requirements of people with Down syndrome, and was delivered in a safe and stimulating environment that focused on building relationships and confidence.

Specific goals of the program included:

- Supporting the physical, cognitive, social and emotional development of individuals with Down syndrome to help prepare them for successful inclusion and long-term interaction within the community; and
- Engaging and working with the parents of individuals with Down syndrome to help improve their understanding of how their children learn and to provide them with tips and techniques for supporting their child's on-going physical, cognitive, social and emotional development.

REFINEMENTS

The following refinements were made to the program as a result of the knowledge and experience gained through the spring 2010 pilot project experience:

- *More Age Groups:* during the LRC Pilot, the School Age Group spanned a very broad age range (5-10 years) and there was no program offered to older teens. The Monarch Centre program was expanded to include an Early School Group and a Late Teen/Young Adult Group to better target and more accurately reflect the particular needs and goals for these age groups;
- *Emphasis on Social Skills:* the program was refined to include more emphasis on developing social and communications skills and conveying key strategies to parents;
- *Enhanced Curriculum:* the program was further refined to include better interactive learning strategies and comprehensive visual schedules, along with more detailed task breakdowns and clearer expectations; and
- *More Efficient Intake Process:* the intake approach was modified to create a more useful screening process, with clearly identifiable milestones that made it easier for parents and educators to track individual progress and evaluate results.

MONARCH CENTRE PROGRAM

The Monarch Centre program was designed to support individuals in each of the following six age groups:

1. Pre-School (1.5-2 years)
2. Kindergarten (3-4 years)
3. Early School Age (5-7 years)
4. Older School Age (8-10 years)
5. Early Teen (11-14 years)
6. Late Teen/Young Adult (15-21 years)

Customized two-hour program sessions were designed for each age group, with each student receiving a total of sixteen hours of direct program support over eight weeks of delivery. These sessions were designed with the understanding that “engagement”, “duration” and “frequency” are key factors for achieving success (maximizing overall learning).

ENGAGEMENT + DURATION + FREQUENCY = SUCCESS

| | |
|-------------------|--|
| Engagement | There is a direct correlation between learning and how meaningful and interesting a particular lesson or situation is to the child. Higher receptivity leads to greater the retention. |
| Duration | Shorter individual lessons make processing information easier and avoid overwhelming or over-stimulating the child. This helps to create a love of learning and a desire for more. |
| Frequency | Learning is improved when key messages are repeated and reinforced. Familiarity helps retention and understanding. |

During each session, groups proceeded through five distinct, age-specific, development stations. All stations began with an engaging group activity to capture students’ attention and included a number of interrelated activities designed to develop gross motor, fine motor, expressive and receptive language skills as well as key social, emotional, cognitive and independent living skills. The use of stations helped to maximize learning by providing students with a variety of activities (engagement), with smaller and more digestible amounts of information (duration), and with continuous reinforcement of key development points (frequency). There were two teachers assigned to each development station for a student-to-teacher ratio of 3-to-1.

Stations comprised the following:

- 1. Gross Motor Centre**
(individual & group activities designed to develop gross motor skills including balance, coordination, development of overall strength, and body and space awareness)
- 2. Music Circle**
(group activity designed to develop peer recognition, finger dexterity, breath support, oral placement, auditory comprehension, and expressive & receptive language skills)
- 3. Snack**
(group activity designed to develop appropriate seating, fine motor, expressive & receptive language, self-help and feeding skills)
- 4. Learning Centres**
(individual activity based on personal goals designed to develop cognitive,

processing, self-help, fine motor and speech and language skills)

5. Closing Circle

(group activity designed to develop social, speech and language skills)

Beyond the strictly physiological focus of traditional therapies, the Monarch Centre program took a holistic view of the individual and focused more broadly on supporting and enhancing their physical, cognitive, social and emotional development. It was created by integrating the insights and expertise of various subject matter experts including therapists, teachers and developmental specialists, and included activities and program best practices from such highly regarded and highly effective programs as *Brain Gym*, *Floortime*, *Handwriting Without Tears*, *Phoneme Touch & Say*, and *Casa Montessori*.

