

Early childhood services that work for children, families and islanders

Executive Summary

CHANCES (Caring, Helping, And Nurturing, Children Every Step) is a non-profit, charitable organization providing child development and parent supports to children from prenatal to 11 years and their families. CHANCES in partnership with the Margaret and Wallace McCain Foundation embarked on a research effort to profile the impact of expanding access to a range of high quality integrated services for children and their families, with a particular focus on those who were identified as being vulnerable.

The initial focus was the expansion and integration of early education and family support services, while further efforts focused on enhancing access, quality and accountability.

The research is designed to evaluate:

- » The effects of the continuous early years program participation on children's readiness for school;
- » The value of a focused professional development agenda on child outcomes;
- » The impact of public investments in early years programming on child outcomes.

RECOMMENDATIONS:

Enhanced Access:

Modify fee subsidy eligibility to support greater access to early education and child care programs for the children of parents working in the precarious, low wage earning sector. This would allow more families to enroll their children in early years programming.

Enhanced Quality:

- » Establish an Early Childhood Education degree as a requirement for pedagogical leaders in licensed Early Years Centres across PEI.
- » Link quality assessment outcomes in Early Years Centres to program expectations.
- » Share the Program Observation Tool as part of a professional learning agenda for the early childhood sector.

Enhanced Accountability:

- » Coordinated use across government and community based programs and services, of a province-wide repository for the collection of existing data sets for research, policy and practice development and accountability purposes.

Excellence in Early Learning & Care:

The Framework on Early Learning and Child Care and PEI's share of new federal funding for early learning provides an opportunity to review progress and set new goals as part of the next phase of PEI's Preschool Excellence Initiative.

Conclusion:

There are early indications of positive outcomes for vulnerable children and families who are exposed to high quality, integrated early education and family support programs and services.

The April 2016 Speech from the Throne recognizes that sustainable economic growth relies on PEI's capacity to increase its population and expand workforce skills. The government's goal is to grow the PEI economy so that more Islanders can prosper here, both economically and socially. A talented and growing workforce is critical to Prince Edward Island's ability to adapt to, and participate in, the changing world economy. Improving educational and health outcomes and reducing poverty are linked to these goals. When health and education account for more than half of all government's spending, containing expenditures is dependent on improving overall population health outcomes.

PEI is focused on repatriating, recruiting and retaining a skilled and talented workforce. A productive workforce is born in a strong education system, and a strong education system begins with early education. Prince Edward Island's efforts to reorganize its early childhood services, place it in an advantageous position to benefit from the new opportunities provided by the national Framework on Early Learning and Child Care. As the first phase of life long learning, improving early childhood education for all is an essential complement to the government's renewed approach to education with its emphasis on community engagement and student success.

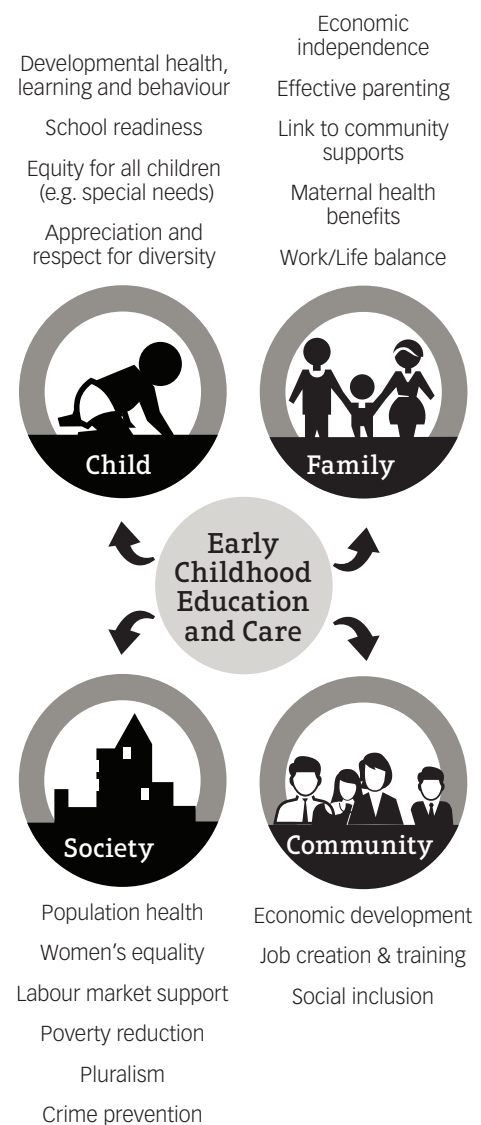
Affordable preschool education has a positive impact on a family's decision to have children and to remain on the island. By reducing the cost of combining work and motherhood, early education supports both fertility and population stability (OECD, 2011). Good, affordable preschool education signals to women that work and having children are compatible. This is good for women, good for productivity and good for PEI's future.

