
The Early Years Study Three Years Later



From Early Child Development to Human Development:
Enabling Communities

August 2002

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PREFACE

Since the release of the *Early Years Study* (April 1999), we have been asked for our comments about the response of the Government of Ontario to the recommendations in the report.

It is now a little more than four years since we came together with the reference group to prepare the *Early Years Study*. Since then there have been a number of new developments in our understanding of the importance of early childhood and the effects on health, learning and behaviour in the later stages of development.

This report has been prepared by the co-chairs, Hon. Margaret McCain and J. Fraser Mustard with the help of the reference group. Jane Bertrand provided staff support. Doug Willms provided analysis of the National Longitudinal Survey of Children and Youth data.

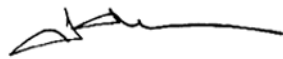
We have discussed the new knowledge and developments and the failure of the Ontario government to adequately act on the recommendations of the *Early Years Study*. The contents of the report in respect to the new knowledge and the government's response are the responsibility of the two co-chairs and Jane Bertrand.

This report is dedicated to all the people we met with in Ontario during the preparation of the *Early Years Study* and subsequently after the release of that study. Despite the response of the government, most have been trying to find ways to implement the key recommendations that are relevant to their communities.

The theme of this report is "From Early Child Development to Human Development: Enabling Communities".



Hon. Margaret Norrie McCain



J. Fraser Mustard

EXECUTIVE SUMMARY

This report is an assessment of the Ontario government's response to the *Early Years Study* requested by the former Premier of Ontario, Michael Harris.

The report consists of seven sections:

1. **Introduction**
2. **A review of international initiatives in early child development [ECD]**
3. **The September 11, 2000 communiqué of the Government of Canada on early child development**
4. **The new scientific evidence**
5. **The status of Ontario's preschool children**
6. **The Government of Ontario's response to the recommendations in the *Early Years Study***
7. **Considerations for the Government of Ontario**

The main conclusion from this review is that a number of initiatives in different parts of the world recognize that ECD (early child development) is a key step in human development trajectories that are set in the early years and tend to carry on through education into adult life in respect to health, learning and behaviour. Thus, the theme of this document is "From Early Child Development to Human Development: Enabling Communities".

The social and economic importance of this theme is gaining recognition in many jurisdictions and by groups. Heckman, the 2000 winner of the Nobel Prize in economics, has recently stated clearly the fundamental social and economic importance of the early years:

"The best evidence suggests that learning begets learning. Early investments in learning are effective. Much of the recent emphasis on lower tuition costs for college students is misplaced when the value of early preschool interventions is carefully examined. In the long run, significant improvements in the skill levels of American workers, especially workers not attending college, are unlikely without substantial improvements in the arrangements that foster early learning. We cannot afford to postpone investing in children until they become adults, nor can we wait until they reach school age - a time when it may be too late to intervene. Learning is a dynamic process and is most effective when it begins at a young age and continues through adulthood. The role of the family is crucial to the formation of learning skills, and government interventions at an early age that mend the harm done by dysfunctional families have proven to be highly effective.

The returns to human capital investments are greatest for the young for two reasons: (a) younger persons have a longer horizon over which to recoup the fruits of their investments and (b) skill begets skill. Skill remediation programs for adults with severe educational disadvantages are much less efficient compared to early intervention programs. So are training programs for more mature displaced workers. The available evidence clearly suggests that adults past a certain age and below a certain

*skill level obtain poor returns to skill investment. A reallocation of funds from investment in the old and unskilled to the young and more trainable for whom a human capital strategy is more effective is likely to produce more favorable outcomes in the long run. At certain levels of investment, marginal returns are highest for the young.*⁵²

In this report we set out why Early Years Centres are not the early child development and parenting centres available to all families with young children which were recommended in the *Early Years Study*. We have analyzed the number of vulnerable children in the 0 to 6 age group. Of the approximate 900,000 children, more than 200,000 are vulnerable. More than 20% are vulnerable when they enter the school system. We know that with effective ECD and parenting programs, the number of vulnerable children in the preschool population can be reduced (see **Appendix 1**).

We set out a challenge to the Government of Ontario to now act on what was set out in the *Early Years Study* and build on the capacity to start to help put in place early child development and parenting centres. The actions our society and government can take include the following:

1. Learn how to better integrate ECD and education (the concept of a human development initiative).
2. Establish a legislative and funding framework to support the building of ECD and parenting centres as part of a broader human development initiative. Do not place ECD, a component of human development, in ministries or municipal service programs concerned with health care and welfare programs.
3. Build on and involve the community in establishing the network of ECD and parenting centres available for all families with young children (communities have demonstrated some capacity to do this). Encourage and support schools to be part of this and embrace in the schools the principles of human development through programs such as Roots of Empathy (see **Appendix 2**).
4. Examine how other jurisdictions have overcome the silo structures of the public service and put in place more integration.
5. Establish a network of bases involving postsecondary education institutions (such as HELP in B.C.) to promote and help apply the new knowledge in the districts or regions in which they are located. Provide a coordinated EDI initiative to assess ECD based on the outcome measures, and help communities to develop strategies to improve ECD in their districts.
6. Encourage postsecondary institutions to establish initiatives that include ECD in their health, education and social science programs within a human development context.
7. What should the government organization be?
 - The equivalent of a Ministry of Human Development that includes all the institutional structure from conception to postsecondary

Executive Summary

education that influences human
development

8. Themes for a government initiative in
ECD could be:
 - From Early Child Development to
Human Development
 - Enabling Communities

I INTRODUCTION

Since the release of the *Early Years Study* in April 1999¹ awareness of the importance of ECD (early child development) in relation to human development has continued to increase in the developed and developing world. The recent book from the World Bank² emphasizes the importance of tier one of human development (ECD) for human development. The Dutch economist, Jacques van der Gaag in his work for the World Bank³ has emphasized that early child development sets the foundation for learning, behaviour and health, and helps build social capital and equality, all of which are crucial for prosperity and reducing poverty in the developed and developing world.

The theme of this report, looking at developments in Ontario since the release of the *Early Years Study* (April 1999) a little more than three years ago is, “From Early Child Development to Human Development: Enabling Communities”.

The *Early Years Study*, commissioned and endorsed by Premier Harris, has had considerable influence in Canada and other regions of the world. In looking at what other provinces, countries, and institutions are doing, we have some measure of how well the Government of Ontario has understood and been able to implement the recommendations of the *Early Years Study*. Three years after the release of the report, the Reference Group met to consider progress by the Government of Ontario on the subject that Premier Harris considered important.

We begin with a brief outline of recent international developments and the September 11, 2000 communiqué⁴ of the provincial governments and the federal Government of Canada.

II INTERNATIONAL INITIATIVES IN EARLY CHILD DEVELOPMENT

World Bank

The World Bank has just released a publication based on their April 2000 meeting in Washington entitled, *From Early Child Development to Human Development*.

In this report, Iglesias (President of the Inter-American Development Bank) and D. Shalala (former Secretary U.S. Department of Health and Human Services), state,⁵

“Much has been learned about how to help very young children grow to be smart and healthy. The important step, however, is the next step -- to engage families, communities, universities, religious and other organizations, as well as government, to invest in the first and most lasting hope of the new century, the world’s children.”

The Ontario *Early Years Study* was distributed to the participants from different regions of the world attending this meeting and is referenced in the recent World Bank publication. Minister Marland, Minister Responsible for Children in Ontario at the time of the meeting, took part in this meeting.

OECD

The OECD has recently issued several reports on human development and the role of early child development (*The Well-Being of Nations: The Role of Human and Social Capital*, 2000⁶, and *Starting Strong*, 2001⁷). In the *Starting Strong* report, they state:⁸

“As a result of recent demographic, economic, and social developments, childhoods are changing in OECD countries. An increasing proportion

of children are growing up in lone-parent households, and many hail from linguistically, culturally, and ethnically diverse families. In some cases, they are living in poverty and deprivation, at risk of social exclusion. Perhaps the most significant change in modern childhoods is that children no longer spend the first five years of their lives at home with their mothers. Increasingly, they are living a greater part of their early childhood in out-of-home settings, and often, in multiple settings with multiple caregivers. If these ECEC (early childhood education and care) experiences are of sufficient quality, they will help strengthen children’s dispositions to be lifelong learners and to take an active part in society. Governments need to acknowledge these societal changes and seek to better understand the implications for children, families, and society. A more contextually-sensitive approach will help policy and provision respond in a holistic and integrated manner to the needs of children and families.”

In these reports, the OECD emphasized the following key points for governments and their societies to consider in building a strong base for early child development and future high quality human capital.

- Support for families with young children
- Support for voluntary initiatives
- Government decision-making process
- Empowerment of citizens and proximity of government to people

Figures 1 and 2 summarize a comparison of spending on ECD (age 3 to compulsory school) in OECD countries. Public sector spending in major developed countries is from about .1% of GDP to .8% of GDP. Canada in 1998 was at the low end of the group of countries. For countries for which data were available, fees cover from about 11% to more than 60% of the costs. These data are not a perfect comparison because the diverse initiatives in many countries involving different levels of government and the private sector make it difficult to create a common base.

UNICEF

UNICEF, in its recent report (December 2001),⁹ has also emphasized the need for integrating programs for early child development at the community level. This is a change from many earlier UNICEF initiatives when the emphasis was on nutrition, clean water and immunization, but not on integration. They now include stimulation or nurturing as important and the need to integrate these initiatives at the community level.

British Government: Sure Start¹⁰

In this initiative of the British government, they set out to:

“Improve the health and well being of families and children before and from birth so children are ready to flourish when they go to school.”

The target is 500 programs by 2004. The investment in the two first years (1999-2000 to 2001-2002) was £452 million to be increased by a further £580 million over the next two

years. Thus, the government expenditure on this new initiative is quite significant (about £250 million/year or about CAD\$600 million). They already spend about 0.4% of their GDP⁷ on preschool programs (largely the age 3 to school group). It appears they will be providing increased support for the 0 to 3 age group. One of their key objectives is, “to achieve for children age 0 to 3 in the Sure Start areas, a reduction of five percentage points, the number of children with special and language problems requiring specialist education by age 4.”

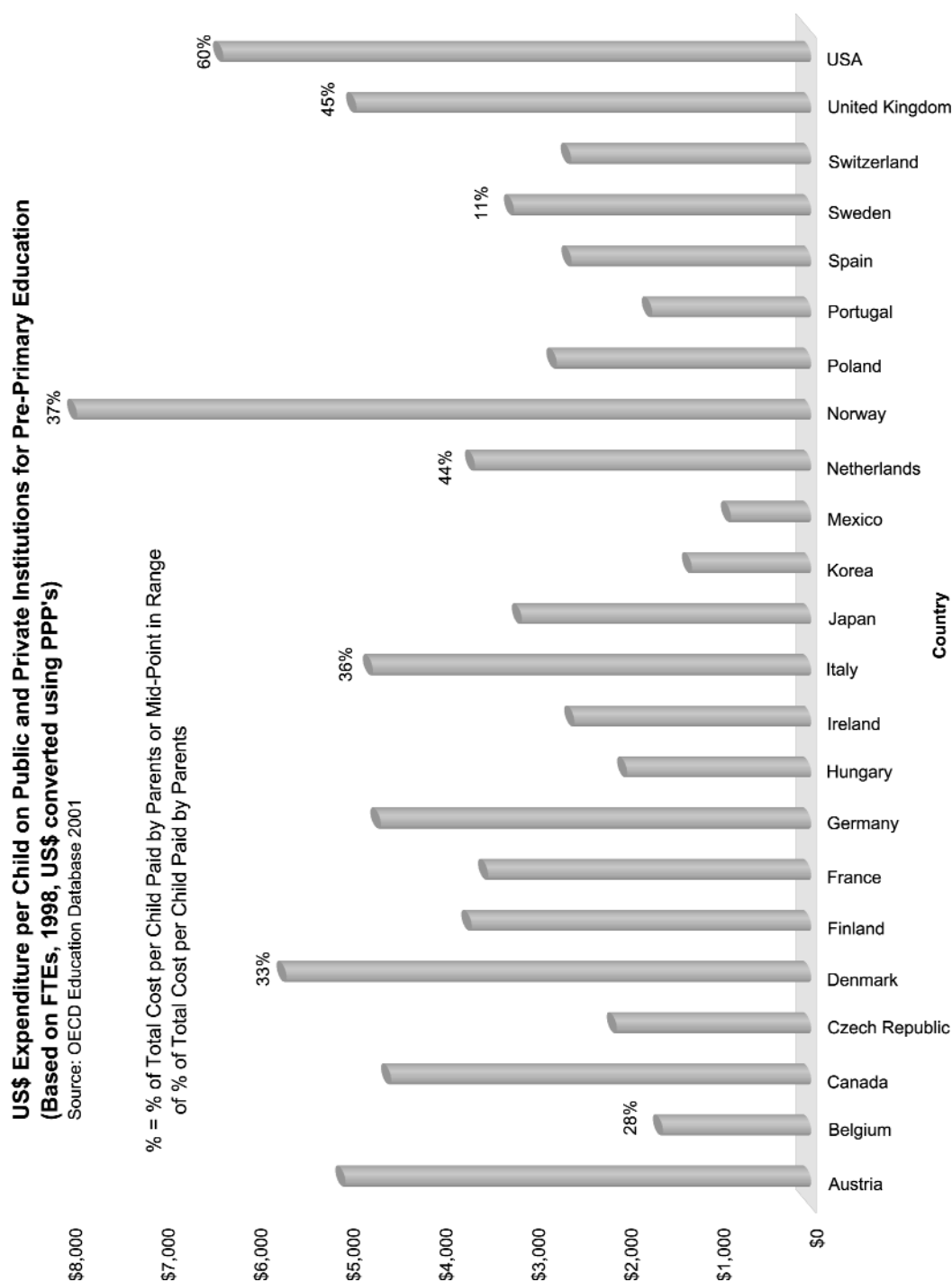
In putting the new initiative in place, the government recognized they had to better integrate the understanding and initiatives in various departments. Initially they asked Treasury Board to head this initiative but as understanding improved, they had the Minister of Public Health chair the group with Treasury backing. They had a number of reviews involving individuals from a number of ministries particularly Education and Health as well as external consultants.