Brain Gym

Based on work of Dr. Paul Dennison, Brain Gym is a series of easy, gentle and enjoyable movements that relaxes the system and readies the brain. This leads to improvements in concentration, memory, listening and physical coordination. Brain Gym enhances energy and mental alertness, stimulating the flow of information within the body and brain, and freeing our innate ability to learn and function at top efficiency.

Floortime

Based on the work of Dr. Stanley Greenspan, the Floortime approach focuses on helping children master essential emotional milestones (self regulation and interest in the world, Intimacy/human relationships, complex communication - continuous flow of back and forth communication, emotional ideas, emotional thinking). This approach helps develop the foundation for learning and builds healthy foundations for social, emotional and intellectual capacities.

Handwriting Without Tears

Based on work by Jan Olsen, O.T., Handwriting Without Tears uses fun and educationally sound instruction methods to teach handwriting to students, pre- K through cursive.

Phoneme Touch & Say

Created by Speech and Language Pathologist Jill Hicks, M.Sc., Phoneme Touch & Say is a multi-sensory cueing system to help children learn and specifically: speak more clearly (articulation); tell speech sounds apart (phoneme discrimination); initiate reading skills (phoneme awareness and sound letter matching)

Casa Montessori

We included some key activities chiefly into our daily living skills program based on the work of Maria Montessori. The Montessori method helps a child to gain high levels of independence, full appreciation of culture and their environment with an emphasis on sensory experiences, language and number concepts.

Social Skills

Developed by our Social Skills Learning Specialists, we created a greater emphasis on social skills than was present during the pilot project. Our social skills component focused on:

- **Body Awareness and Emotional Regulation:** activities to assist participants in developing an awareness of how their bodies react to emotions. Sensory and movement activities are used in all curriculums.
- **Verbal and Non-Verbal Communication:** ability to express emotions and thoughts effectively. Helping participants to identify non-verbal cues (body language) and gestures.
- **Social Etiquette:** focuses on greeting others, personal space, making eye contact and social manners.
- **Connections and Friendships:** ways to interact with others, identifying safe friends, dealing with bullies.

THE WEAVE

The Monarch Centre program was a weave of all of the above specialty areas together with key physical components, including:

- **Gross Motor:** strength, coordination, balance, body awareness, and motor planning;
- **Fine Motor:** dexterity, bilateral co-ordination, self help skills, sensory regulation, dressing/undressing skills; and
- **Speech and Language:** articulation, oral motor, expressive language, non-verbal communication skills.

We also incorporated:

- Music and movement;
- Cognitive skills to introduce and enhance literacy, numeracy, short term memory and processing abilities;
- Emphasis on self help dressing/undressing skills;
- Informal circle and play to help children feel comfortable and successful;
- Snack Time with emphasis on snack/meal preparation - incorporating self help, appropriate seating, daily living skills (fine & gross motor), speech and language (conversational skills, question and answer) plus social skills.

All teachers working directly with children were accredited teachers, early childhood educators (ECEs) and/or educational assistants all currently employed in the school system.

OTHER SERVICES & DELIVERABLES

In addition to the sixteen hours of developmental programs provided to each child, the Monarch Centre provided:

- An Information Evening and comprehensive Information & Registration Package for each parent prior to the start of the program;
- A dedicated Monarch Centre website with key information, contact and resource links;
- Accessible, on-going contact and communication for parents from the Executive Director and the Director of Programming of the Monarch Centre;
- Scheduled observation times to provide parents with an opportunity to observe their child in session.
- An opportunity to build community and relationships by having a coffee room to allow parents to connect with other parents.
- On-line, electronic processes to streamline and facilitate program payment and information sharing;
- Regular, weekly electronic newsletters reviewing progress to-date and identifying upcoming program activities;
- Formal discussions with each family early in the program so that we could incorporate specific goals/concerns into individual program plans;
- Program Goals and Outlines for each age group given to parents;
- Establishment of relationship with Special Services at Home (SSAH) to help financially defray program fees for eligible parents;
- Opportunities for parents to meet with visiting Occupational, Physio and Speech therapists;
- Informal, weekly post-session teacher feedback opportunities for parents;
- Post-program parent survey and opportunities to provide formal feedback; and
- Individualized Development Reports for each child after the program had concluded.