The benefits of effective early childhood programming

As illustrated in **Figure 1**, early childhood education is associated with a multitude of social and economic benefits. Quality programs lead to positive long-term effects with respect to individual academic achievement, employment and health (Yoshikawa, 2013). Early childhood education (ECE) is also linked to economic benefits. It is an employer in its own right,

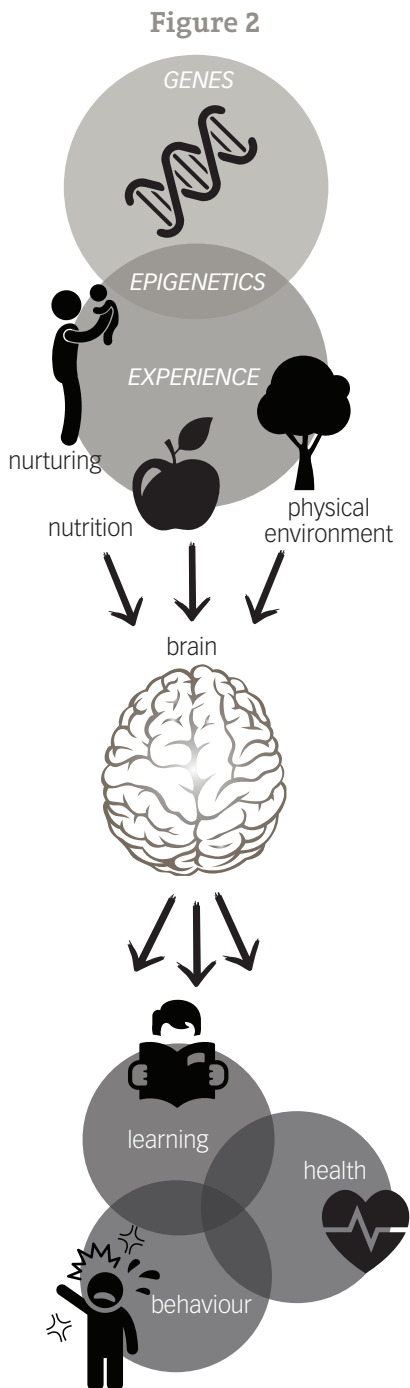
while supporting the workforce participation of parents. It also contributes capacities of the next generation of workers. It offers opportunities for inclusion by reducing inequalities that result from poverty. In a country dependent on immigration, it assists in the settlement of new Canadians. By identifying problems and intervening early, ECE decreases the cost of special education. Improved educational outcomes ultimately help to reduce skills shortages and expenditures in health and social service. These, in turn, have a positive effect on income inequality and lead to a stronger society and economy.

Figure 1



EARLY HUMAN DEVELOPMENT

Quality programs contribute to child development. The early years of human life are a period of rapid growth in which children are highly sensitive to their environments. **Figure 2** demonstrates how nurture, stimulation and nutrition interact with genetic predispositions to sculpt the architecture of the brain and its neural pathways, influencing learning, behaviour and physical and mental health over the life course. Genes listen to the environment and the environment adapts the genetic blueprint. This is the important epigenetic story and helps to explain why interventions in early childhood can be so effective.



Adapted from Fields, D. 2011; Kendel, E et al. 2000; McCain et al. 2007.

Adversity in early childhood in the form of harsh, neglectful or inconsistent parenting, combined with poor socio-economic factors, has an impact on brain development. This creates cascading effects that manifests throughout the life cycle:

In preschoolers: Aggression or withdrawal; developmental delays.

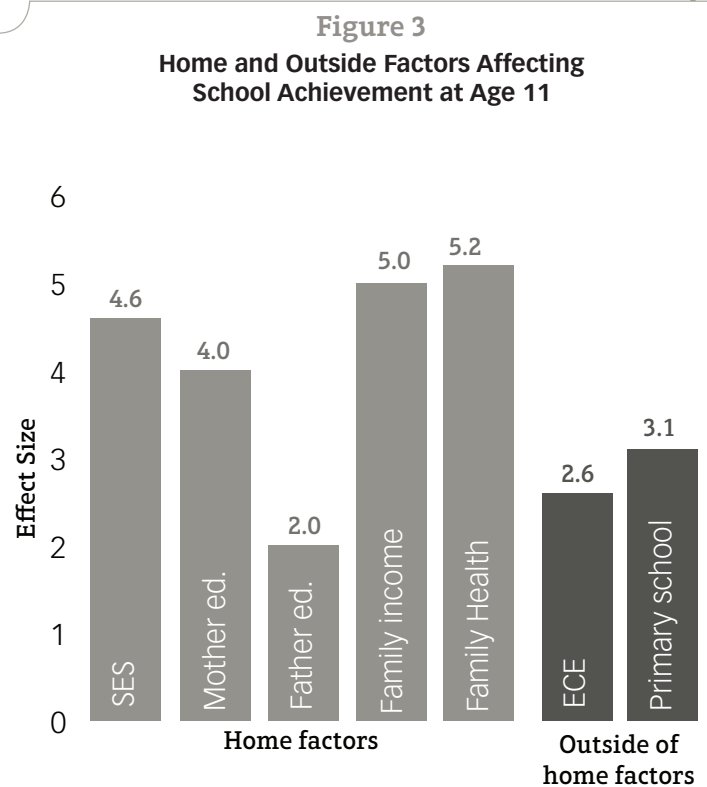
In adolescents and young adults: Poor academic performance; greater school dropout rates; early pregnancy; risky behaviour, including substance abuse; and mental health problems.

In adults: Obesity; type 2 diabetes; cancers and heart disease.

These in turn create poor environments to rear the next generation.

In Canada, the Maritime Provinces experience a higher prevalence of obesity and chronic diseases compared to other provinces.

As shown in **Figure 3**, the home environment, including the health of family members, socio-economic factors and parent education exert the most influence on child outcomes. However, the strongest outside-the-home influencers are participation in ECE programs and the quality of early schooling. These studies provide important information for policy-makers.