The key conclusions from the review were:

- The earliest years in life are the most important for child development, and that very early development is much more vulnerable to environmental influences than had previously been realized;
- Multiple disadvantage for young children was a severe and growing problem, with such disadvantage greatly enhancing the chances of social exclusion later in life;

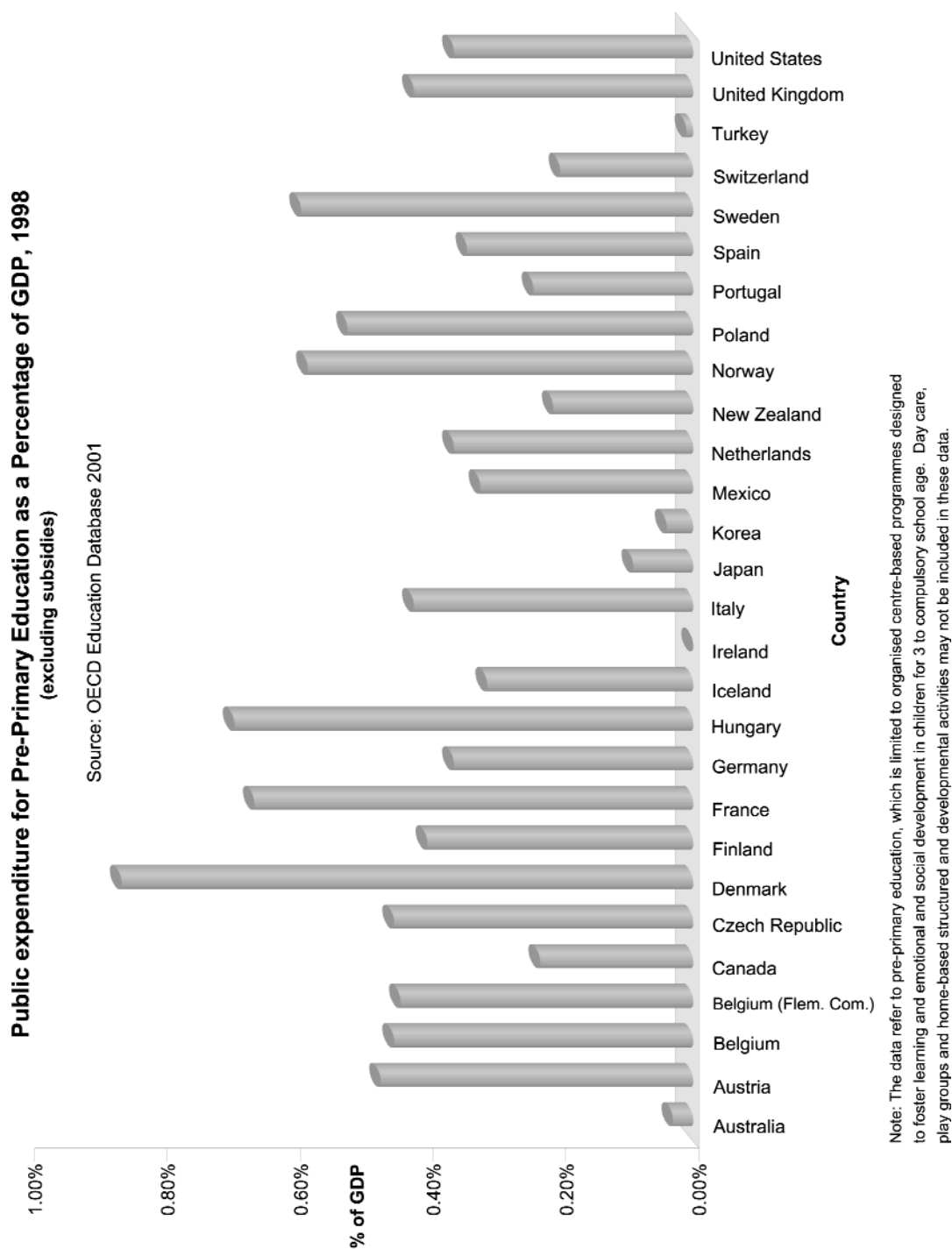
FIGURE 1 - US\$ EXPENDITURE PER CHILD ON PUBLIC AND PRIVATE INSTITUTIONS FOR PRE-PRIMARY EDUCATION (BASED ON FTE'S, 1998, US\$ CONVERTED USING PPP'S)

Source: OECD Education Database 2001



**FIGURE 2 - PUBLIC EXPENDITURE FOR PRE-PRIMARY EDUCATION AS A PERCENTAGE OF GDP, 1998
(EXCLUDING SUBSIDIES)**

Source: OECD Education Database 2001



II International Initiatives in Early Child Development

- The quality of programs for young children and their families varied enormously across localities and districts, with uncoordinated and patchy services being the norm in many areas. Programs were particularly dislocated for the under fours - an age group who tended to get missed out from other government programs;
- The provision of a comprehensive community-based program of early intervention and family support which built on existing services could have positive and persistent effects, not only on child and family development but also help break the cycle of social exclusion and lead to significant long-term gain to the Exchequer.

On the last point the Review established that while there was no single blueprint for the ideal set of effective early interventions, they should share the following characteristics:

- Two generations: involve parents as well as children;
- Non-stigmatizing: avoid labeling “problem families”;
- Multifaceted: target a number of factors not just, for example, education or health or “parenting”;
- Persistent: last long enough to make a real difference;
- Locally driven: based on consultation and involvement of parents and local communities; and
- Culturally appropriate and sensitive to the needs of children and parents.

In preparing this ECD initiative, they recognized its effects on health and learning. They therefore set in place the following organizational structure.

To ensure that the program continued to reflect the cross-cutting nature of the initiative, it was decided that David Blunkett, the Secretary of State for Education and Employment should speak for the program in Cabinet, but that the Minister for Public Health should continue to have day-to-day responsibility for the program and to chair the steering group of departmental Ministers and senior officials overseeing the development of the program. The management group of junior officials from various departments as well as the Prime Minister’s office, the Social Exclusion Unit, local government and the voluntary sector continues to be chaired by Treasury Board. The Head of the Sure Start unit will be an additional accounting officer within the DfEE (Department for Education and Employment), to make clear that the program is not just another “normal” DfEE program.

In order to emphasize the crosscutting nature of the program, one particularly interesting decision involves a minor but fascinating constitutional innovation:

When questions are asked in the House of Commons about Sure Start, the questions will be tabled during education question time but the Minister of Public Health speaking as a Health Minister will give the answers. This is one of the first public policies to recognize that ECD affects health, learning and behaviour.

Thus, the U.K. acknowledges the importance of ECD in health and learning and has taken steps to modify the government's structure to support this initiative.

United States

The United States has no comprehensive ECD policy but public awareness campaigns, strong advocacy and extensive research have secured a place for ECD on the public agenda. Recent developments including an increase in political commitment and investment at both the federal and state levels are increasing the provision of ECD programs. Several initiatives promote coordination among state and local governments, nonprofit organizations, businesses and local communities. Professional organizations and many state-wide initiatives have addressed quality and staffing issues.

Examples of recent developments include the following:

Head Start^{11,12} is a compensatory preschool program that began in 1965 targeted to ameliorate the impact of social and economic disadvantage. Program activities are comprehensive and involve preschool children, family members and other caregivers. Federal funds are allocated to state governments and then applied to programs. The present federal allocation is now US\$6.5 billion and the average annual cost per child in the program (0 to 6) is US\$6600. Approximately one million (about 4% of all preschool children) targeted preschool children now participate in Head Start programs.

When first started, it was mainly applied to children three years of age or older. During

the last decade, it has been extended to a small number of children in the 0 to 3 age group. Today the program operates in more than 664 communities serving approximately 55,000 children.

Overall, the findings from the Head Start programs (mainly observational research) show benefits for children who participate. Programs that begin early in life with quality caregiving have longer term and bigger effects. The most recent conclusions are that the earlier the start, the better the gain. Programs that start at three years have less effect than those that start earlier.

California Proposition 10¹³ is the result of a very strong group of citizens in that state that promoted the importance of ECD. In the 1998 state elections, they set out a proposition to collect a 50 cent tax on the sale of each package of cigarettes. The income from the tobacco tax is distributed to each of the local county commissions to build ECD programs that incorporate and expand existing programs. The allocation is administered by local commissions (made up of local community members) within each of the 58 counties. The annual income is about US\$700 to US\$800 million which represents about US\$23/person in California. Eighty percent of this is allocated to the counties and twenty percent is used for research, state-wide infrastructure and administration costs. This is in addition to other support in California and the federal government initiatives such as the Head Start program.

Several points stand out from this brief review. First of all, none of the diverse societies refer to the ECD programs as daycare, in part

II International Initiatives in Early Child Development

because daycare, in the minds of many older adults, gets interpreted as babysitting rather than ECD but the centres do provide nonparental care. Secondly, there is recognition that ECD, has a major effect on the next stages of development and eventually, competence, and coping skills as an adult.

III CANADIAN EARLY CHILD DEVELOPMENT COMMUNIQUE

In Canada, a significant development was the announcement by the First Ministers on September 11, 2000, of a federal/provincial/territorial agreement for ECD.⁴

In the announcement they,

“affirm their commitment to the well-being of children by setting out their vision of early child development as an investment in the future of Canada. Canada’s future social vitality and economic prosperity depend on the opportunities that are provided to children today.”

“The early years of life are critical in the development and future well-being of the child, establishing the foundation for competence and coping skills that will affect learning, behaviour and health. Children thrive within families and communities that can meet their physical and developmental needs and can provide security, nurturing, respect and love. New evidence has shown that development from the prenatal period to age six is rapid and dramatic and shapes long-term outcomes.”

Four Areas for Action

To meet these objectives, the First Ministers agreed on four key areas for action. They stated, “Governments’ efforts within this framework will focus on any or all of these areas. This will build on the priority that governments have placed on early childhood development and the investments that governments have already made.” (Each province or territory can select specific areas for implementation.)

1. Promote Healthy Pregnancy, Birth, and Infancy

“Prenatal, birth, and infancy experiences have a profound effect on the health and well-being of infants and young children, and contribute to continuing good health. This priority addresses needs related to the prenatal, birth and infancy periods and includes supports for pregnant women, new parents, infants and care providers. Possible examples are prenatal programs and information, and infant screening programs.”

2. Improve Parenting and Family Supports

“Parents and families have the primary responsibility for the care of their children. This priority addresses the needs related to positive parenting and includes supports for parents and caregivers. Possible examples are family resource centres, parent information and home visiting.”

3. Strengthen Early Childhood Development, Learning and Care

“Quality early child development, learning and care have been shown to promote physical, language and motor skills; and social, emotional and cognitive development. This priority includes supports that promote healthy development, provide opportunities for interaction and play, help prepare children for school and respond to the diverse and changing needs of families. Possible examples include preschools, child care and targeted developmental programs for young children.”

4. Strengthen Community Supports

“Communities make key contributions to the well-being of children through formal and informal networks. This priority includes supports to strengthen community capacity to

meet the needs of children and families from a healthy community perspective. Possible examples include supports for community-based planning and service integration.”

They also outlined two key components for the development of these initiatives in respect to funding and public accountability.

Funding

“First Ministers agree that ensuring effective early childhood development is a long-term commitment to our children’s future. First Ministers agree that investments for early childhood development should be incremental, predictable and sustained over the long term. First Ministers are committed to helping all sectors of society support children in their early years and to making incremental investments in this area.”

Under this agreement, Ontario received \$114 million in 2001, rising to \$187 million in 2003.

Pregnancy / Parental Leave and Benefits

Effective January 1, 2001, pregnancy and parental leave benefits increased from six months to one year. The benefits are administered through the federal Employment Insurance program. Pregnancy and parental leave benefits remain tied to employment status and are available only when parents are in the paid labour force prior to the birth or adoption of a child.

The benefits provide about 50% of a parent’s income (up to a maximum of about \$400/week). The eligibility requirements for

Employment Insurance eliminate more than 60% of parents with newborn or adopted children.¹ The employer can add to the income. Nevertheless, the introduction of pregnancy/parental leave benefit for up to a one year period is significant. It establishes a benchmark of a one year leave. Perhaps most surprising, is the relatively positive (or at least not negative) response from the private sector.

The province of Ontario revised the Employment Standards Act to be consistent with the changes in the federal benefits.

IV THE SCIENTIFIC EVIDENCE

Since the report was released evidence mounts that reinforces the conclusions about experience-based brain development in the early years and the effects on health, learning, and behaviour throughout life. New evidence from neurobiology, animal studies, epidemiological and longitudinal studies of populations, intervention studies, and observational studies reaffirms that experience-based brain development in the early years of life, including the in utero period, affects learning, behaviour, and physical and mental health throughout life. This is summarized in **Table I**. The remarkable consistency in the findings from these studies strengthens the conclusions.

Coping With Challenges

Further studies in the biological fields of neuroscience, epidemiology, and longitudinal studies have shown the relationship between what has been called the stress pathway and behaviour, physical and mental health, anxiety, substance abuse, and other mental and behaviour characteristics in later life.^{2,14,15,16,17} A key conclusion from the new knowledge is that the regulatory control of the hypothalamus-pituitary-adrenal gland (HPA) pathway and linkage to other pathways in the brain (e.g. serotonin and the frontal brain) is influenced by events during the prenatal period and in the early years of life and can set a

TABLE I - SUMMARY OF RELATIONSHIP BETWEEN EXPERIENCE-BASED BRAIN DEVELOPMENT IN EARLY LIFE AND OUTCOMES IN LATER LIFE IN RESPECT TO HEALTH, LEARNING AND BEHAVIOUR

CATEGORY	OUTCOMES LATER IN LIFE
A. Health Physical Mental	Coronary heart disease, blood pressure Type II diabetes, immune pathways (host defense), obesity Depression, suicide
B. Learning	Level of Literacy Level of Numeracy Level of Academic Achievement Level of IQ
C. Behaviour	Anti-social Violence Substance Abuse Alcohol Abuse Smoking

control in respect to the stress response for life that can be good or bad depending on one's circumstances. Because of the effect of this pathway on the hippocampus and on the frontal brain, it influences memory, behaviour and cognition. It also has a major effect on the immune system and the body's overall defense pathways.^{18,19} The response and control of the HPA pathway to the life course has obvious effects on body systems. McEwen refers to this system's response to stress as the allostatic load.¹⁹ Stress can be caused by external factors or by internal factors such as disease.

Adults subject to physical or sexual abuse, or neglect during the early sensitive period of brain development show escalation of hormones such as cortisol and ACTH in response to stress and a slow return to resting levels in contrast to adults with little or no abuse in childhood.²⁰ It is likely that because of these hormones and their effect and the cortico-releasing hormone and other pathways in the brain, some subjects who experience early childhood neglect or abuse show an increased risk in adult life for mental health problems such as depression, antisocial behaviour including violence, drug and alcohol abuse and learning difficulties.^{21,22,23} It is estimated that 10% or more of the population have experienced significant, repeated physical or sexual abuse or neglect in the early years.²⁴

Secure attachment buffers the cortisol response to events in young children.²⁵ When children participate in childcare settings, the cortisol rise throughout the day is higher than it is for children who are cared for by parents at home. For the majority in good quality settings, the difference is minimal and is likely to support children's successful development in dealing

with social and cognitive challenges. However, Megan Gunnar and her colleagues^{26,27} have reported disturbing findings that indicate children who are angry and aggressive and placed in poor quality settings exhibit a much sharper rise in their cortisol levels.

Early Language Development

The evidence concerning the development of sensing pathways, language, and cognition show a similar pattern of sensitivity in relation to the early years.^{28,29,30,31,32} The brain is most plastic in the early years and for the sensing pathways such as vision, touch, smell, and hearing, this is most dynamic during the first years of life. For language, which begins early, the development of the sensing pathways is obviously important. The acquisition of language skills is influenced by the sensory input to the brain.

Differences in language development can be detected in the first years of life and by 24 months, differences in vocabulary words can be detected among children from different social classes.^{29,30,31} This development is strongly related to communicative words spoken to the child during the early period of life. This period of development has a significant effect on later language development and literacy and for males, is related to anti-social behaviour as teenagers.³³ It also appears to be related to IQ, which is influenced by the effects of the caregiving environment on experience-based brain development in the early years, particularly the first year.³⁴

Supportive Early Environments

Individual and population longitudinal, intervention and observational studies continue to report findings that are consistent with the biological studies and studies reviewed for the *Early Years Study* and the World Bank report.^{2,12,35,36} The quality of care (parental and nonparental) has the strongest influence on early development. Early childhood programs are most effective when they support parents' active participation in their children's early learning and development as well as provide regular, consistent opportunities for guided interactions and play with other children.

■ Early Head Start

The Early Head Start initiative in the United States is intended to enhance children's early development and health, strengthen family and community partnerships and support staff working with low income families with pregnant women, infants or toddlers.^{11,12} The Early Head Start targeted program began in 1995 and operates in 664 communities, serving 55,000 children. Seventeen of the programs participated in a randomized controlled trial evaluation. Program approaches included centre-based care, home-based care and mixed options. Overall, the investigators found significant differences on a number of the measures. Early Head Start children scored significantly higher than control children on cognitive measures, language development and several aspects of social emotional development. Early Head Start parents were observed to be more emotionally supportive and provide greater support language and learning than control group parents.

Three specific findings from this study support the conclusions of the *Early Years Study*:

- Impacts on children by age three years were associated with improved parenting when children were two years old. Enhanced parenting capacity supports children's development.
- Programs that are both adult- and child-focused are more likely to improve child development outcomes than programs that focus primarily on parents or on children. The investigators recommend that the Early Head Start centre-based activities should increase attention to supporting parents and drawing them into daily interactions with the programs.
- The strongest impacts were achieved with children whose families enrolled earlier. Programs that enroll children of families as early as possible (preferably before birth) have a more significant effect on ECD outcomes.