FINANCIAL RESULTS

With only three weeks to attract the minimum number of potential registrants (27) in order to move forward on a feasible basis with the delivery of the program, the Monarch Centre was able to attract a total of 33 registrants across six age groups (see **Appendix A** for age distribution of participants). All 33 registrants stayed with the program for the full eight weeks.

The Monarch Centre maintained its financial commitment to the HDSA and invoiced the budgeted amount per the Service Agreement of \$43,358.32 plus HST.

Table A provides a financial breakdown comparing the Monarch Centre costs to the previous LRC pilot project costs:

TABLE A: FINANCIAL COMPARISON

| | LRC PILOT | MONARCH CENTRE |
|----------------------------------|------------------|-----------------------|
| Students | 22 | 33 |
| Program Hours Per Student | 16 | 16 |
| Design Cost | \$ 11,332.20 | \$ 7,083.33 |
| Delivery Cost | \$ 22,664.40 | \$ 36,274.99 |
| Total Cost | \$ 34,000.00 | \$ 43,358.32 |
| Delivery Cost Per Hour | \$ 64.39 | \$ 68.70 |
| Total Cost Per Hour | \$ 96.59 | \$ 82.12 |
| Total Cost Per Student | \$ 1,545.45 | \$ 1,313.89 |

Note that the Monarch Centre's *Total Cost Per Hour* and *Total Cost Per Student* were significantly lower than the comparative rates associated with the LRC pilot project.

OPERATIONAL RESULTS

We conducted exit interviews with participating parents and solicited feedback from parents using an on-line questionnaire after the fall program was completed. **79% of families who registered their child at the Monarch Centre responded to the questionnaire.** The results of the questionnaire along with testimonials are provided below:

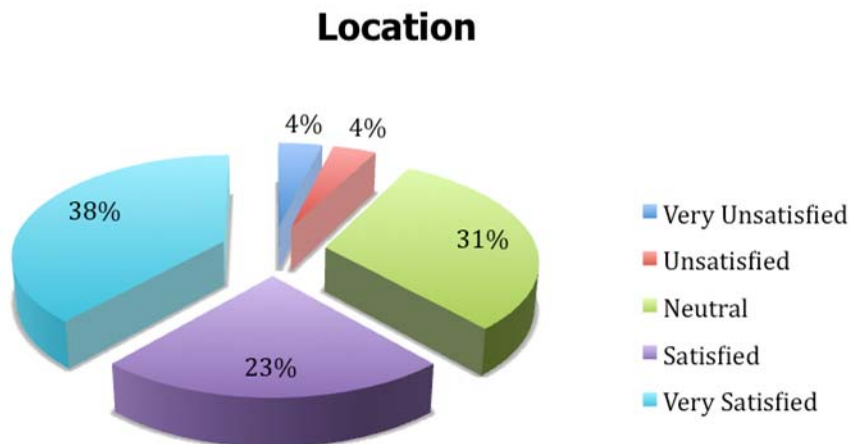
100% of respondents stated that their child benefitted or experienced positive change as a result of the Monarch Centre development program.

82% of respondents stated that the Monarch Centre development program met their overall desired expectations.

Other specific questions we asked were:

How satisfied were you with the location (Burlington) of the Monarch Centre development program?

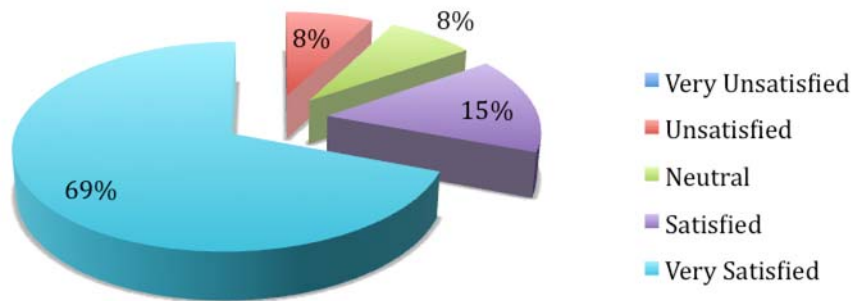
***61% of respondents were satisfied or very satisfied with the location.
31% were neutral.***



How satisfied were you with the day of the week (Saturday) chosen for the Monarch Centre development program?