Sylva et al., 2012.

In PEI and other Maritime provinces, literacy levels continue to be lower than in other jurisdictions in Canada (CMEC, 2012).

While it is difficult for public policy to alter family dynamics, it does exert considerable influence over the availability and quality of ECE and primary schooling.

Waiting for the school years to improve academic and social outcomes is often too late. Language skills are a strong and early predictor of cognitive achievement, social competency and emotional regulation. Children’s early oral vocabulary knowledge continues to grow rapidly throughout early childhood overlapping with reading acquisition in primary school.

Children with low language and numeracy skills at school entry are unlikely to have the process reversed by the school system. Reducing academics inequities and their resulting long-term consequences are therefore dependent on improving the competencies of children before they start school.

Quality ECE programs have been found to amplify benefits for all children and help to mitigate the detrimental effects of adverse home and neighbourhood environments on school readiness (Schweinhart, 2012; Pianta & Howes, 2009, Jenkins, J et al., 2015). Children who benefit most from participation in quality ECE programs, but who are the least likely to attend, are those living in families disadvantaged by poverty (McCain et al., 2011). A large UK study, illustrated in **Figure 4** shows that regular attendance in an ECE program for two years prior

to kindergarten has an impact on literacy and numeracy that is independent of family factors and carries forward at age 14 (Sylva et al., 2012). Public investment in quality ECE actually increases the impact of later investments in public schooling (Herrington, 2015).

PUBLIC POLICY INFLUENCES ON ECE QUALITY

ECE programs are most effective when they are universally available; are part of a children’s service network; include health and parenting supports; and are accompanied by adequate paid parental leave and income transfers (Commission on Social Determinants of Health, 2008; Yoshikawa, 2013).

The OECD Quality Network (Organisation for Economic Cooperation and Development, 2011) lists four factors contributing to effective ECE programs:

1. The children attend regularly;
2. The majority of children participate, avoiding the targeting of children in low-income families;
3. Staff are adequately trained;
4. The teaching approach is child-centred, with a high portion of child initiated activities.

These are considerations for policy-makers as they grow access to ECE services. ECE’s positive influence on educational outcomes makes it a compelling area for investment. Education is also the ultimate tool to address many economic and social challenges. It creates wider options for careers, raises employment and lowers chronic unemployment, leading to higher standards of living and a reduction in the social ills associated with poverty. A more educated workforce creates a more innovative and productive economy.

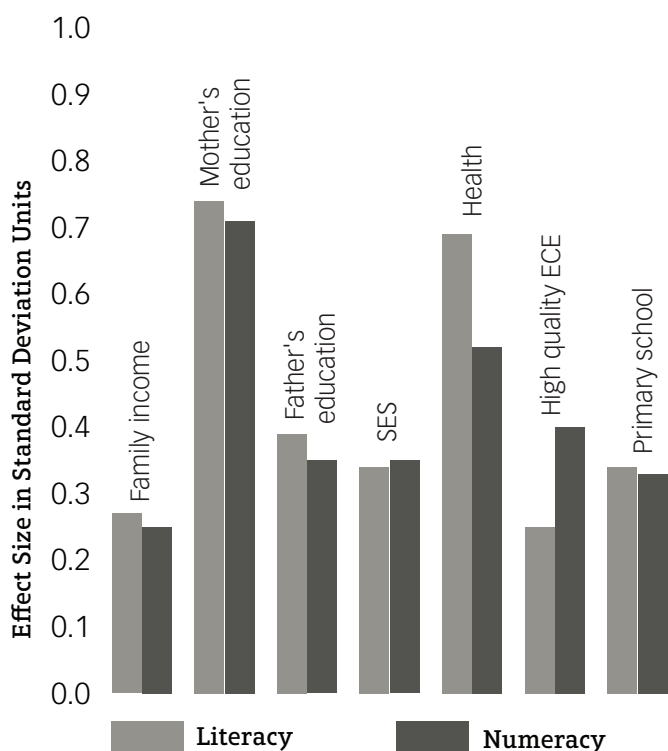
PEI’s Preschool Excellence Initiative

Prince Edward Island’s early years system is respected across Canada (McCuaig, Akbari, 2014). In 2010, the PEI government introduced full day kindergarten for 5 year olds and developed publicly managed early years centres (EYCs) for infants to 4 year olds. There are now 44 early years centres across the province. Early years centres provide early learning and child care for Island children, supporting the development of social, emotional, physical and cognitive skills, which lay the foundation for future academic and life success.

The government supports early years centres through yearly grants to offset salaries and expenses, covering approximately 40 per cent of the operating costs for each centre. EYC staff are trained in the province’s Early Learning Framework and centres

Figure 4

Effects at Age 14 on Literacy and Numeracy



are required to meet certain requirements including providing infant care, care for children with special needs, charging set parent fees, and paying employees according to a wage grid. Nearly 2000 children are enrolled in early years centres.

Phase 2 of the PEI Preschool Excellence Initiative is in development with the intention of reviewing standards in existing EYCs, adding new centres and exploring an expanded role for Family Resource Centres. As a first step, staff working in early years centres received a 2 per cent wage increase beginning in July 2016.

CHANCES: A community of learners

CHANCES (Caring, Helping, And Nurturing, Children Every Step) is part of PEI's early years service system. It is a non-profit, charitable organization providing child development and parent supports to children from prenatal to 11 years of age and their families.