■ NICHD (National Institute of Child Health and Human Development) Study

The National Institute of Child Health and Human Development (NICHD) Study of Early Child Care is a comprehensive longitudinal study, initiated by NICHD in 1989, to consider questions about the relationship between early childhood experiences and child and youth developmental outcomes.³⁵ The study included 1,364 families from varied ethnic and socioeconomic backgrounds, living in 10 locations in U.S. sites. Families were selected using a conditional random sampling method at the time of their children's birth. Parents selected the type and timing of child

care for their own children (not a random placement) - and child care placements include care by other family members (not mother), in-home, family child care, and centre-based care. The research team observed settings at regular intervals (6, 15, 24, 36, and 54 months) to assess characteristics of child care - including age of entry into care, quantity of care, quality of care, provider's education and training, group size, safety and health issues.

By age three, over 90% of the children had experienced regular nonparental care and over 50% were regularly spending over 30 hours/week in care. Two of the central conclusions^{35,36} to date confirm the conclusions of the *Early Years Study*:

- Family factors including parenting involvement were more consistent predictors of children's outcomes than any aspect of nonparental care. Parenting is a key element in shaping early experiences and early brain development.
- The quality of the nonparental care experiences does make a difference for outcomes. Settings that ensure basic health and safety measures, positive adult-child interactions and regular opportunities for guided play with other children predicted better language and social-emotional outcomes for children.

The NICHD findings echo those found by Megan Gunnar and her colleagues, as discussed earlier. Poor quality nonparental care settings combined with maternal insensitivity had negative effects for children's outcomes, particularly social-emotional measures that

reflect their ability to deal with stress and challenges.

■ British Cohort Longitudinal Studies

Further investigation of the British 1958 and 1970^{37,38} cohort studies and other studies show additional confirmation of the conclusions of the *Early Years Study* in relation to the early years of development and the trajectory of development in the school system. Child development measures in the 1970 cohort at 22 and 42 months had a significant correlation with later academic achievement. Studies from the 1970 British birth cohort longitudinal study found that preschool programs and parenting practices were important predictors of the mobility of children from all social classes out of disadvantage in the school system. These observations from the 1970 British longitudinal study are compatible with the American Abecedarian study showing clearly the effect of improvement in the early years on better outcomes in school and adult life.³⁹

Jefferis, Power and Hertzman⁴⁰ found, in their analysis of the 1958 cohort data, a clear relationship between birth weight and social class and cognitive development as measured at ages 7, 11 and 16. The largest effect was the effect of social class at birth (presumably the early years period) not the school period. This evidence is compatible with the influence of birth weight and ECD on cognitive development (in this case, mathematics) of children in the school system. The trajectory set in the preschool period is difficult to change when the children enter the school system.

Feinstein,³⁸ an economist, in his analysis of the British longitudinal cohort studies concluded,

“although this result is far from novel, the paper has shown that these early differences are not greatly off-set by the schooling system in the U.K. These early differences are shown to influence ultimate schooling outcomes, but the paper has also shown that when children enter school, the weakening position of children in less educated or lower SES families is, at least, halted”. This suggests that schooling institutions are capable of influencing developmental trajectories.

■ Canadian National Longitudinal Survey of Children and Youth

In examining the Canadian National Longitudinal Survey of Children and Youth (NLSCY) in respect to factors influencing children in all socioeconomic classes, reading to the child and social support are important.⁴¹ When these are of good quality, the socioeconomic gradient is reduced. This illustrates the importance of ECD and parenting centres for all families with young children.

The National Longitudinal Survey of Children and Youth (NLSCY) is a long-term survey designed to track child development and well-being from birth to early adulthood. It collects information about how a child's family, friends, activities, school and community affects their learning, behaviour and health. The survey is done in partnership by Statistics Canada and Human Resources Development Canada. The first cycle of the survey was conducted in 1994 - 95 with a representative sample of almost 23,000 children, from newborns to age 11. Data are collected every two years; new children (newborns to two years) are added to the sample, and the age span moves upward for each cycle.

Understanding the effect of experience-based brain development in the early years on subsequent human development in learning, behaviour, and health means that ECD and parenting programs should be placed in a public policy structure that embraces all sectors that relate to human development including education and health.

V STATUS OF ONTARIO'S CHILDREN

Measures of expression of brain development (verbal skills, literacy, behaviour etc.) in developed countries in the early years plotted against the SES (social economic status) of the families are a gradient. Doug Willms has combined measures of ECD from the NLSCY (National Longitudinal Survey of Children and Youth) into a “vulnerability index”.⁴¹ This shows that vulnerable children live in families in all socioeconomic sectors, not just in low income families (poverty). As stated in the *Early Years Study*, this information has major policy ramifications that point to the need for ECD and parenting programs available for all families with young children, not just those who have identified special needs or are considered at-risk by the usual criteria.

The Willms’ vulnerability index is intended to identify children whose chances of optimum human development (health, learning, and behaviour) are reduced even with a concerted and prolonged effort on their behalf when they enter the school system and in later in life. Children were classified as being vulnerable in the cognitive domain if they had a low score on a standardized test of motor and social development at ages 0 to 3, a low score on a test of receptive vocabulary at ages 4 to 5, or a low score on a standardized mathematics test at ages 6 to 11. Children were considered vulnerable in the behavioural domain if they were rated by their parents as having a difficult temperament at ages 0 or 1, or were classified as having any one of six behaviour disorders (i.e. anxiety, emotional disorder, hyperactivity, inattention, physical aggression, or indirect aggression) at ages 4 to 11. We examined the vulnerability measures for children 0 to 6 years in Ontario based on the 1994, 1996, and 1998 NLSCY data.

Figures 3, 4, 5, and 6 show vulnerable children in the 0 to 3 age group in three consecutive cycles of the NLSCY data for Ontario. The estimates of vulnerability for this age group are based on parent report measures. In 1994, 24% were rated as vulnerable and in 1998, the figure was about 22%, a decline of 2%. An interesting observation from the 1998 data is that the percentage of vulnerable children by these criteria is almost the same in all socioeconomic groups - the gradient is quite flat. Vulnerability for the 0 to 3 group declined in the rest of Canada by about 7% between 1994 and 1998. The declines for low SES children in Ontario were similar to those for the rest of Canada. However, in Ontario the percentage of vulnerable children in higher socioeconomic families increased. In 1998 there were about 505,000 children in the 0 to 3 age group in Ontario. Based on this analysis, over 110,000 of these children were vulnerable for the next stages in development.

Figures 7, 8, 9, and 10 show that the vulnerability gradient for children in the 4 to 6 age group against socioeconomic status has become steeper in Ontario between 1994 and 1998 with an overall decline of 5%. In the rest of Canada vulnerability for the 4 to 6 age group declined by nearly 8% during this period. Between 1996 and 1998 the prevalence of vulnerability among low socioeconomic status children increased, while it declined in the rest of Canada. In 1998, there were approximately 102,000 vulnerable children in the 4 to 6 age group in Ontario.

The assessment for this age group includes direct child outcome measures in addition to parent report measures. The increased slope of vulnerability could be related to the

How to Read Figures 3 to 10

The horizontal line represents the socioeconomic status (SES) of families. On the far left side are children whose families are in the lowest SES group and on the far right side are children whose families are in the top SES group. The children whose families are between -1 SES (low-middle SES group) to those whose families are +1 SES (high-middle SES group) make up about two-thirds of the population.

The vertical line represents the percentage of children with a poor outcome.

The line represents the statistical relationship between family SES and the numbers of children who are having problems.

Note that this analysis and all subsequent analyses are controlled for immigrant status. Thus the Y axis should really read "Prevalence of measure, adjusted for immigrant status".

introduction of the direct child measures but is also influenced by the consequences of experience-based brain development during the first three years.

From this analysis, **approximately 212,000 children, of 900,000 in the 0 to 6 age group in Ontario are at risk of not reaching their full potential when they enter the school system and are on a life course trajectory that could lead to learning, behaviour, and health problems in later life. The majority of these children live in two-parent, middle income families.**

FIGURE 3 - SOCIOECONOMIC GRADIENTS FOR CHILDHOOD VULNERABILITY, CHILDREN AGED 0 TO 3

National Longitudinal Survey of Children and Youth, 1994

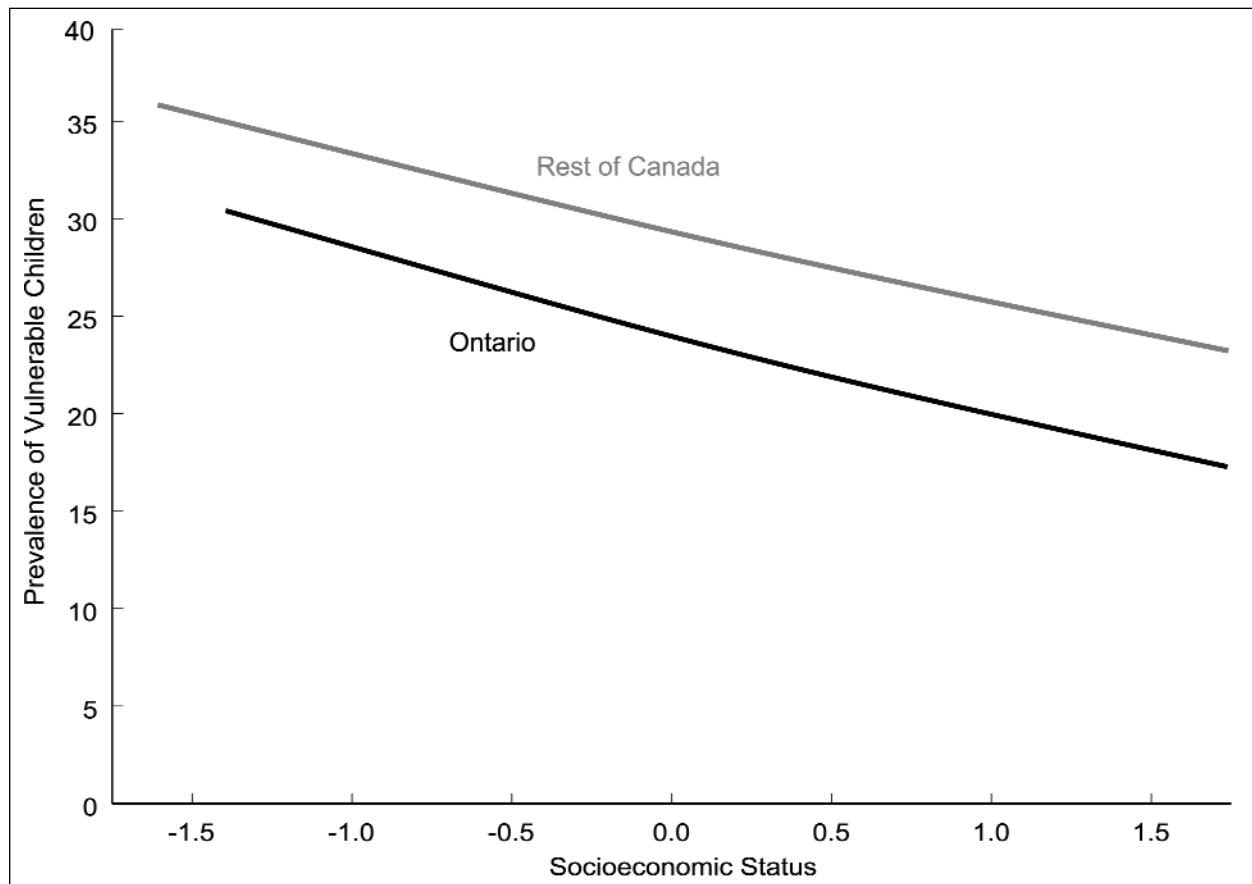
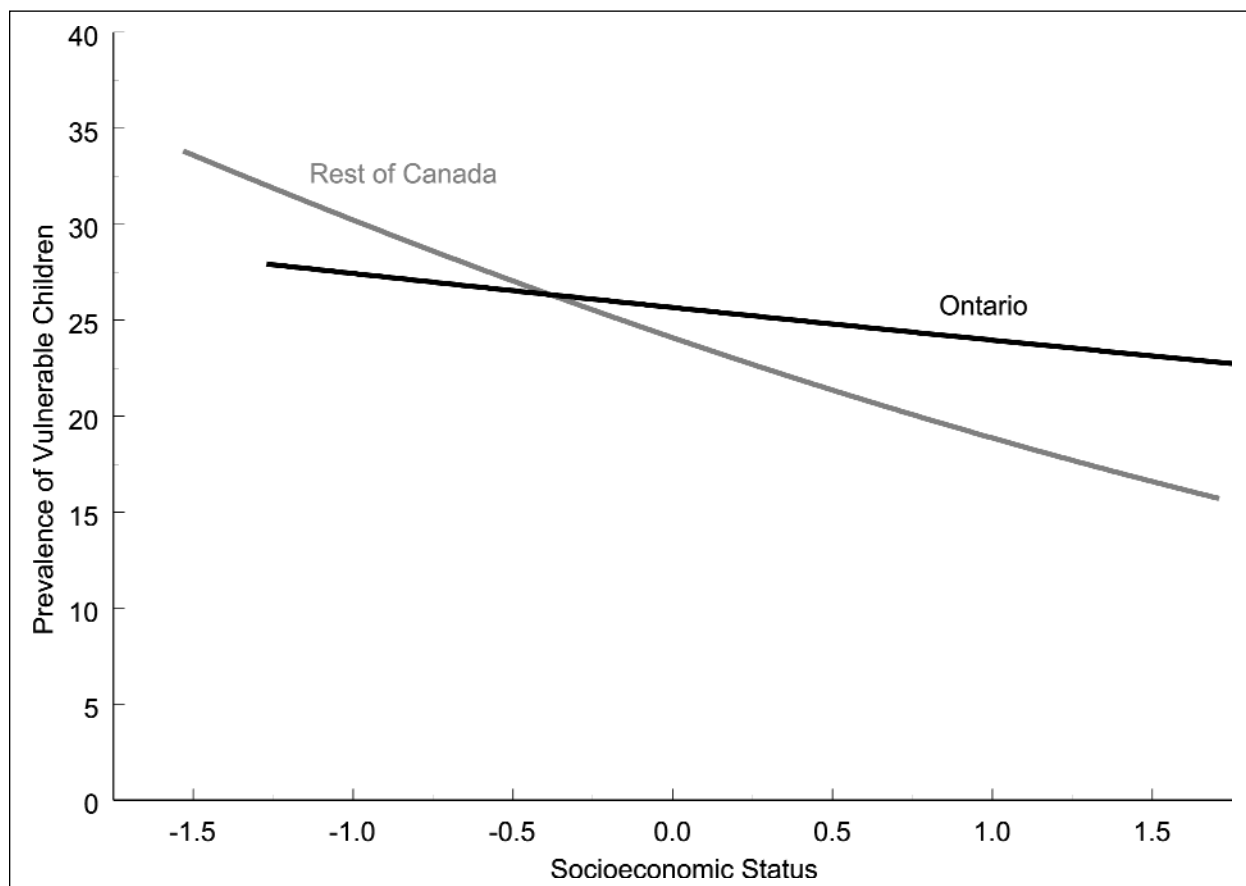