84% of respondents were satisfied or very satisfied with the day of week.

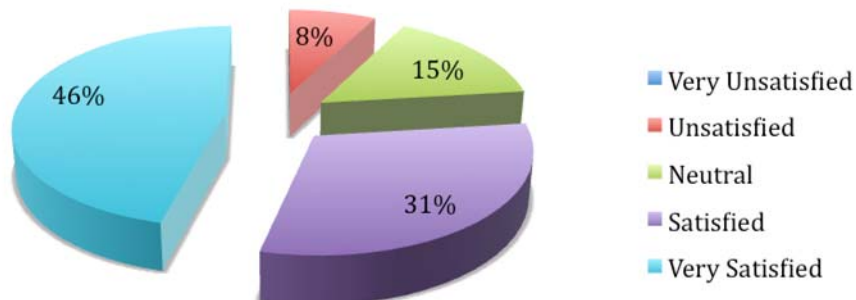
Day of Week



How satisfied were you with the time scheduled for your child's session?

77% of respondents were satisfied or very satisfied with the time of session.

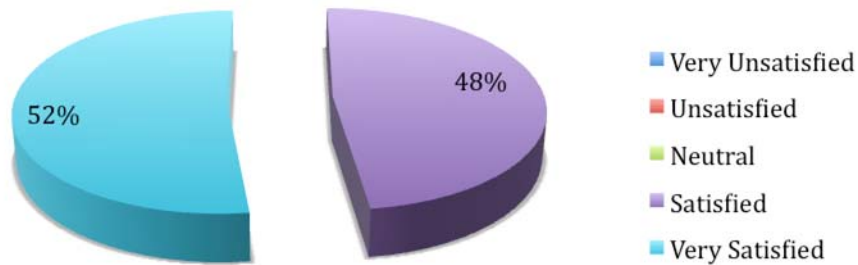
Time of Session



How satisfied were you with the expertise/quality of the teachers?

100% of respondents were satisfied or very satisfied with the expertise/quality of the teachers.

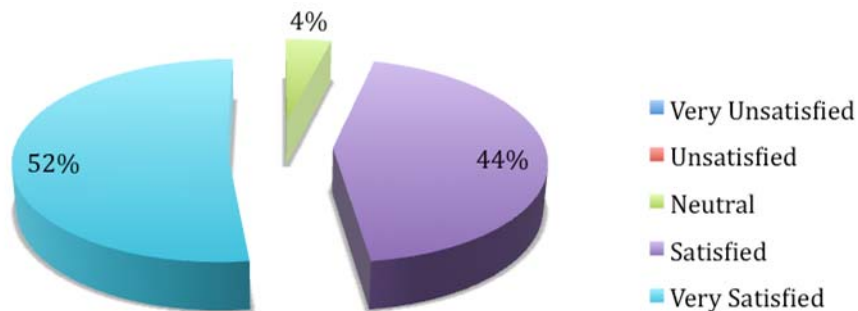
Expertise/Quality of Teachers



How satisfied were you with the curriculum/program content?

96% of respondents were satisfied or very satisfied with the curriculum/program content.