CHANCES carries out its mission through eight program streams:

Smart Start Early Years Centres providing early learning and flexible child care for children from infancy to kindergarten entry;

Smart Play after-school activities promoting physical and academic growth for children aged 5 to 11 years and resources for their families;

Strong Start parent/child drop in programs building early literacy;

CAPC Family Resource Centres – Drop-in programs for children, family members and other caregivers;

Best Start province-wide home visiting for newborns to age 3;

Parenting programs offering advice, workshops and resources for families with children to age 11;

The Canada Prenatal Nutrition Program promoting healthy pregnancies and support for new parents;

Family Health Clinic delivering well baby/well child exams and ongoing management of chronic health conditions with a focus on health promotion and illness prevention provided for families without a primary health care provider.

PHASE 1: THE STARTING POINT

Smart Start began as a preschool program located in Prince Street School. In phase one of its development, a partnership with the Margaret and Wallace McCain Family Foundation (MWMFF) expanded Smart Start into a full-time preschool and

infant program, co-located with a Family Resource Centre in a school providing an easy transition for children into kindergarten. CHANCES now operates four early years centres in the Charlottetown area, with an additional one in O'Leary. These centres provide the platform for its array of child and family programming.

Table 1 shows CHANCES is a major provider of children's services on PEI. CHANCES integrated child and family services complements the province's vision and helps to inform its implementation.

Table 1 Children's service provision Prince Edward Island 2016

	CHANCES	ALL
Licensed capacity province wide	450	3669
Licensed capacity EYCs	229	1998
Number of EYCs	5	44
Number of non-designated centres		21
School age capacity	221	1671
Home Visiting (Families)*	540	540

*900 adults, 881 children (582 identified as vulnerable at birth by Public Health Nursing)

PHASE 2: ENHANCED ACCESS, QUALITY AND ACCOUNTABILITY

CHANCES and the Margaret and Wallace McCain Family Foundation have partnered for Phase 2 of the evaluation. This phase concentrates on three areas: expanding access to preschool particularly for children from vulnerable families; focused attention to improving program quality; and, enhanced accountability to inform policy development and effective practice.

The research is designed to evaluate:

- » The effects of continuous early years program participation on children's readiness for school;
- » The value of a focused professional development agenda on child outcomes;
- » The impact of public investments in early years programming on child outcomes.

Continuous access for vulnerable populations: Identified families of new infants are offered up to 3 years of home visiting as part of the CHANCES Best Start program. About 500 families participate each year. Because of family circumstances, these children would normally not participate in any other early years programming after exiting Best Start at age 3. With funding from the MWMFF, CHANCES offered 15 hours a week in its Smart

Start early years centres for children leaving home visiting who were not eligible for a child care subsidy. Parents were not changed fees.

The objective was to evaluate the effect of uninterrupted early years program attendance on children’s school readiness as determined at the beginning of kindergarten. The analysis was conducted on a cohort of Best Start/Smart Start participants enrolled in Charlottetown early years centres between March 2012 and October 2015.

Enhanced quality: CHANCES staff are working to constantly improve their family-centred practice incorporating the province’s Early Learning Framework (ELF). As part of their quality improvement efforts, all CHANCES staff have been provided with new tools and trained to systematically collect data. By analyzing the findings and reflecting on their own practice, professionals are able to identify where programming can improve and how.

Enhanced accountability: It is expected that the first stage of analyses will help to inform the design of future studies, which will follow the selected cohort into formal schooling, linking preschool outcomes to later school performance. Likewise, this study could serve as a prototype for a province-wide birth cohort to assess the impact of early years investment across the lifespan.

The principal investigator for this project is W.J. Montelpare, Professor of Applied Human Sciences at the University of Prince Edward Island.

I. ENHANCED ACCESS

Early years centres offer play-based educational programs for children from infancy to kindergarten. Parents who enroll their children in an EYC pay a government-established fee. Low-income working parents may qualify for a government-provided subsidy to reduce their costs. **Table 2** shows standard parent fees per age group. A 2012 review of PEI’s Preschool Excellence Initiative found that most parents struggled to pay the standard fees. The low-income threshold for subsidies excluded many low and modest income families while the parent co-payment for subsidized fees was too onerous. Excluding exceptional circumstances, parents on social assistance are not eligible for fee support. The children of parents engaged in seasonal or precarious work, cycle in and out of preschool programming in tandem with their parents’ access to work.

To evaluate the effects of the continuous preschool participation on children’s readiness for school, CHANCES offers 15 hours per week in a Smart Start Early Years Centre to

Table 2 Prince Edward Island child care fee levels 2016

Age Group	EYC fee/day
Infant	\$34.00
2 year olds	\$28.00
3 – 4 year olds	\$27.00
5 – 11 year olds	\$22.00 full day \$12.50 part day

children graduating from the Best Start home visiting program at age 3. The no-cost program was made available to families who could not afford the standard EYC fees and who did not qualify for government fee subsidies. Children exit Smart Start when they enter kindergarten.

Between March 2012 and October 2015, the program enrolled 110 children (**Table 3**). The children in the study had fewer breaks in attendance and fewer absences than non-Phase 2 attendees. The final group of children will start kindergarten in August 2018.