FIGURE 4 - SOCIOECONOMIC GRADIENTS FOR CHILDHOOD VULNERABILITY, CHILDREN AGED 0 TO 3

National Longitudinal Survey of Children and Youth, 1996

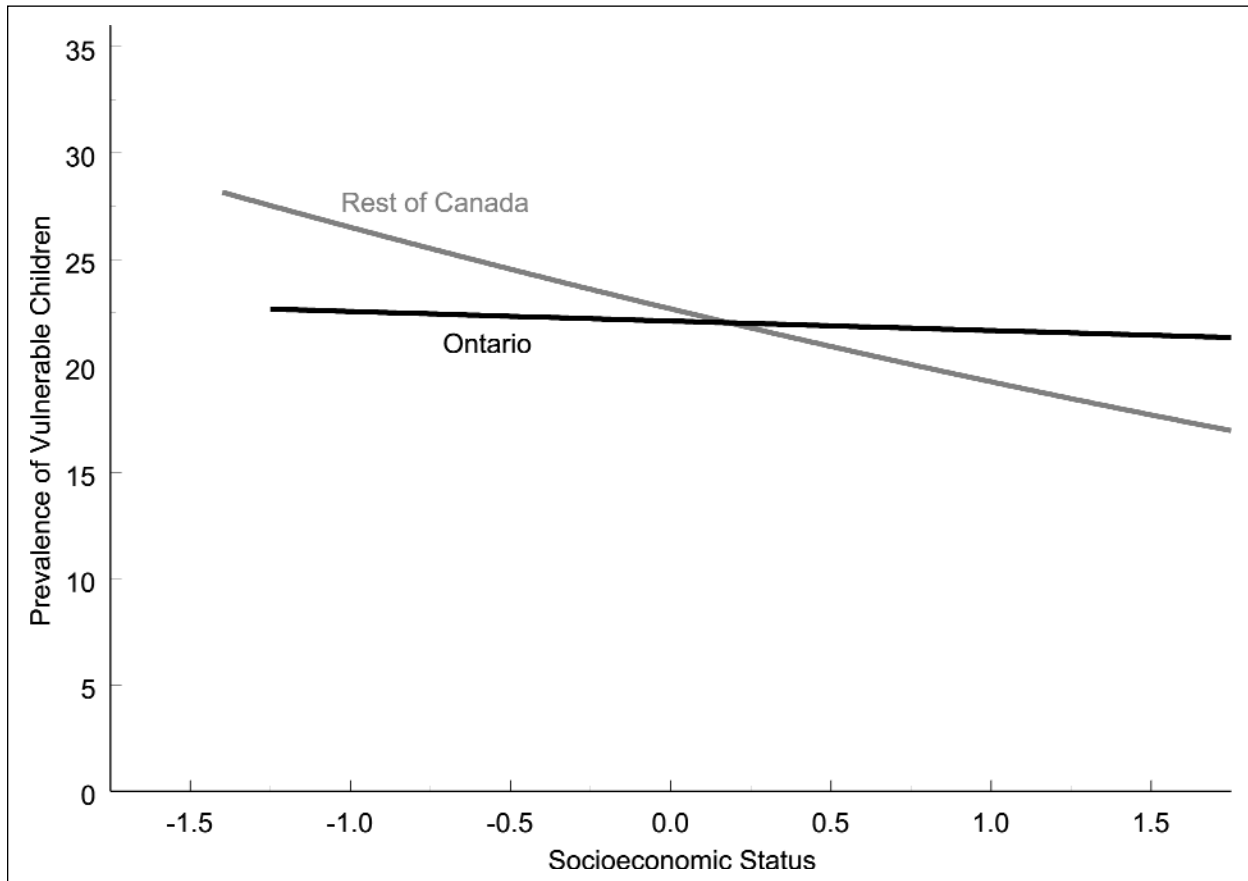


A small proportion of vulnerable children have specific identified disabilities that are tied to their genetic inheritance. Others have identified congenital disabilities that are related to their prenatal or earliest environment perhaps combined with particular genetic predispositions. For example, approximately one in every 500 children is estimated to be autistic.⁴³ This means approximately 1,800 preschool children in Ontario. There will always be a small proportion of children with identified specific special needs who will require specific interventions but the vast majority of the vulnerabilities we see in

Ontario's children can be reduced through environments that promote optimal ECD. Helping these vulnerable children through specialized interventions later on in the school system is difficult and expensive. It is important that children who do have specific special needs not only benefit from specialized interventions early in life but should, wherever possible, also be when appropriate included in an ECD parenting program. In other words, good ECD and parenting programs help all families.

FIGURE 5 - SOCIOECONOMIC GRADIENTS FOR CHILDHOOD VULNERABILITY, CHILDREN AGED 0 TO 3

National Longitudinal Survey of Children and Youth, 1998



Many vulnerable children will carry forward a developmental drag that will for many affect their mental and physical health, coping abilities and competence throughout life. Special education and other remedial programs appear to be limited in what they can do to help many of the vulnerable children once they enter the school system.^{37,38}

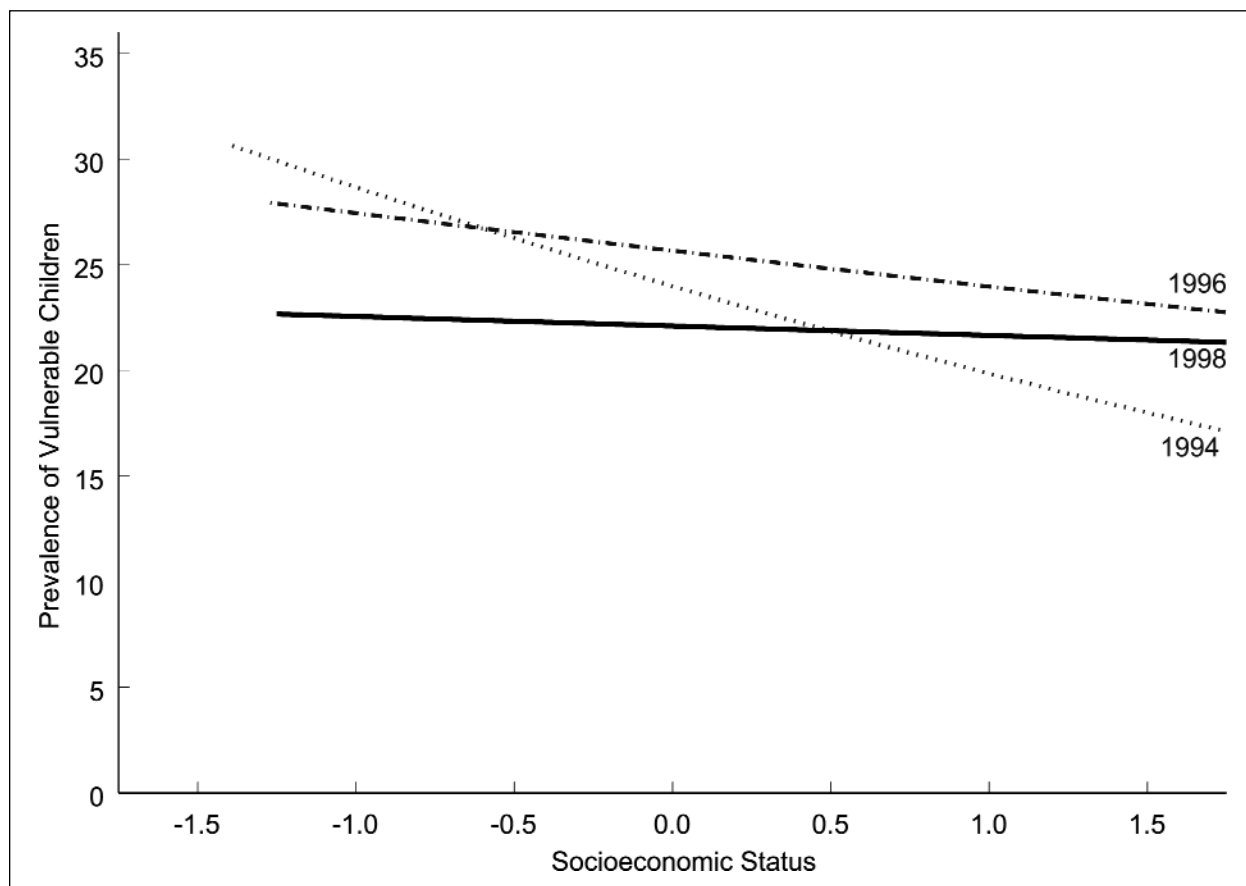
Based on Doug Willms' recent analyses,^{41,42} we know something of the environmental factors that affect the vulnerability scores. Families providing poor parenting and caregiving have more vulnerable children. [This occurs in all

social classes.] One of the striking observations is that regardless of socioeconomic class, if children are read to, they are less likely to have poor cognitive development or major behavioural problems. Also, if there is strong social support, there is good cognitive development and no increased behavioural problems. This is a strong reason why societies need to put in place community-based quality ECD and parenting initiatives for all families with young children.

The total number of vulnerable children in Ontario is a large number. It will not be

**FIGURE 6 - SOCIOECONOMIC GRADIENTS FOR CHILDHOOD VULNERABILITY,
ONTARIO CHILDREN AGED 0 TO 3**

National Longitudinal Survey of Children and Youth, 1994-1998



possible to substantially improve the quality of the overall population without dramatically reducing this number.

The greatest numbers of vulnerable children live in two-parent, middle-income families; targeting developmental resources to children who are living in poverty, although valuable, will have a relatively small impact on the overall population. Estimates suggest that if we could eliminate the negative impact of poverty, we would only reduce the numbers of children who are vulnerable by 10%¹ or about 22,000 in the 0 to 6 age group. Children in single parent

families, if the child is read to and supported (good ECD programs involving the parents), do well. Interventions to address the needs of children with diagnosed, specific disabilities can improve the quality of life for these children but these targeted programs will not have an impact on the large number of vulnerable children.

Community-Based Outcome Measures: Early Development Instrument (EDI)⁴⁴

In part as a result of the September 11, 2000 report, a national EDI (early development

instrument) has been applied to children entering schools in a number of communities across Canada. This measure is used to assess, on a population basis, ECD outcomes in a community. The EDI consists of five measures:

1. Physical health and well-being
2. Social competence
3. Emotional maturity
4. Language and cognition
5. Communication and general knowledge

This measure has been extensively applied to children entering the school system in Ontario and British Columbia as well as in other parts of Canada. In Ontario, the EDI has now been used in over 75 communities.⁴⁵

In Vancouver, the percentage of children in the bottom 10% of one or more of the measures in the EDI assessment is a gradient when plotted against the socioeconomic circumstances in the districts from which these children came (6% to 11% of the children in the most affluent districts, to 30% to 38% in the poorest districts [Figure 11]).

FIGURE 7 - SOCIOECONOMIC GRADIENTS FOR CHILDHOOD VULNERABILITY, CHILDREN AGED 4 TO 6

National Longitudinal Survey of Children and Youth, 1994

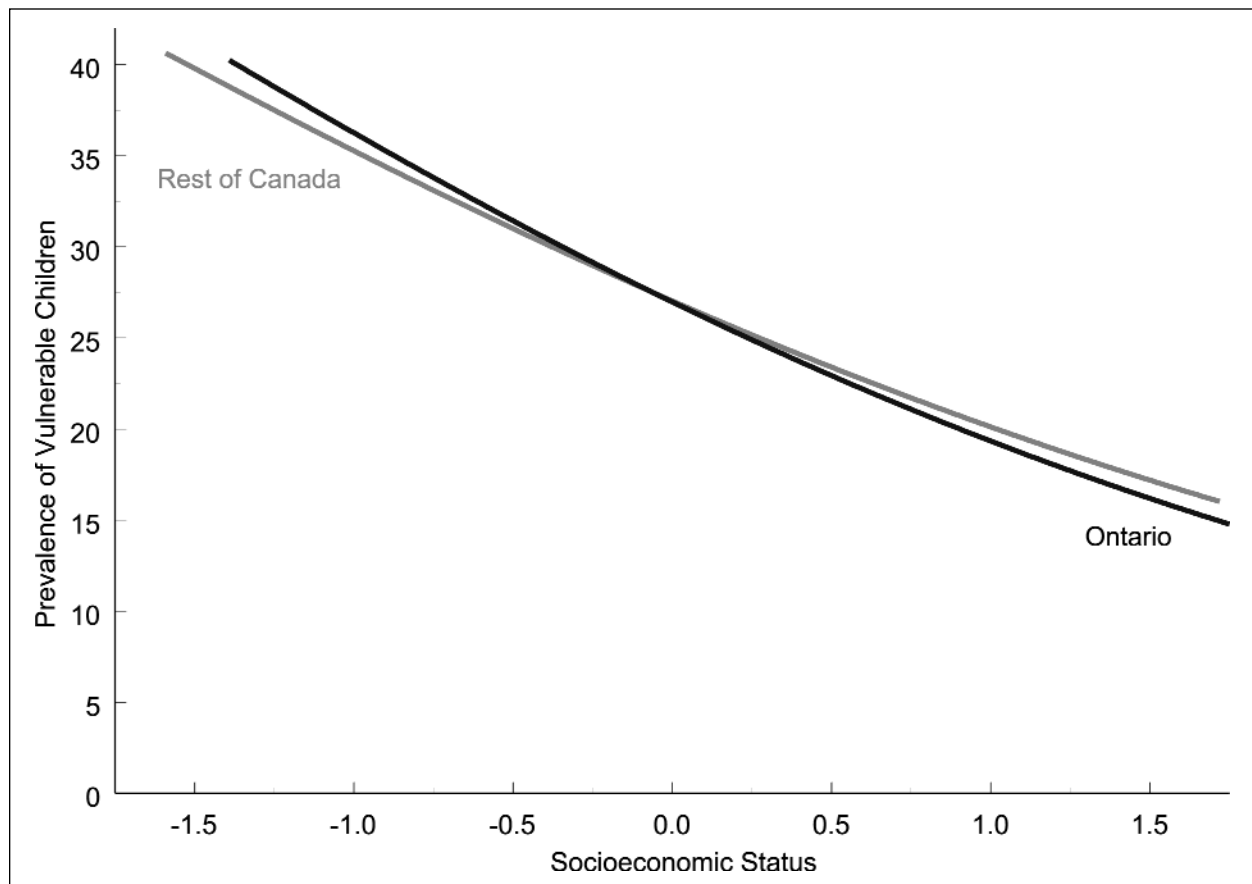
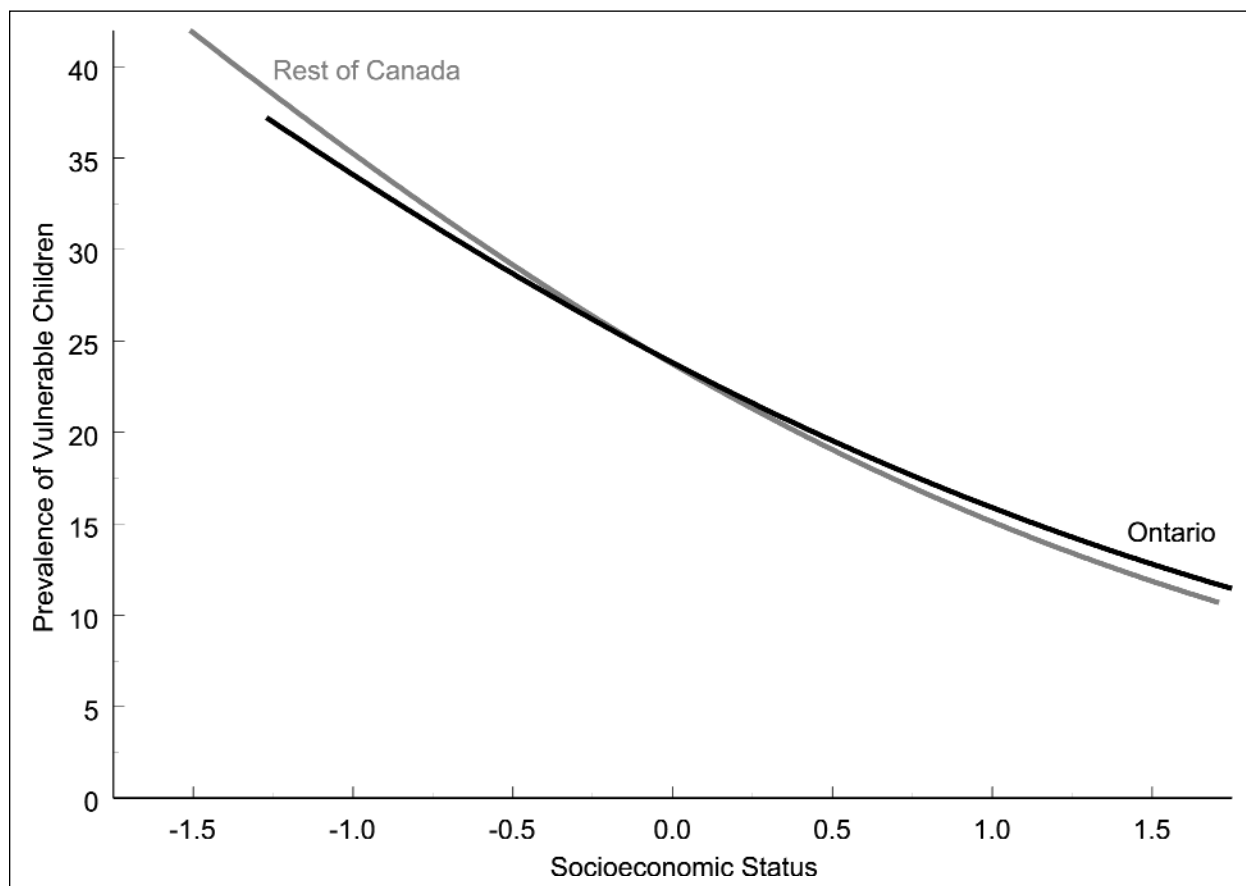