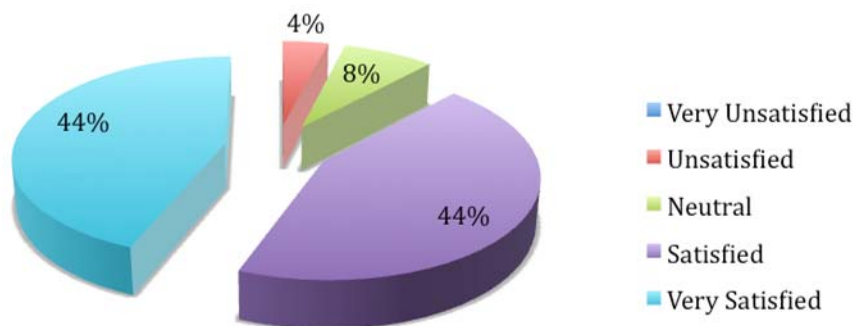
Curriculum/Program Content



How satisfied were you with overall communication (emails, bulletins, telephone calls, website, face-to-face contact)?

88% of respondents were satisfied or very satisfied with overall communication.

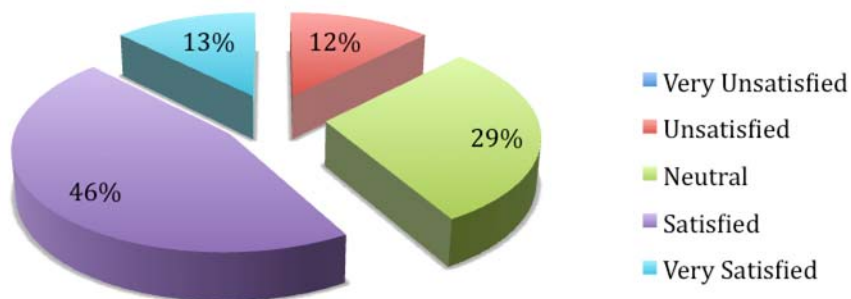
Communication



How satisfied were you with feedback about your child's progress?

59% of respondents were satisfied or very satisfied with feedback about their child's progress. 29% were neutral.

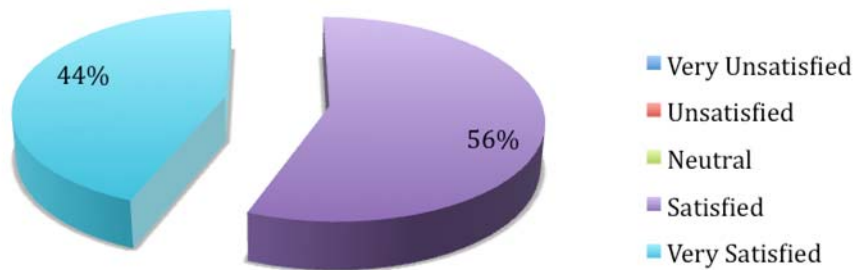
Feedback About Progress



Overall, how satisfied were you with the Monarch Centre development program?

100% of respondents were satisfied or very satisfied with the Monarch Centre development program.

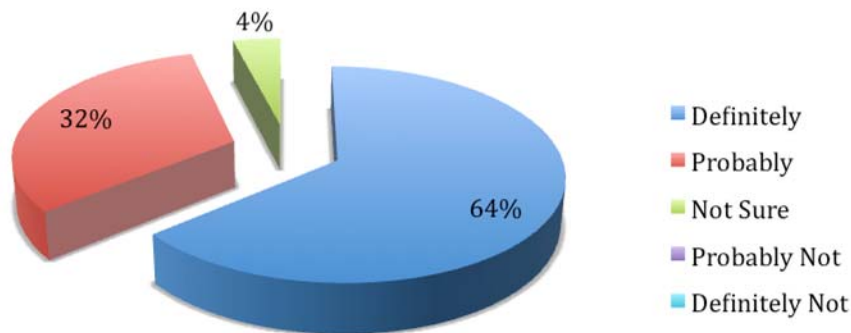
Overall Satisfaction with Program



Would you register your child for a future Monarch Centre development program?

96% of respondents said that they would definitely or probably register their child for future Monarch Centre programs.