Table 3 Phase 2 children entering program by fiscal year

Fiscal Year	# children entering Smart Start
Mar 2, 2012 – Mar 31, 2012	6
Apr 1, 2012 – Mar 31, 2013	32
Apr 1, 2013 – Mar 31, 2014	27
Apr 1, 2014 – Mar 31, 2015	22
Apr 1, 2015 – Oct 31, 2015	23
Total	110

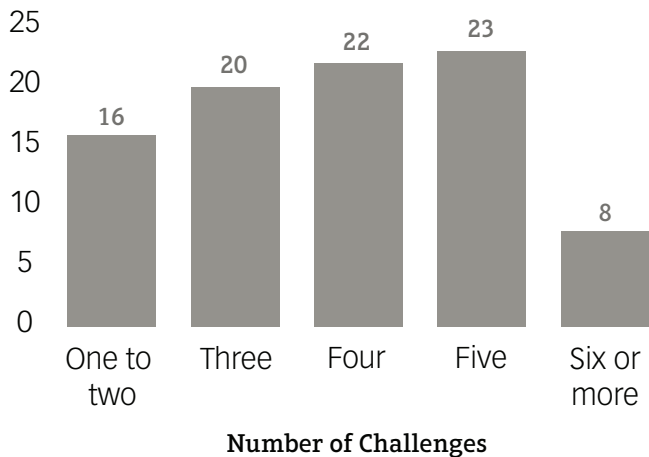
CHANCES Phase 2 participants

The parents of children participating in the Phase 2 study are engaged in seasonal or precarious work or receive Income Support. Not unlike thousands of families in similar programs across Canada, CHANCES Phase 2 families face a number of additional challenges which may include but are not limited to: parenting as a single parent, recovering from addictions and/or mental illness, dealing with a child with special needs, living with partner violence, or restarting their lives as immigrants to Canada. The distribution of the number of risk factors identified by CHANCES Phase 2 families are summarized in **Figure 5**.

Service integration as a support to access

CHANCES is supporting families to increase the range of services they use. More attention is being paid to CHANCES

Figure 5
Number of Self-reported Challenges among Phase 2 Families.



public profile; its web site and social media are being used more systematically. Program information is up-to-date, and all staff are well versed in the various program streams. During enrolment interviews staff introduce families to the full range of CHANCES services and bridge families to other programs. For example, home visitors bring families to Strong Start drop in literacy programs.

Particular attention is paid to the alignment of CHANCES programs with schools. Where possible programs are located in schools to facilitate family participation and access to facilities including the school gym, staff room, computer lab, library, etc. Regular information sessions are held with school principals and Kindergarten teachers with the goal of developing explicit transition to school plans for families. Opportunities to collaborate on educators' professional learning are sought to align behaviour expectations and curriculum goals.

To gauge their communication with parents and assess program use, CHANCES conducts regular surveys. For the parent survey 2016, 380 parents participated.¹ The demographic distribution of CHANCES parents is reflective of Island families with respect to marital status and number of children per household. **Table 4** presents the number of children per family as reported by the parent respondents, while **Table 5** presents the highest formal education achieved among the parents.

The data in **Table 5** indicate that most parents have completed some formal education beyond the high school diploma (>53%) although slightly less than eight percent of respondents had not achieved their general education diploma. Further, more than 90 per cent of respondents were born in Canada (n=275) while

¹ A minimum sample size of n=15 is used in the reporting of personal characteristics to prevent disclosing information that could contravene anonymity of respondents.

Table 4 Number of Children per Family Using CHANCES Services

Number of children attending CHANCES programs per family	N	Percentage of respondents
1 child	188	61
2 children	91	29.5
3 or more children	30	9.5
Total respondents = 307		

Table 5 Education Attainment by CHANCES Parent Respondents

Highest Reported Formal Education Completed	N	Percentage of respondents
Less than Secondary School	23	7.8
Secondary School	115	38.9
Community College or Technical School	88	29.7
University and/or Post graduate	70	23.6
Total respondents = 296		

10 per cent (n=30) were born outside of Canada. Consistent with birth location, English was the home language for 85 per cent of respondents while 15 per cent spoke a language other than English at home. As indicated in **Table 6**, the majority of parents are employed full time.

Table 6 Employment Status of Respondents

Employment status	N	Percentage of respondents
Working more than 30 hours per week	107	40.4
Working part-time	40	15.0
On EI parental leave (ex: maternity leave)	66	24.9
On Income Support	41	15.5

Table 7 lists the proportion of parents attending CHANCES programs, organized by income levels. **Table 8** shows how long families have participated in CHANCES programming.

While the majority of families used one CHANCES program, a third participate in more than one program, (**Table 9**) an indication of CHANCES efforts to introduce families to its full suite of programming.

Table 10 shows the range of programs and activities used.

Referrals from other programs was the primary introduction to CHANCES for families, but social media and staff are an increasing point of contact (**Table 11**).

Table 7 Family Income

Income	N	Percentage of respondents
Less than 20,000	85	28.3
20,000 – 30,000	44	14.7
30,000 – 40,000	29	9.7
40,000 – 50,000	14	4.7
50,000 – 75,000	30	10
75,000 – 100,000	35	11.7
Chose not to answer	63	21

Table 8 Association with CHANCES programming

Participation (time)	N	Percentage of respondents
Less than 6 months	49	16
6-12 months	91	29.5
1- 2 years	65	21
2- 3 years	22	7
More than 3 years	81	26.5

Table 9 Number of programs used in past 6 months

Number of programs	N	Percentage of respondents
At least one program	205	66
Two programs	50	16
Three or Four programs	27	9
Five Programs	28	9

Total Respondents = 310

Note: Respondents had the opportunity to check all that apply

II. ENHANCED QUALITY

A Community of Learners

A “community of learners” approach emphasizes active engagement and respectful knowledge building to achieve common goals and extends beyond professionals to the children and parents who are served by the program. Researchers Dr. Carl Corter and Dr. Jan Pelletier of the Dr. Eric Jackman Institute of Child Study at the University of Toronto designed the quality research in consultation with CHANCES staff.