FIGURE 8 - SOCIOECONOMIC GRADIENTS FOR CHILDHOOD VULNERABILITY, CHILDREN AGED 4 TO 6

National Longitudinal Survey of Children and Youth, 1996



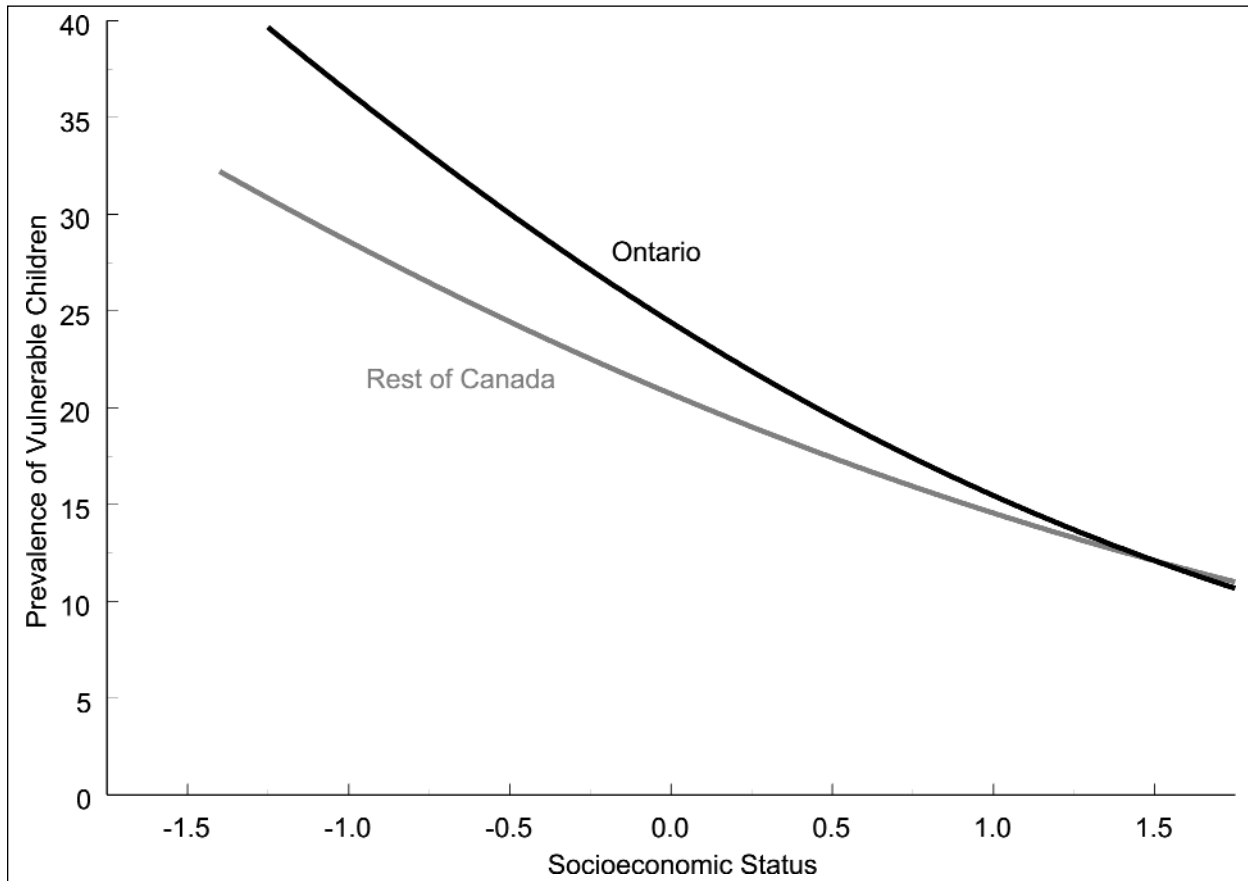
This is similar to the gradient in the receptive language measure at ages 4 to 5, found in the recent report, *Early Child Development in British Columbia: Enabling Communities*,⁴⁶ which ranged from 5% to 35%. It is similar to the gradient for the measurements of verbal skills for children aged 4 and 5, reported in the Ontario *Early Years Study*. In the Vancouver assessment, the schools in districts with the larger proportion of children with a low EDI score performed less well in terms of reading and mathematics in the Grade 4 tests than the schools with children entering with a higher score on the EDI measure (**Figure 12**). In the

more affluent districts, less than 11% of the students did not meet the Grade 4 numeracy expectations, while in the poorest districts, more than 50% did not meet the expected result. These observations are consistent with the conclusion from the longitudinal studies discussed earlier that the quality of ECD influences school performance.

The B.C. data is the first Canadian evidence that school performance is related to the quality of ECD before the children enter the school system. In Vancouver the data are made available to the communities to decide

FIGURE 9 - SOCIOECONOMIC GRADIENTS FOR CHILDHOOD VULNERABILITY, CHILDREN AGED 4 TO 6

National Longitudinal Survey of Children and Youth, 1998



how they would like to mobilize resources to improve ECD.

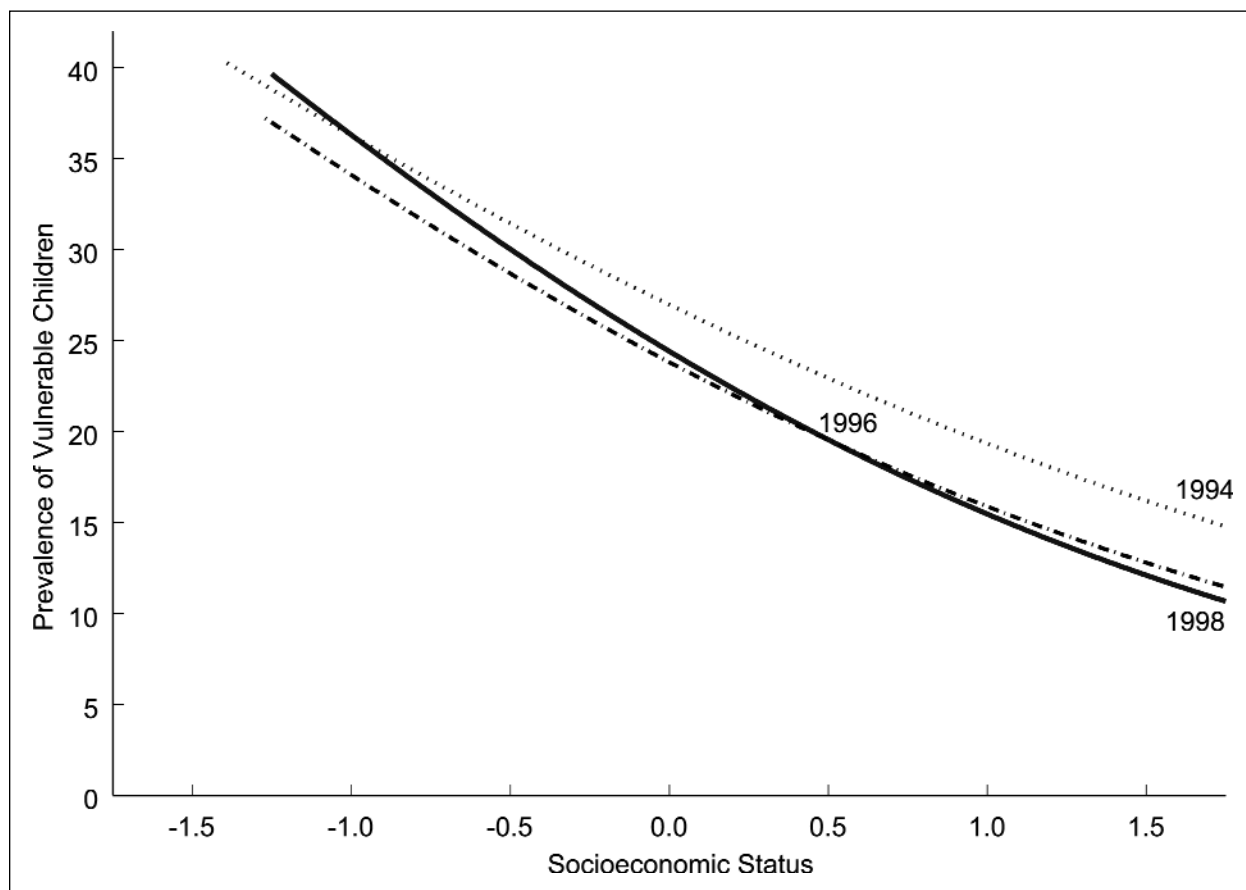
Table II shows the percentage of children with low performance on the EDI assessment for three Ontario regions. The districts are census tract districts for these regions. This shows that there is a gradient by district in the EDI assessment and that the range is from a low of 5.6% in a district of York to over 43% in a district of Nipissing/Parry Sound. This is similar to the data for Vancouver in terms of the range of children's performance by district. Preliminary assessment for Ontario indicates

that schools in districts with poor EDI performance for children entering the schools in the district have poor Grade 3 test results.

The recent report of the Grade 10 school literacy test in Ontario⁴⁷ is interesting in view of early experience-based brain development, language acquisition, and literacy capacity in later life. Children with poor verbal skills at age 4 and 5 tend not to do well in the school system. This largely comes from the findings of longitudinal studies in Sweden, the United Kingdom and the United States. The data for the *Early Years Study* showed that about 22% of

**FIGURE 10 - SOCIOECONOMIC GRADIENTS FOR CHILDHOOD VULNERABILITY,
ONTARIO CHILDREN AGED 4 TO 6**

National Longitudinal Survey of Children and Youth, 1994-1998



Ontario's children in this age group performed at the lower end of the testing scale for verbal skills. If the school system can only marginally help the majority of these children, one would expect poor literacy performance of around 25% of the children in Grade 10. In fact, the recent literacy test showed that about 32% performed poorly. These data also are congruent with the Statistics Canada OECD data for youth literacy in Canada.⁴⁸ About 40% of this population functioned at level 1 and 2 of the literacy test scaling (low performance). The critical question is how

much of this represents a trajectory in learning because of poor brain development in the early years (verbal skills and language development) for which it is difficult for school programs to change outcomes.

The school system runs special programs for children with problems in reading and writing. It is difficult to get hard evidence about the scale of the problem in the school system and the effectiveness of the special education programs for these children. Anecdotal evidence suggests that it is a sizeable problem

FIGURE 11 - EDI: PROPORTION OF CHILDREN LIVING IN EACH NEIGHBOURHOOD THAT SCORED IN THE BOTTOM 10% ON ONE OR MORE SCALES

The University of British Columbia Community Asset Mapping Project

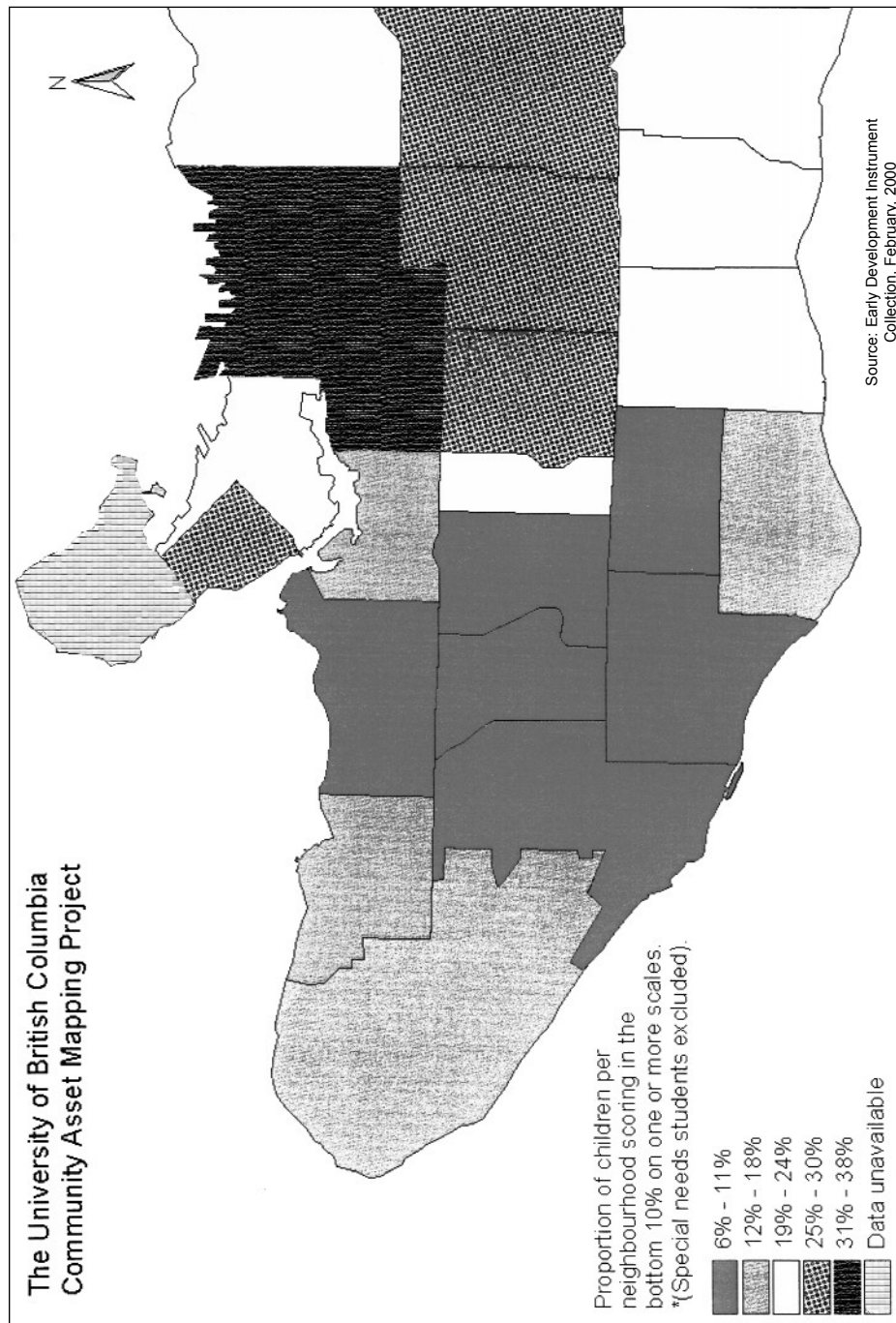
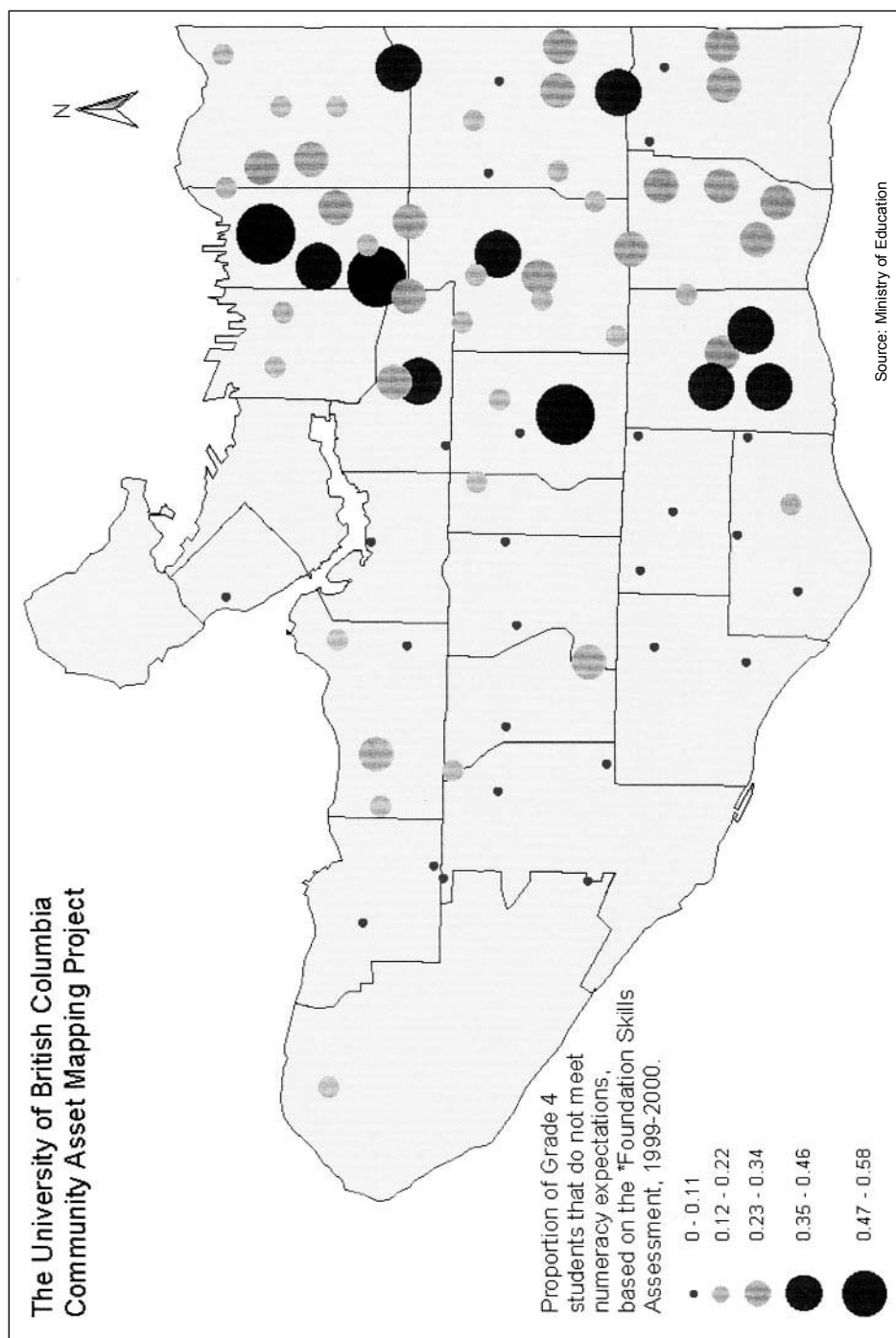