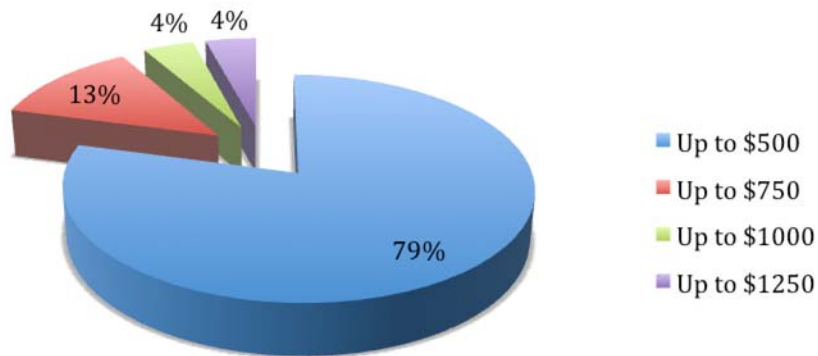
Future Registrations



What is the maximum you'd be willing to pay for an eight (8) week development program?

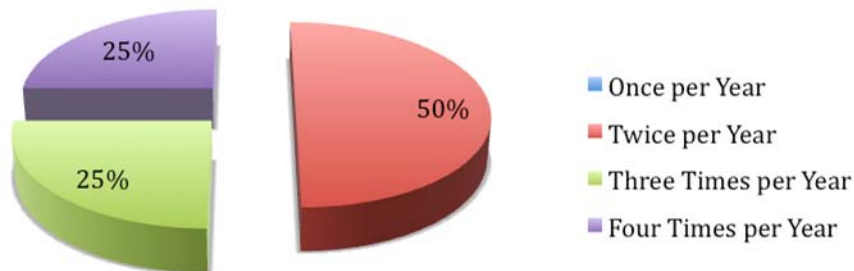
79% of respondents said that they would pay up to \$500 for future Monarch Centre programs.

Maximum Fees



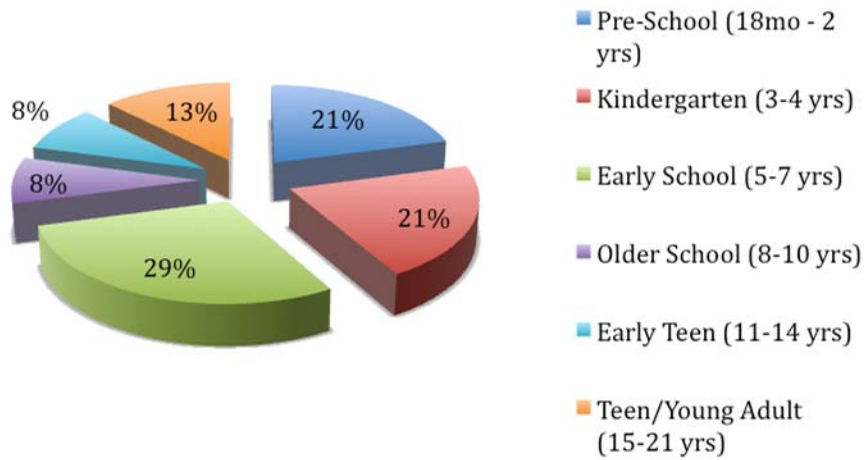
How many times per calendar year would you be willing to register your child for an eight (8) week development program?

Registrations Per Calendar Year



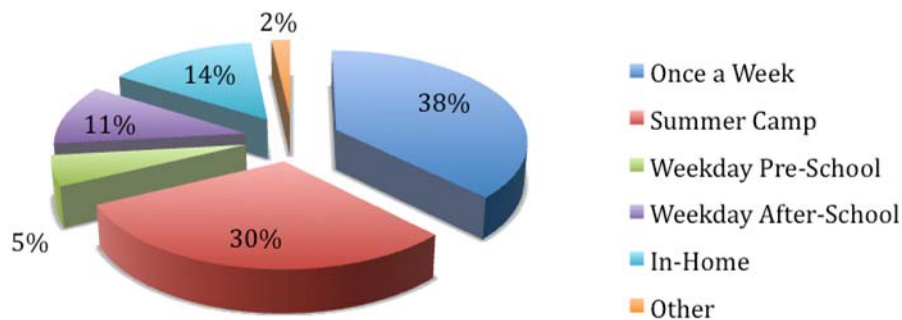
What future age-group development programs are you most interested in?