The School of Early Childhood Education at George Brown College and other ECE experts have participated with staff to create an ongoing Professional Learning Agenda across CHANCES’ program areas, building on the PEI Early

Table 10 Programs/activities used in the past 6 months

Number of Programs	N	Percentage of respondents
Smart Start (Early years centre)	56	18.0
Smart Play (before & after school program)	32	10.3
Best Start (in-home visiting program)	203	65.1
Drop-in-Play (parent and child play group)	57	8.3
Strong Start (parent and child play group)	31	9.9
Parenting Sessions/Workshops	32	10.3
Family Parties (Christmas, Halloween, summer picnics)	39	12.5
Special Delivery (prenatal classes)	*	*
Building Incredible Babies (BIB) (postnatal program)	*	*
Community Kitchens	*	*
Welcome Here! (Program for families new to Canada)	*	*
Health Clinic/Nurse Practitioner	23	7.4
One-on-one support	*	*

Total Items Selected = 517

* denotes too few to report

Note: Respondents had the opportunity to check all that apply

Table 11 How did you hear about CHANCES programs?

	N	Percentage of respondents
Word Of Mouth	99	31.7
Public Health Nursing	182	58.3
School	20	6.4
Child & Family Services	18	5.8
CHANCES Brochure	56	17.9
Provincial Childcare Registry	*	*
Email	*	*
Facebook	28	8.9
CHANCES Website	23	7.3
CHANCES Staff	40	12.8
Other Community Agencies:	*	*

Total Items Selected = 489

* denotes too few to report

Note: Respondents had the opportunity to check all that apply

Learning Framework. The agenda has included workshops on pedagogical documentation, organizing indoor and outdoor learning environments and early language development. Also the management team participated in specific sessions on pedagogical leadership and coaching techniques.

While created for CHANCES, the tools developed through the Community of Learners process are shared with PEI's Department of Education, Early Learning and Culture and provided to other jurisdictions upon request.

The tools include:

- » A database to collect how many families register for programs, what programs they use and how often they attend.
- » A Parent Survey, developed with the research expertise of the University of PEI School of Nursing, asks parents about CHANCES and its programs; how easy it is to access the various programs; how they and their children interact with staff; the appropriateness and quality of the programming; and if and how their association with CHANCES has improved their well-being.
- » A Program Observation Tool, developed by CHANCES educators and the Margaret and Wallace McCain Family Foundation, allows individual staff to reflect on practice indicators aligned with the PEI Early Learning Framework. The process includes staff self-reflection, peer review, supervision and support.

Reflections on quality: The Parent Survey 2016

In addition to administrative and demographic data, the Parent Survey 2016 assessed parent satisfaction with CHANCES programming. Over 95 per cent of respondents report feeling comfortable using CHANCES programs. Ninety per cent feel staff communicate effectively with them about their children and 80 per cent believe staff value their opinions. The majority (85 per cent) report that CHANCES staff work with them to meet their family needs, including supporting their parenting skills (85 per cent) and involvement (90 per cent). Parents also credit CHANCES programming with supporting their child's development. Over 85 per cent feel their child is developing the skills necessary to succeed in school.

Promoting quality

CHANCES educators have focused on improving the quality of early childhood education offered to children across all settings – Smart Start (Early Years Centres), Smart Play (before-

and after- school), Strong Start (drop-in play groups), Family Resource Programs and Best Start home visiting.

Program Observation Tool

The Program Observation Tool is a companion curriculum document to Prince Edward Island Early Learning Framework. The tool assists educators to describe and provide examples about the relationships, environments and experiences in their early childhood settings. The tool is intended to describe the key features of educator practices organized into indicators. Information is gathered from:

- » Observations of the physical environment, available pedagogical documentation, and interactions between and among educators, children and families.
- » Conversations with children, educators and families.

In Smart Start Early Years Centres, the Centre Directors work in pairs using the Program Observation Tool to review classrooms in centres where they do not work. They note whether each indicator is demonstrated, not demonstrated or if there was no opportunity to observe a particular practice. Examples are provided to illustrate how or how not the practice indicator was demonstrated.

Once the observation is completed the Centre Director and the educator team review and reflect on the information and develop an action plan for the upcoming year.

ECERS-3

The Early Childhood Environment Rating Scale, Third Edition (Harms, Clifford & Cryer, 2015) is a validated and reliable measure of program quality in early childhood education settings.

The scale consists of 35 items organized into 6 subscales:

- » **Space and furnishings** includes items such as indoor space furnishings for care and learning, room arrangement, lighting and ventilation, and space for privacy. It considers examples of child-related display, space and material for gross motor play.
- » **Personal care routines** includes items related to meals and snacks, health, toileting and safety practices.
- » **Language and literacy skills** in children are supported through a print-rich environment and high-quality conversations with adults and with other children.
- » **Learning activities** represent fine motor, art, music, blocks, dramatic play, nature and science, math, numeracy, diversity and use of technology.
- » **Interactions** relate to supervision of activities,

individualized teaching and learning, staff–child interaction, peer interaction and behaviour guidance.