FIGURE 12 - PROPORTION OF GRADE 4 STUDENTS SCORING BELOW FSA* NUMERACY EXPECTATIONS, 1999-2000

The University of British Columbia Community Asset Mapping Project



and that the effectiveness of special education is limited due to a variety of factors. In our meetings with primary school principals and teachers, they continually emphasized that children with poor verbal and literacy skills at school entry tended not to do well in the school system and it was difficult to improve outcomes. A rough estimate of the cost for special education programs for vulnerable children and children with special needs in Ontario is about \$1.2 billion per year. Investment in quality ECD and parenting programs could reduce the number of vulnerable children entering the school system and reduce the need for special education programs for the vulnerable children.

The B.C. initiative demonstrates that the EDI measure can show the burden of children in a

district not meeting a development standard from a population perspective. It also shows the difficulty schools in the different regions of a community have in meeting the standards for school test results. This is compatible with the U.S. readiness-to-learn data and school performance.⁴⁹

British Columbia Human Early Learning Partnership (HELP)

One of the challenges is the application of the EDI assessment in communities and the establishment of an institutional structure to work with them to improve the performance of ECD in districts where children are not performing at the desirable level. The University of British Columbia, in collaboration with other postsecondary

TABLE II - EDI MEASUREMENT FOR SELECTED REGIONS IN ONTARIO

CENSUS TRACT DISTRICT	YORK		GREY BRUCE		NIPISSING/PARRY SOUND	
	EDI*	# Children	EDI*	# Children	EDI*	# Children
1	5.6	900	10.5	1010	10.7	640
2	5.9	725	11.4	700	14.3	160
3	18.7	435	15.0	440	17.3	435
4	24.0	535	22.5	460	21.7	420
5	30.0	610	24.4	705	22.2	130
6	33.6	445	29.4	345	25.0	300
7	35.2	505	33.3	635	33.3	165
8	40.0	285	42.9	595	43.2	215

*percent scoring low on one or more of the EDI assessments

institutions, has initiated the Healthy Early Learning Partnership (HELP).⁴⁶ The B.C. government has given support to this innovative initiative. The mission of HELP is to create, promote and apply new knowledge through leading interdisciplinary research to help children thrive. It will play a key role in applying the EDI assessment by district in British Columbia. The themes of this initiative are:

■ *Create new knowledge:* By stimulating and supporting a network of interdisciplinary research into the fundamental aspects of child cognitive, language, social and emotional development, HELP will allow us to understand more fully the factors that encourage optimal readiness-to-learn.

■ *Apply new knowledge:* Working closely with communities, non-profit organizations, professional networks, and governments, HELP will apply this new knowledge to mobilize and coordinate approaches and interventions in ECD. The application of this knowledge along with the EDI outcomes will enable communities to assess how well their initiatives are doing in reducing the number of vulnerable children.

■ *Promote new knowledge:* Understanding the powerful interplay between early childhood experiences and subsequent health, well-being and competence has important implications for policy in Canada. Armed with scientific evidence, HELP will assist the government in its ECD strategy to improve the circumstances in which children grow up, live and learn. In doing so, HELP will effect change and reduce significant gaps in existing patterns of B.C. children's development, so that all children have the ability to reach their full potential.

This initiative, involving individuals from a number of disciplines in four postsecondary institutions, will have the capacity to improve understanding among professional groups in communities and to apply the EDI outcome measures in the districts and help communities put in place strategies to improve ECD

Ontario could consider creating a similar infrastructure among a number of its postsecondary institutions to work with communities in their regions. The Canadian Centre for Studies of Children at Risk at McMaster University (the base for the EDI assessment), as is the case with UBC, could be the hub for such an initiative.

VI THE EARLY YEARS STUDY (1999) AND GOVERNMENT'S RESPONSE

Former Premier of Ontario, Mike Harris, called for the *Early Years Study*, endorsed it and brought it to the attention of his colleagues across the country which contributed to the agreement on ECD released by the provincial/territorial First Ministers and the Prime Minister on September 11, 2000.⁴ The federal government put up new dollars to help provinces and territories implement the idea of ECD programs and outcome measures for the whole country. That announcement set objectives including the possibility of incremental funding if provinces met the goals set out in the September 11 communiqué. If the provinces do not fulfill the objectives they agreed to in principle on September 11, 2000, it may be difficult for them to get support for incremental funding, particularly beyond the five year term of the agreement.

Since the release of the *Early Years Study*, many of us have had meetings with communities across the province. Some of the following comments come from this experience as well as the government reports.

The Government of Ontario initially, through Margaret Marland, Minister Responsible for Children, set up a staff and secretariat to take steps to implement the report. One of the key recommendations of the report called for the development of ECD and parenting centres in communities. They would be based on the capacity of communities to develop programs available for all families with young children, sensitive to ethnicity, language, religion, and other social, cultural factors and based, in part, on existing programs in the community. The report suggested the communities should become organized to involve all sectors. Private sector involvement was important particularly

because many businesses now employ large numbers of mothers (as well as fathers) in all social classes with young children, aged 0 to 6 years.

A series of initiatives followed.

- In September 1999, the Children's Secretariat established demonstration projects in five communities to test how well all sectors of communities could get together to build on existing programs to establish ECD and parenting centres as set out in the report. Activities included implementation of the Early Development Instrument (EDI), community resource mapping and start up of small initiatives that were able to bring together both private and public sector support. Over the course of the next 18 months each of the project sites made progress in building community capacity for ECD.⁵⁰
- In April 2000, Minister Marland established an Early Years Task Group to provide advice to the government on how to set up a provincial framework to support a province-wide Early Years Program based on ECD and parenting centres. The group prepared an interim report in January 2001 (not made public) that recommended increased public education, an integrated database development, changes in education regulation and funding in relation to on-site ECD programs, the need to address transportation and nonparental care issues and increased professional development opportunities for ECD staff. The Task Force was disbanded in the spring of 2001 when the Children's

VI The Early Years Study (1999) and Government's Response

Secretariat was moved into the Ministry of Community and Social Services.

- The provincial government announced an Early Years Challenge Fund that would match contributions raised in the community from business, the public and foundations to build community ECD capacity. In September 2000, Minister Marland announced the establishment of local Early Years Steering Committees and community coordinators in each of Ontario's 37 public health units (the community coordinators were funded through the public health units). Initially communities were responsible for the selection of steering committee members and coordinators. In early 2001, the government made a major change and transferred the Children's Secretariat to the Ministry of Community and Social Services under Minister Baird.

- Then the process changed and communities were asked to make recommendations while the government made the appointments for the community steering committees through Orders in Council. By late spring 2001, most of the steering committees and coordinators were in place. By March 31, 2002 each committee had made recommendations on allocations of the community Early Years Challenge Fund to the provincial government and prepared detailed Early Years Plans for their communities. In spite of a confusing, frequently changing process, the community proposals for the Challenge Fund and the final plans demonstrated robust community ability to

start building capacity for ECD and parenting centres.

The Early Years Challenge Fund however, has not been used as a matching grant incentive for communities to establish ECD and parenting centres. Many of the proposals that embraced the ECD and parenting centre concept (including provision of nonparental care) and involved the private sector were not supported. The provincial government removed the requirement for matching funds from the private sector although private contributions were already lined up in many communities. This activity has frustrated and angered a number of communities.

- In May 2001, after the disbandment of the Children's Secretariat and the shift of the Early Years Secretariat to the Ministry of Community and Social Services, Minister Baird announced that Early Years Centres would be established in each provincial riding. The purpose of the centres is to provide information to parents and to link them with children's services. The Centres would be developed under the guidance of a provincially-appointed local champion and with input from the community. A total of \$30 million of the federal Early Child Development Initiative dollars were allocated to establish the Centres.

The government has stated these centres will implement the recommendations of the *Early Years Study*. But, the truth is that the Early Years Centres are not the ECD and parenting centres set out in the report. They appear to be largely advisory centres

in relation to community initiatives that could help parents have access to treatment services as well as providing advice to parents. It appears that the Early Years Centres will be operated by selected agencies. Many of the agencies selected to date are part of the standard children's treatment sector - such as children mental health centres and community health centres. Very few are connected to the education system in Ontario and most are not part of core ECD program components that already exist in communities. The plan for the Early Years Centres does not easily fit into a concept of ECD to human development. They run the risk of being largely influenced by the service programs of the Ministries of Community, Family, and Children's Services and Health (targeted at-risk families), and not the broader objectives that relate to the effects of ECD on learning, behaviour, and health for the population. The guidelines for the Early Years Centres exclude nonparental care, ignoring the recommendations of the *Early Years Study*, developments in the rest of the world, and repeated feedback from communities across the province about the importance of quality nonparental care.

The need for expanded quality nonparental care surfaces in all reports generated in the community and was identified as a need in the Early Years Task Group interim report. It is not possible to implement ECD programs in the 21st century without also providing nonparental care. In Ontario the majority of preschool children (more than 70 %) live in two working-parent families or in lone working parent families. In view

of the socioeconomic changes in today's societies, referred to at the beginning of this report, it is not possible to develop effective child development and parenting programs that do not also include nonparental care including respite care.

At the present time the scale and scope of the Early Years Centres is unclear. It seems likely that many will be influenced by the scope of activities that are part of the lead agency's mandate. The relationship between the Early Years Centre senior staff and the goals of the lead agency is unclear and could, in some situations, seriously constrain what the Early Years Centre can do. This initiative will have difficulty fitting into the framework of "early child development to human development".

- The provincial government has now bundled together the Early Years Centres (\$30 million), Early Years Challenge Fund (\$15.4 million), and the remaining \$69 million for 2001 - 2002 allocation from the federal government agreement on ECD, into the provincial *Early Years Plan*. This Plan includes allocations of about 30 individual projects and services that are mostly existing services provided by the Ministry of Health and Ministry of Community, Family, and Children's Services for children at-risk and those with very special needs.

Some of the programs are for children with very special needs (e.g. autism, developmental disabilities, sensing defects). Many of these important programs belong in the Ministry of Health as part of our health care system. The scattered activities

and streaming of new financial resources into targeted services and existing programs fragments and does not build community capacity for ECD and parenting programs or equality of opportunity for the children of all families. **The documents that describe the government's Early Years Plan make no mention of ECD and the crucial relationship to education and do not embrace the concept of "from early child development to human development."** (Fortunately, some communities, e.g. Niagara Region, North Bay, and Grey Bruce, have involved local school boards in early years initiatives.)

Early Child Development and Parenting Programs and Early Years Centres

The strategies put forward by the Ministry of Community, Family and Children's Services do not clearly fit the goal of "early child development to human development". It is a fragmented, bureaucratically-controlled strategy that will fail to reduce the problems associated with poor ECD (health, learning and behaviour) in Ontario.

The policy statements that have emerged from the Ministry of Community, Family and Children's Services emphasize targeted and at-risk programs rather than initiatives that are aimed at all young children and their families. This limits the capacity for the government's early years initiatives to enhance the capabilities of all children entering the school system.

The central recommendation of the *Early Years Study* called for community-based ECD and parenting centres available for all young

children and their families within five years (2004). The study proposed that existing programs (for example, nursery schools, family resource programs, child care centres, kindergarten, parenting centres, Healthy Babies, Healthy Children and playgroups) were core components that could be incorporated into integrated community-based ECD and parenting centres. The report strongly recommended that these centres could be based as much as possible in schools. A number of schools have early years programs (including child care centres, nursery schools, family resource programs, parenting centres and family literacy activities) besides kindergarten that are a base for growth of ECD and parenting centres. The report also recommended that the Ministry of Education's funding formula for school boards should not jeopardize these programs and the development of ECD and parenting programs in association with the school.

The Early Years Centres put in place by the provincial government do not adequately embrace the concepts set out in the report. They are more centrally accountable to the government public service than their communities. In the letter to the community coordinators in February of this year, they emphasize the need for more central control. This does not readily enable communities to build ECD and parenting centres and runs the risk of bureaucratic programming which we, in our report, said should be avoided. The government should examine how other societies are putting their ECD initiatives in departments other than social welfare and special needs services.

In the guidelines for the Early Years Centres, they describe their role with core services and other services.⁵¹ There is no reference to ECD and parenting centres as set out in the report. The emphasis appears to be on “services” that could relate to children at-risk and with special needs.

The Early Years Centres seem to have a focus on targeted and so called at-risk families. This tends to exclude the middle class where the largest number of vulnerable children in the 0 to 6 age group are located (more than 160,000 children). This group has needs and initiatives that exclude them and weakens the commitment of society to invest in ECD.

The concepts set out in the Early Years Centres report could make it difficult to involve a high level of private sector and volunteer participation. This is an important base for communities that need to involve private sector support and interest to build

social capital. There is no attention paid to a tax credit strategy to enhance private sector support.

In the list of activities and institutions that the centres should be engaged with in the communities, there is only passing reference to schools and education. This implies that the concepts in the report have been largely driven by a public service whose interests and roles are driven by “repair” shop functions for children with special needs or children who are considered by the ministries’ criteria to be at-risk initiatives.

In **Table III**, we summarize the differences between what was recommended in the *Early Years Study* for ECD and parenting centres and the Early Years Centres and their relationship to education. The Early Years Centres do not easily fit the integrated concept of “from early child development to human development”.

TABLE III - ECD AND PARENTING CENTRES VERSUS EARLY YEARS CENTRES

ECD AND PARENTING CENTRES	EARLY YEARS CENTRES
<ul style="list-style-type: none"> • Integrate existing core program components - HBHC, nonparental care, family resource programs, kindergarten, parenting • Link to network of early intervention programs • Integrate with school system • Community-based • Universal focus • Programs 	<ul style="list-style-type: none"> • Early years information resource • Early intervention services core • No nonparental care • Loss of established ECD program components • Not linked to schools • Most not linked to core programs • Tendency to focus on at-risk children & targeted services • Services

VI The Early Years Study (1999) and Government's Response

Despite the provincial government's inability to effectively implement the key recommendations of the *Early Years Study*, a number of communities have struggled to adopt the government's response and move forward their early years agendas that are consistent with the *Early Years Study*.