Age-Group Programs



Moving forward, parents overwhelmingly indicated an interest in once-a-week (Saturday) programs and summer camp programs.

Program Types



TESTIMONIALS

The following parent testimonials were written about the services provided by the Monarch Centre during the fall of 2010:

"My son enjoys going to the LRC on Saturdays and is very happy after he leaves. I see big changes in his efforts to be more verbal around others other than my husband and myself, and a lot more confidence. He benefits greatly from the opportunity to be part of a program that fulfills his social, emotional and developmental needs, in a very supportive and non-judgmental environment."

"Highest praise for the Halton Down Syndrome Association's Learning & Resource Centre! I am very impressed with both the quality and content of the program. The educational staff and therapists are not only highly competent but also genuinely enthusiastic about the role they are playing in our children's overall development. My son is benefiting from the additional education and he is learning life skills that he will always need and use. Even better, when I tell him where we are going, he breaks into a big smile and shouts "yeah!!" Thank you for this much needed resource!"

"Our daughter is loving this session again & we appreciate all she is gaining each week!"

"I do believe this program is extremely valuable and want it to continue and want my son to continue to be a part of the program."

"My son's speech and sound enunciation has improved as well as his fine motor skills. He now has more patience and doesn't get discouraged by wooden puzzles or pegs like he did before. He can almost dress himself completely at 3 years old, while his typical brother couldn't do that at the same age. His sense of independence has strengthened and his perseverance in completing a task is also more developed. His separation anxiety has greatly diminished and he easily accepts new adults as caregivers/teachers. Thank you for the work poured in from Michael, Leanne and all teachers. This Centre is a breakthrough for our kids. Makes us parents confident in their future."

"It was an opportunity to develop social and communication skills and develop speech, fine and gross motor skills. He always enjoyed going to the program. The program met my expectations because it addressed the broad scope of skills our children need to develop to become as independent as possible and to function well in society."

"She was able to interact in a meaningful way with her peers and she was exposed to activities she hadn't done before; sign language was reinforced. She will continue to benefit from what we have learned as parents as to how to help her learn."

"We think the Monarch Centre program is fabulous!!! The hard work put in by everyone involved is unprecedented! My husband and I were thrilled with the program and its various different groups. Our son benefitted tremendously from this program. He thoroughly enjoyed going and didn't really want to leave once he was there. His comfort level with new situations and people has greatly improved over the course of the session as well as his ability to do more things for himself. Our son is definitely more interested in walking since the program has started and is doing very well in that area. He also is doing fairly well with drinking a straw, which is something we hadn't attempted previously. The Monarch Centre program has exceeded my expectations!!! We really didn't know what type of experience this would be for him, but it has proven to be an amazing experience as well as something that my husband and I fully intend on continuing for him. The dedication and sincerity of Leanne and Michael is admirable. It is so nice to see individuals so intent on making a difference in our children's lives."

"We found the time of our child session challenging due to the fact we travel from out of town... but we love the program so much it was worth it! We found that our son has learnt about waiting for the other kids, waiting his turn...."

"My son benefited in that he was exposed to a variety of learning environments and stimulants. He had the opportunity to interact with peers his own age and practice independent learning skills. I liked the fact that the program was developed using a variety of different ideologies. I liked that the staff were approachable at all times. Overall, we were very satisfied with the program, and look forward to enrolling our son again."

"I am so impressed with how well the teachers motivate the children to participate in an activity & how they manage to engage & keep the children focused on a task. They really make it fun. Each aspect of the program is intentional, for example practicing social skills while having snack, & getting to practice pouring the water. I find the whole program to be very well run & organized & that communication is easy & efficient via email. Our daughter loves coming to the Monarch Centre each week & often speaks about what she has done. I know it is a lot of fun & a positive experience for her & it's good for her to spend time with

her peers. But as she's having fun, we know she is learning valuable lessons. Thank you all so much for your commitment to this amazing program. It is something that has brought great joy to our daughter & to us as we see her enjoyment & the gains that she is making in many areas of her development. With many, many thanks for all that you do to make it work so well!"

APPENDIX A