- » **Program structure** includes adult supervision, transitions and waiting times, opportunities for free play and whole group activities.

CHANCES early years centres were assessed by the province prior to the Phase 1 research using an older version of the ECERS tool. The centres were assessed again in June 2016 by a trained outside evaluator. Given the revisions in the tool it is not possible to directly compare scores but trends can be noted.

- » The organization of the environment and the analysis of children’s learning in pedagogical documentation are improving during CHANCES Phase 2. Educators are ready to provide more analysis about the learning experiences they observe and describe.
- » Educators are becoming more intentional in how they respond to children’s thinking. The ECERS-3 and Program Observation Tool findings suggest that educators could seek opportunities to extend children’s engagement in learning experiences.
- » Attention should be paid to expanding the quantity and quality of literacy and math materials and experiences presented to children to ensure that there is ample representation of multi-modal literacies and multiple different categories present.
- » Educators can seek resources and representations that reflect the cultural backgrounds of all of the children who are attending CHANCES.
- » Improved outdoor environments promote dramatic and socio-emotional and literacy opportunities and additional equipment including mud kitchens, climbing structures and designated play spaces support the outdoor learning experiences which echo the indoor learning environments.

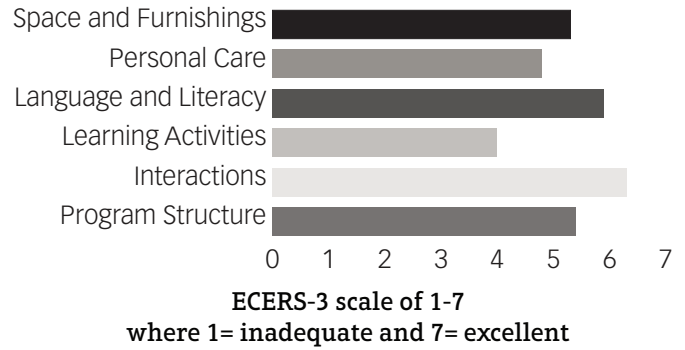
Figure 6 summarizes the results of the June 2016 ECER-3 evaluations in the five CHANCES early years centres.

III. ENHANCED ACCOUNTABILITY

Dr. WJ Montelpare collaborates with CHANCES and the government of PEI to investigate the impact of continued opportunities for ECE and family supports until entry to kindergarten. Through a secure data repository established at the University of PEI, the Department of Health has shared Ages and Stages data collected from parents during regular child immunization visits to Public Health Nurses. Public Health also

Figure 6

Average ECERS-3 ratings across 5 CHANCES early years centres (June 2016)



collects data using a newborn screen at birth. An additional database that is currently held by the Ministry of Education contains outcomes from the evaluations of children at five years of age, and is based on the Early Years Evaluation (EYE).

The goal is to assess outcomes for children who are identified as at-risk at birth and compare the impact on vulnerable and non-vulnerable children of their participation in Best Start and/or Smart Start programming. This makes it possible to investigate the extent to which programs like Best Start/ Smart Start influence the outcome measures of the Early Years Evaluation. The proposed work represents a critical first step to establishing the necessary infrastructure that will become fundamental to future studies in this area.

Montelpare and his team received de-identified Ages and Stages data from Public Health. They attempted to conduct a formal statistical evaluation of the enhanced services that are made available to children and their families through the Best Start and Smart Start program at CHANCES. However, the data were mostly completed by parents without Public Health Nurse involvement and are incomplete. Therefore it is not possible to use the data to consider the impact of Best Start or Smart Start.

Montelpare has established the initial infrastructure necessary for an integrated database that would monitor children’s developmental trajectories in PEI from birth into the school system. Such a database would be valuable in evaluating the impact of public investments in child and family programs and services prior to school entry and tracking children’s trajectories through the school system and into adult life.

Montelpare is working with colleagues at UPEI and New Brunswick Health Research Foundation to build on the investigation of the CHANCES cohort within provincial databases to create a Children’s Health Profile in New Brunswick and Prince Edward Island. The proposed project aims

to identify and evaluate selected administrative datasets from New Brunswick and Prince Edward Island to create two intra-provincial health profiles of 18-month-old children and likewise to establish the foundation for a birth cohort database in each province using existing datasets. The outcomes from this innovative research will yield important insights into children's health status and trajectories that can be used toward chronic disease prevention to reduce the needs for complex care later in life. The NB and PEI child health profiles and the future birth cohort databases will allow various stakeholders and knowledge users to monitor and report on child health over the long term, and to evaluate current practices and future health interventions to establish well-informed and effective primary prevention strategies. It will be possible to then link education data with health data when children enter school. Matching funds have been secured from the New Brunswick Health Research Foundation and the Margaret & Wallace McCain Family Foundation through the University of PEI.

Early Years Evaluation – Direct Assessment (EYE-DA)

Every child entering kindergarten on Prince Edward Island undergoes a standardized developmental assessment entitled the Early Years Evaluation – Direct Assessment (EYE-DA). This assessment provides important information across six key developmental domains.