(Background information for this report can be found in a special set of appendices on the Founders' Network website, wwwFOUNDERS.NET.)

VII CONSIDERATIONS FOR THE GOVERNMENT OF ONTARIO

The increased understanding and awareness of the importance of early childhood and experience-based brain development in early childhood for human development in a changing socioeconomic world is leading more and more individuals to recognize the importance of this period of human development in determining the quality of human capital. Heckman, the Nobel Prize winner in Economics in 2000, outlined the importance of investment in the early years in his recent paper, “Policies to Foster Human Capital”.⁵²

“The best evidence suggests that learning begets learning. Early investments in learning are effective. Much of the recent emphasis on lower tuition costs for college students is misplaced when the value of early preschool interventions is carefully examined. In the long run, significant improvements in the skill levels of American workers, especially workers not attending college, are unlikely without substantial improvements in the arrangements that foster early learning. We cannot afford to postpone investing in children until they become adults, nor can we wait until they reach school age - a time when it may be too late to intervene. Learning is a dynamic process and is most effective when it begins at a young age and continues through adulthood. The role of the family is crucial to the formation of learning skills, and government interventions at an early age that mend the harm done by dysfunctional families have proven to be highly effective.

The returns to human capital investments are greatest for the young for two reasons: (a) younger persons have a longer horizon over which to recoup the fruits of their investments and (b) skill begets skill. Skill remediation programs

for adults with severe educational disadvantages are much less efficient compared to early intervention programs. So are training programs for more mature displaced workers. The available evidence clearly suggests that adults past a certain age and below a certain skill level obtain poor returns to skill investment. A reallocation of funds from investment in the old and unskilled to the young and more trainable for whom a human capital strategy is more effective is likely to produce more favorable outcomes in the long run. At certain levels of investment, marginal returns are highest for the young.”

The recommendations set out in the *Early Years Study* were designed to increase Ontario’s investment for ECD and parenting linked to education (from ECD to human development) and for there to be a Minister with a strong mandate. Some of these recommendations are:

Recommendation 2

To ensure there is a strong voice around the Cabinet table for early child development issues, and to ensure there is a provincial Minister with the responsibility for leading the development of the early child development and parenting program across Ontario, we urge the Premier to give the Minister Responsible for Children a strong mandate.

Recommendation 3

Given that some form of local authority will be required to administer the integrated early child development and parenting program in communities, and given that there should be participation by all levels of government and the private sector, the Minister Responsible

for Children should, with the advice and assistance of the Task Groups, explore the relative merit of upper-tier municipal governments, school boards, or other local arrangements as possible lead local bodies. This would be done with a view to identifying the lead organization in every community in Ontario for the purpose of local coordination, purchase of service, and partnership development.

Recommendation 4

Given the need to bridge the barriers between the early years and the public school system, and given the importance of school sites as a public resource in communities with easy access for many families and as a good site for early child development and parenting centres, we urge government, school boards, and communities to:

- Keep school sites available that are a potential location for early child development and parenting centres.
- Establish policies and support to make school facilities available to communities so that parents and children everywhere can use the facilities the taxpayers have already paid for to ensure early child development and parenting centres can operate in the evenings and on weekends, as well as daytime.
- Establish incentives to encourage location of early child development and parenting centres on school sites as one of the potential community locations for these programs.

Recommendation 5

Given that kindergarten is the only universal program offered to all Ontario children up to age six today, and given its significance as part of our proposed early child development and parenting program, we urge the government and school boards to:

- Continue funding and support for existing (full-day and part-day) kindergarten programs and develop strategies with communities to make kindergarten part of the early child development and parenting centre framework as soon as possible.
- Ensure that the Early Learning Grants for alternatives to Junior Kindergarten are used only for programs for children under age six, rather than throughout the primary school grades.
- Work with the community bodies responsible for developing and implementing ECD and parenting centres to incorporate the present kindergarten programs into ECD and parenting centres.

The time has come, given our new understanding of the importance of experience-based brain development in the early years for ECD and parenting programs in the preschool period to be integrated with education which can be considered second stage in human development. For the Government of Ontario to facilitate this linkage, it should think about how to link or integrate its initiatives that relate to ECD and the next stages of human development (education and postsecondary education and adult re-training programs - see Heckman's paper).⁵²

The linkage of ECD with education is not a new idea. In 1994, the Royal Commission on Learning recommended:⁵³

“We recommend that Early Childhood Education (ECE) be provided by all school boards to all children from 3 to 5 years of age whose parents/guardians choose to enroll them. ECE would gradually replace existing junior and senior kindergarten programs, and become a part of the public education system.”

We note that a very similar recommendation was made by George Radwanski in his report to the Ontario Ministry of Education in 1987⁵⁴: “That all school boards in Ontario be required to provide universally available early childhood education in public and separate schools for children from the age of three.”

Radwanski concluded that such education should be universal rather than targeted at disadvantaged children for a number of reasons, and suggested as well,

“The need for deliberately provided early learning experiences and intellectual stimulation outside the home may no longer be limited to children from the most obviously disadvantaged households ... numerous children of non-needy and relatively well-educated parents are spending much of their time in sub-optimal care arrangements that do not provide the fullest opportunities for early development.”

The same idea was proposed by Bette Stephenson while she was the Minister of Education in Ontario twenty years ago.

Whether the ECD and parenting programs should be under the jurisdiction of school

boards will be strongly debated. But to allow integration of ECD and education programs, however achieved, is an important objective.

We concur with these conclusions but, in view of our new understanding of experience-based brain development in the very early years, emphasize that the ECD and parenting centres, should also be available for pregnant mothers and the 0 to 3 age group.

The complex socioeconomic changes that are taking place in Ontario affect all families and young children. Society is increasingly knowledge based. The time has arrived to act and to make investment in ECD and parenting a high priority linked to the next stages of human development to help ensure, as Heckman and others argue, high quality human capital in the future.

Establishing a government ministry that combines ECD and education would be a logical step. This would fit into our recommendation for the use of available community sites such as schools for ECD and parenting centres integrated with education programs.

There are already components of ECD and parenting centres such as parenting centres, family resource centres and centres for nonparental care located in a number of schools. Such school based ECD and parenting centres, as has been demonstrated in parts of the province¹, can be connected with satellite ECD and parenting programs located in churches, community centres and/or family homes for rural or spread out residential communities.

An interesting example that has been operating for more than 20 years is Toronto's Parenting and Family Literacy Centres. The Toronto District School Board (formerly known as the Toronto Board of Education) was the first school board in Canada to recognize the importance of supportive early environments and their relationship to academic success. In 1981, Parenting and Family Literacy Centres were established in inner city schools, with the goal of reducing school drop out and failure rates and promoting smooth transitions to kindergarten (see **Appendix 1**). A rich play-based early child development program that involves the parents is the centrepiece of the program. Parents learn by doing and are offered practical assistance, information, and resources to cope with the stresses of living in poverty, isolation, or family violence. Hallmarks of the program's success include: Canada's largest and oldest school-based family ECD program, culturally sensitive parenting capacity building, a demystification of the school system for families, and parental participation in school governance - all of which converge to break intergenerational cycles of poor ECD and poor parenting. An unexpected benefit of this approach, which integrates ECD and education, is an increase in understanding and trust between the community and the school. There is a long standing relationship between parental engagement in ECD and education and children's long term development. This concept has now been picked up by other jurisdictions.

We must face up to the cost of improving ECD initiatives, given our need to take steps to improve the quality of human capital in today's knowledge-based society. We did not set out

the potential cost of a provincial network of ECD and parenting centres against expected use in the first few years of implementation. Part of the reason for this was our view that the centres should be supported by all sectors of the community and thus it would be difficult to estimate the costs to government before communities had sufficient experience in establishing ECD and parenting centres. The expenditures on ECD in developed countries range from about 0.1% of GDP to more than 0.7% to 0.8% of GDP. Canada, based on the OECD data (1998) is about 0.2% of GDP. It is recognized today that for every \$1 invested in ECD, the minimum return to society is \$3.⁵⁵

We have now prepared a rough estimate of costs for implementing a provincial network of ECD and parenting centres in Ontario based on the OECD documents and the *Early Years Study*.¹ Our financial projections and assumptions are consistent with those of the federal government⁵⁶ and an extensive cost-benefit analysis study by Cleveland and Krashinsky.⁵⁷

The provincial government now spends approximately \$1.5 billion on what we consider are key components of ECD and parenting centres, recommended in the *Early Years Study*. About \$800 million of this sum is the cost of kindergarten programs which we recommended should be part of the ECD and parenting centre concept. There are approximately 900,000 children aged 0 to 6 years in Ontario. The estimated annual cost per child for ECD and parenting centres (0 to 6) would be around \$7,000 (includes cost of nonparental care). This would mean a total cost of about \$6.3 billion for all families with young

children. However, these initiatives must not be compulsory so in the initial stages not all families would wish to take part.

The recent OECD report on ECD in Western countries provides a base on which to make some estimates of costs based on participation and funding sources. Based on this experience, about 20% to 30% of working parents with children in the 0 to 3 age group will, at this stage of socioeconomic change in developed societies, make use of ECD and parenting centres that include nonparental care options (this is influenced by parental leave policies). This could mean for Ontario about 90,000 children in the 0 to 3 age group. In the 3 to 6 age group (including kindergarten), the use of ECD and parenting centres that provide nonparental care (full or part time) could reach about 80% or 360,000 children. Although these programs must not be compulsory, once centres are established there would likely be about 450,000 children in the 0 to 6 age group taking part in ECD and parenting centres recommended in the report. It is also likely that utilization will climb over time. The estimated average cost/child based on U.S. and OECD data in these centres would be about CAD\$7,000/child/year (including private sector investment and voluntary contributions and contributions in kind).

Thus, the total cost to build an initial network of ECD and parenting centres, primarily based in schools and community centres, available for all families with young children, providing full or part time nonparental care, would be about \$3.15 billion. It could take at least three to five years to reach this level of participation. The provincial government presently spends about \$1.5 billion/year (this includes kindergarten

and the federal government contribution) that supports programs that could fit into the activities of ECD and parenting centres. Thus, to build on the existing base to establish a network of ECD and parenting centres in communities would require an incremental increase from all sources over the next few years of an additional \$1.65 billion per year by the end of five years.

The OECD data shows that for the 3 to 6 age group between 11% to 60% of the costs are covered by fees. If one assumes that about 30% of the total cost (\$3.15 billion) could be recovered by fees, this would provide about \$945 million. This would leave a shortfall of about \$700 million. With the right incentives and tax credits for the involvement of the private sector in communities, a further \$300 million to \$400 million might be provided (about 5% of the base tax for corporations in Ontario). This would leave a shortfall of about \$350 million. This may seem like a large sum of money for a government focused on cutting taxes, but for governments that are vitally interested in the quality of human capital and the future of their society, it is a small sum of money for a wealthy society such as Ontario. For example, the government reimbursement of \$200 to all Ontario taxpayers in 2000 would have more than covered the government's cost for this investment for one year. Part or all of the provincial government's additional contribution could be covered by the federal government if it takes steps to incrementally increase federal support for ECD as announced on September 11, 2000. The September 11, 2000 proposal shows that Ontario will receive about \$187 million in the third year from this initiative.⁴

VII Considerations for the Government of Ontario

We already have evidence from the Parenting and Family Literacy Centres in many Toronto schools of how to improve ECD (see **Appendix 1**). This initiative, which started in 1981, contains some of the components recommended for ECD and parenting centres, and improves outcomes for the 0 to 6 age group.⁵⁸ Given this and evidence from other jurisdictions, it is irresponsible for Ontario society and government to not act and implement what we now know is an important initiative to give all young children equality of opportunity for future development and improve the quality of human capital.

The activities taken since our report was released in April 1999, have demonstrated that our communities can mobilize and take steps to establish networks of ECD and parenting centres in their communities. Some have already established linkages with the school system that could become important. The province now has the opportunity to build on this and establish an initiative that embraces the concept of “from early child development to human development” that creates an integrated relationship between ECD (the 0 to 6 age group) and education.

Overcoming the Barriers

One of the key issues is how to develop a shared framework with the various units in government whose work affects some aspects of ECD and parenting in the province. The British government, in setting up Sure Start, set out to build a common framework of understanding in its public service. Recognizing that ECD affects health and learning, they set the initiative up so that the Minister of Health and Education had joint

responsibility. They did not put the responsibility to the Ministry involved with community and social services. They may have taken the first step to establishing a Ministry of Human Development involving ECD and Education. In the light of our increasing understanding about experience-based brain development, this could be an important evolution to ensure a well-educated population.

The second barrier to understanding is in part within many of the faculties of education. For the disciplined structure of universities to move, it will take some time. It is interesting that some of the leadership in family medicine, pediatrics, and child psychiatry are taking steps to put the implication of ECD and physical and mental health into their curriculums.

In some areas, community colleges and university education faculties are beginning to collaborate on programs for preparing teachers in ECD.

When we did the *Early Years Study*, we found many school boards and their administrative staff lacked interest in the importance of ECD (there were of course exceptions). Today, we find a much better understanding between ECD initiatives in communities and their boards of education and community government.

Finally, there are community groups who are resistant or disinterested. However, within the private sector, there is increasing interest in the subject, particularly among businesses that employ women with children in the 0 to 6 age group.^{59,60}

This change in interests and understanding would suggest that what is now needed is political will and leadership.

An Integrated Program for ECD as a Base for Human Development

If the government appreciates the importance of the concept, “from early child development

to human development”, it will take the necessary steps to enable communities to establish programs for ECD linked to education available for all families with young children. In **Table IV**, we set out the key points that a government should consider.

First of all, ECD is a basic step in human development for all young children. The

TABLE IV - WHAT CAN SOCIETY AND A GOVERNMENT DO?

1. Learn how to better integrate ECD and education, (the concept of a human development initiative).
2. Establish a legislative and funding framework to support the building of ECD and parenting centres as part of a broader human development initiative. Do not place ECD, a component of human development, in ministries or municipal service programs concerned with health care and welfare programs.
3. Build on and involve the community in establishing the network of ECD and parenting centres available for all families with young children (communities have demonstrated some capacity to do this). Encourage and support schools to be part of this and embrace in the schools the principles of human development through programs such as Roots of Empathy.
4. Examine how other jurisdictions have overcome the silo structures of the public service and put in place more integration.
5. Establish a network of bases involving postsecondary education institutions (such as HELP in B.C.) to promote and help apply the new knowledge in the districts or regions in which they are located to provide a coordinated EDI initiative to assess ECD based on the outcome measures, and help communities to develop strategies to improve ECD in their districts.
6. Encourage postsecondary institutions to establish initiatives that include ECD in their health, education and social science programs within a human development context.
7. What should the government organization be?
 - The equivalent of a Ministry of Human Development that includes all the institutional structure from conception to postsecondary education that influences human development
8. Themes for a government initiative in ECD could be:
 - From Early Child Development to Human Development
 - Enabling Communities

VII Considerations for the Government of Ontario

government's role should not be placed in a ministry primarily concerned with welfare, special treatment programs and so-called "children at risk". It should be in a ministry concerned with the first stage of human development. In an ideal world, one could link ECD and education into a ministry of human development. Experience-based brain development does not create the division between ECD and education society has created that can affect human development. To achieve the integration will take time. However, steps can be taken now to implement a process that will need to evolve over the years.

There are already developments in Ontario regions that are a base to create integration between ECD and parenting and education. The tens of thousands of children and parents who have benefited from the Parenting and Family Literacy Centres of the Toronto District School Board over the past 21 years provide the strongest foundation for the principles of this integration. Other developments engage groups involved with ECD initiatives, municipal government and school boards. The First Duty project in Toronto neighbourhoods involving the Toronto District School Board, City of Toronto, Atkinson Charitable Foundation, numerous children's organizations, and communities is one example.⁶¹ They have already taken steps to reduce the barriers to integration between ECD and education. Other regions such as Grey Bruce and Niagara Region have groups looking at this integration. The provincial government should take steps to implement the recommendations set out in the recent Coffey McCain report.⁵⁹

The Ontario Government has, through its matching grant support, funded an Ontario initiative, Roots of Empathy, in its school system, that is recognized as important across Canada and in other countries (Japan, Australia, United Kingdom and the U.S.). This initiative teaches human development through the universal access point of the education system. Roots of Empathy is a classroom-based parenting program which brings a community parent and infant into the classroom so that the rising generation learns, in an experiential way, key factors influencing human development (**Appendix 2**). Roots of Empathy integrates the education system with community agencies and organizations (they provide instructors for Roots of Empathy training) and parents and infants, the very heart of the community. Curriculum Services Canada has recently approved and recommended the Roots of Empathy Curriculum and Training Manual, "Roots of Empathy is recommended as a valid program for use with students in kindergarten to Grade 8 to promote understanding of human development, diversity, and the uniqueness of individuals."⁶² It is to the credit of the Ontario Government that they have supported this highly innovative approach to ECD and human development.

As outlined in the introduction, the significance of ECD for human development is now increasingly recognized in the developed and developing world. The importance of this for society is well stated by the Dutch economist, Jacques van der Gaag, in the recent World Bank report:⁶³

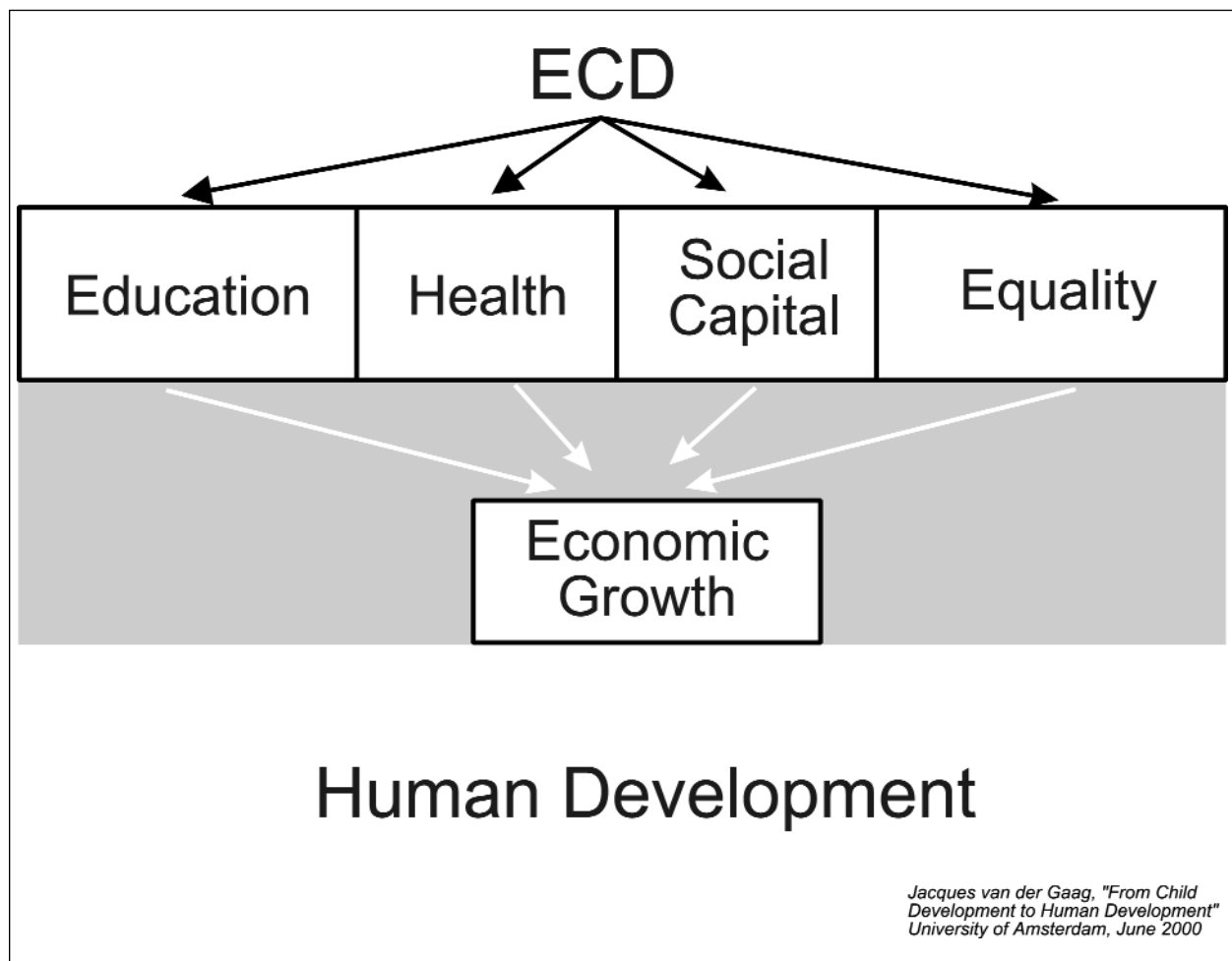
"Well-executed and well-targeted ECD programs are initiators of human development."

They stimulate improvements in education, health, social capital, and equality that have both immediate and long-term benefits for the children participating in the programs. Investments in ECD programs are in many ways investments in the future of a nation."

Ontario has the opportunity to provide leadership in enabling communities to put in place ECD programs to improve human development for the future. This investment is key for the future of our next generation communities and society.

The importance of ECD for society is captured in **Figure 13** taken from his recent World Bank paper.

FIGURE 13 - FROM EARLY CHILD DEVELOPMENT (ECD) TO HUMAN DEVELOPMENT



APPENDIX 1

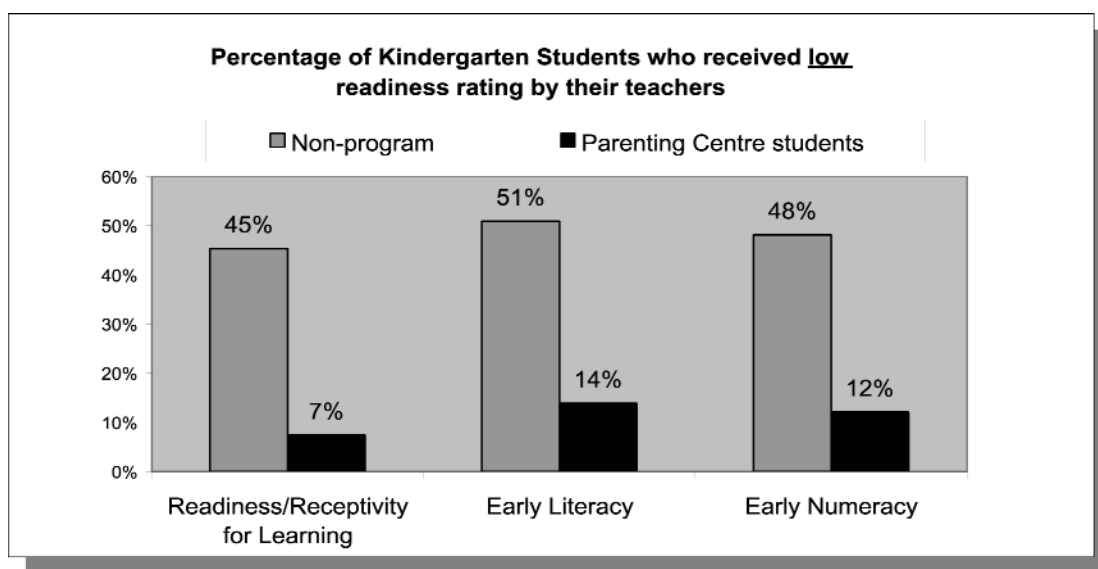
DO PARENTING AND FAMILY LITERACY CENTRES MAKE A DIFFERENCE? - ABSTRACT, AUGUST 2001

Parenting and Family Literacy Centres were first set up by Mary Gordon, in 1981, in five inner city schools in Toronto. By 2001 the number of in-school Parenting Centres grew to 41 spreading throughout the inner city downtown schools with a high proportion of the students coming from different language and cultural backgrounds within economically disadvantaged neighbourhoods.

One of the key mandates of these Centres is to increase the school readiness level of young children in these inner city neighbourhoods, where there has been a continuous concern with high rates of academic failure and school dropout. Recent data has shown that the majority of these children entering kindergarten were rated by their teachers to be *not* well prepared for formal schooling, or as *not* having developed the expected level of early literacy and numeracy skills for their kindergarten programs. To raise these children's school readiness level, Parenting and Family Literacy Centres were set up within these schools to provide for both the preschoolers and their parents or caregivers a

“Readiness to Learn” program which would foster positive parent/child interaction and optimal development of the child.

In 1999-2000, with the funding support of the Atkinson Foundation, both quantitative and qualitative data have been collected to ascertain the effectiveness of these in-school Parenting Centres. The first-year (1999-2000) data was gathered from four different sources: teacher assessment, Early Development Instrument, parent surveys, and teacher interviews. While further research that improves upon research controls needs to be done, this preliminary research is extremely promising and shows that in-school Parenting Centres do make a difference for young students in inner city schools, especially those with a high proportion of ESL population. Hard data gathered from over 200 Kindergarten students indicate that young children who had attended the Parenting Centre with their parents or caregivers in these schools were much more prepared for schooling than their peers in the same neighbourhood who had not attended the program. As illustrated in the chart below,

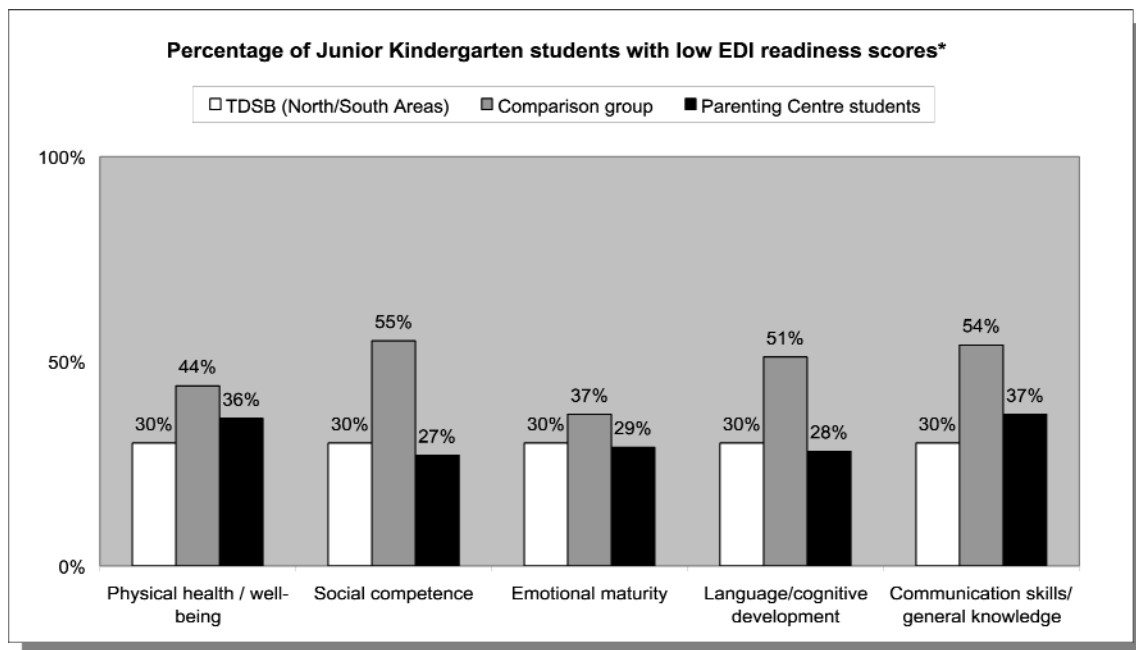


Appendix 1 - Do Parenting and Family Literacy Centres Make a Difference?

about half of the Kindergarten children from the latter group had been rated by their teachers to have a *low* readiness or receptivity level for learning, and a *low* level of early literacy and numeracy skills; on the other hand, for those who had attended the program, their chances of being rated as having low readiness levels were significantly smaller - around 10%.

To confirm the above findings, the Early Development Instrument (EDI)¹ assessment (administered in the North and South Areas of the Toronto public schools in Year 2000) was used as an independent source of data. Similar to the teachers' assessment mentioned above, the EDI measure also shows that 4-year-old children from the inner city schools sampled in

this study had a much greater chance than the overall population to have *low* school readiness level - especially in the areas of social competence, language development, and communications skills and general knowledge. (See chart below.) However, for children in those schools who had attended Parenting Centres with their parents or caregivers (black bars), their chances of receiving low EDI readiness scores were significantly smaller than their peers who had no exposure to the program, and were comparable to the general population. In other words, the school readiness level of Parenting Centres children in these inner city schools was much higher than their peers in the neighbourhood, and was similar to that of the children across the city.



*The low EDI readiness scores in here were based on the lowest 30th percentile scores derived from the results of all JK students in the North and South Areas of Toronto public schools.

¹This instrument, which was developed by The Canadian Centre for Studies of Children at Risk (McMaster University) as part of the Readiness to Learn Project funded by the federal HRDC, has been used as a community measure to gauge Kindergarten students' school readiness level at the group level. The instrument has been implemented in several school boards across Canada.

Appendix 1 - Do Parenting and Family Literacy Centres Make a Difference?

Teachers' comments and observations were also consistent with the hard evidence described above. For instance, according to the teachers' interviews, some of the most obvious differences demonstrated by these young children were in the areas of language development, socialization, school adjustment, listening skills, as well as their ability to adjust to routines, follow instructions, play purposefully, and learn from and interact with adults.

Aside from the children themselves, parents also benefited in terms of acquiring valuable parenting skills, establishing a supportive social network, and building rapport and links with their child's school. Finally, Kindergarten teachers also find their in-school Parenting Centres workers a great support to their work, particularly in helping them detect and understand the needs of their students, as well as in connecting them with the parents of their students.

APPENDIX 2

ROOTS OF EMPATHY

Roots of Empathy (ROE) is a not-for-profit organization dedicated to building caring, peaceful, and civil societies through the development of empathy in children and adults. The main activity of the organization is the delivery of a parenting education program for elementary school students, based on monthly visits to the classroom by a parent and infant from the school neighbourhood. Mary Gordon is the Founder/President of the program, which has its head office in Toronto. In the fall of 2002, 10,000 children, in seven provinces of Canada, will participate in ROE programs. More than 5000 of these children will be in Ontario. With a pilot already in Japan, ROE is poised for international implementation.

A trained and certified ROE Instructor coaches students to observe, over the school year, how their baby forms an attachment to his or her parent. The infant's development is chronicled and children learn to recognize their baby's cues and unique temperament, while celebrating developmental milestones. The Instructor conducts additional sessions before and after each family visit for a total of 27 sessions over the course of a year. The curriculum has four levels for four different age groups from prekindergarten to Grade 8.

The short term goals of ROE are to foster the development of empathy and emotional literacy. As children learn to take the perspective of others, they are less likely to hurt through bullying, exclusion, aggression, and violence. Increases in empathy are associated with pro-social behaviour and reduced aggression. Principles of democracy thrive in the ROE classroom as children learn how to challenge cruelty and injustice. The

long term goals of the program are to improve parenting and human development in the next generation, thereby breaking cycles of intergenerational violence, poverty, and poor parenting.

The experiential nature of the program and its problem solving approach results in learning which is likely to be long term and behaviour changing. ROE uses the universal access point of public education to deliver public health messages that can prevent infant injury and abuse, advance optimal early childhood development, and reduce violence/aggression. Topics covered include: breast feeding, the hazards of alcohol and smoking in pregnancy, Shaken Baby Syndrome, and S.I.D.S. Messages of social inclusion, and activities that are consensus building contribute to a culture of caring that changes the tone of the classroom. Children are prepared for responsible and responsive parenting as they increase their knowledge about human development.

ROE is a transformational program as it is changing children's perceptions, attitudes, and behaviour in the present and impacting on the future. Its strategy of changing the world classroom by classroom presupposes that the classroom is a microcosm of society.

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