Since 2009, the Early Years Evaluation -Teacher Assessment (EYE-TA) has been administered to successive cohorts of CHANCES Smart Start graduates by their kindergarten teachers. CHANCES has sought approval for the results of the EYE-TA data on CHANCES children to be compared with EYE-DA data collected on all children entering kindergarten. In the interim the April 2016 CHANCES analysis of EYE-DA findings concluded that:

- » Children who participate in the CHANCES program tend to have higher levels of vulnerability than the general population. These findings confirm that children who can benefit most from the CHANCES program are being identified and enrolled.
- » Program attendance had a positive impact on children's development over and above the expected development for children in this age group who did not attend an early years program.

- » A positive impact from attending CHANCES early years programs has been consistently observed over the five-year period of the project. The impact is calculated by subtracting the maturity effect, which is the growth we would expect if the child had not attended the program, from the program effect, which is the actual growth achieved by attending the program. The positive impact on all domains in 2014-2015 suggests that it may be attributable to the increase in the quality of programming. Note that the Early Years Evaluation tool has a ceiling — meaning some children may be exceeding the ceiling therefore the reported impact is likely conservative.

THE COST OF ENHANCED ACCESS

Early Years Centres receive an operating subsidy from government, which covers approximately 40 per cent of costs. The balance is recouped from parent fees. Low-income working families may receive a subsidy to help cover the parent portion of costs. Parents participating in Best Start home visiting typically cycle in and out of low wage, seasonal and precarious work and/or are on income assistance. As a result their children never attend a program, or cycle in and out of preschool in tandem with their parents' employment.

With funding from the Margaret and Wallace McCain Family Foundation, CHANCES offsets the parent portion of program costs when the parent is not eligible for any other form of government assistance. The purpose is to estimate the additional cost of uninterrupted preschool attendance for children living in at-risk environments.

Table 10 summarizes actual and projected enrolment and actual and projected program costs. The total participants in the program funded by MWMFF are projected at 110. For the period April 2012 – March 2019 the total cost to offset parent fees for CHANCES Phase 2 participants is \$317,000 or approximately \$2882 for each Phase 2 child attending 15 hours per week.

An administration fee covers financial management of the program and a small portion of overhead costs.

VI: MOVING FORWARD

The Framework on Early Learning and Child Care and PEI's share of new federal funding for early learning provides an opportunity to review progress and set new goals as part of PEI's Preschool Excellence Initiative. Attention is needed to enhance early years program access and quality and to promote accountability.

Table 10 Phase 2 program costs, actual and projected, MWMFF and government funding

Year	Actual				Projected			Total
	01-Apr-12	01-Apr-13	01-Apr-14	01-Apr-15	01-Apr-16	01-Apr-17	01-Apr-18	
	31-Mar-13	31-Mar-14	31-Mar-15	31-Mar-16	31-Mar-17	31-Mar-18	31-Mar-19	
Parent fees funded by MWMFF	\$49,000	\$81,000	\$101,000	\$71,000	\$ 50,000	\$ 44,000	\$15,000	\$317,000
# Phase 2 children receiving MWMFF funding/year	34	52	68	46	28	16	12	
# days funded by MWMFF	1,441	2,688	3,366	2,607	1768	1556	528	
# Phase 2 children funded by MWMFF & gov't fee subsidy	19	37	38	23				
# Phase 2 children receiving gov't fee subsidy only	33	20	20	23				

1. Enhanced access

Population health outcomes are associated with majority attendance in early childhood programs. Lack of spaces, parent fees and restricted eligibility to fee subsidies prevent families from enrolling their children. PEI already makes a considerable investment in three years of home visiting for vulnerable families. Once graduating Best Start home visiting at age 3, many of these children will attend sporadically or not participate in a preschool program at all until kindergarten — a 2-year gap during the most formative of years of development.

CHANCES Phase 2 evaluation suggests a modest investment would support the children's continued participation in preschool programming.

Modifying fee subsidy eligibility would allow more families to enroll their children in early years programming. This could be accomplished by:

- » Raising the threshold on fee subsidy eligibility to allow modest and middle-income families to participate.
- » Reducing the parental contribution, including the option of no contribution for families with very low incomes or for those receiving income assistance.
- » Delinking fee subsidy eligibility from parental labour force participation to allow the children of parents engaged in seasonal and precarious work to participate fully.

PEI's Preschool initiative is now six years old. Existing early years centres should be firmly established and meet service and quality expectations. This is an opportune time for PEI to review its progress by:

- » Evaluating the status of existing Early Years Centres to ensure service and quality standards are being met.

- » Explore opportunities to establish new Early Years Centres among new applicants, family resource programs, Aboriginal Head Start programs, etc.
- » Explore opportunities for CAPC Family Resource Centres to offer intentional early education programs and encourage regular participation at least three times per week.

2. Enhance quality

Child development is supported by quality early years programming. The Early Learning Framework and on going professional learning are the tools used by Early Years Centres. Quality is also dependent on pedagogical leadership. PEI understood this when it required degree level training for kindergarten educators. A similar approach is now needed for leaders in Early Years Centres. It is time to raise the bar on quality by:

- » Establishing an ECE degree as a requirement for pedagogical leaders in early years centres.
- » Linking quality assessment outcomes to early years program expectations.
- » Sharing the Program Observation Tool as part of a professional learning agenda.

3. Enhance accountability

CHANCES is working with researchers at UPEI and in the PEI government to create a data repository with the potential to link data sets already collected by government departments and community agencies. Similar efforts in other jurisdictions show the value of these repositories to inform policy development and effective practices.

- » Recommend a province-wide repository for the collection of existing data sets for research, policy and practice development and accountability purposes.

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