



# EMPOWERING THE FUTURE:

## Best Evidence for Investing in Early Childhood Education for Canada

As Canadian policy makers and political leaders continue to debate the value of investing in preschool children, they should note the consensus among Canadian scholars based on both Canadian and international research. We can improve children's lives and the economic and social wellbeing of our society by investing in early childhood education. Scholars from economics, psychology, education, health, medicine, and the neurosciences, agree that high-quality early childhood education results in improvements in scholastic, social, and health outcomes for children and their families, as well as in economic benefits for Canadian society.

We come together as researchers and scholars to ask policy makers and political leaders to move forward in investing in young children using the comprehensive body of scientific research available. We offer a succinct overview to urge policy makers to make investing in high-quality early childhood

education a priority in Canada. We present six findings from the scientific literature that show why investment in early childhood is important.

### **High-quality preschool shows positive outcomes on child language, literacy and math skills**

Systematic assessments across Canada indicate that as many as 25% of kindergarten children show signs of vulnerability in their physical, language, and behavioural development at the time of school entry.

A strong body of research indicates that high-quality early childhood education enhances a child's early language, literacy, and math skills when assessed following program completion. These findings have been repeatedly replicated and shown for small targeted programs, as well as large programs within the public system. Over 40 years of studies have demonstrated at least a one-third of a year of advancement in children that attend a high-quality early childhood education program. Recent findings



also indicate that socio-economically disadvantaged children are more likely to benefit from these programs, thus reducing socioeconomic related disparities in school achievement. Giving children a proper start increases their language, literacy and mathematics competency.

### **High-quality preschool shows positive outcomes on child socio-emotional development**

Socio-emotional difficulties in early childhood are precursors of school dropout, adult mental health problems, and difficulties in the job market. With as many as 25% of Canadian kindergarten children having socio-emotional difficulties, addressing these problems within preschool and early elementary school settings is imperative. These problems can be solved and children can get onto better developmental trajectories. Effects of preschool programs that target all children have been somewhat modest, but effects for children who are already showing difficulties and working directly with those children and their parents show important long-term benefits. These benefits include reduced substance abuse, school dropout, juvenile delinquency, and adult criminality, as well as higher levels of employment and income in the job market.

### **Greater benefits are seen with higher quality of programs**

In Canada, we must increase our investment in early childhood education without taking shortcuts on quality. Preschool programs that are high quality have been repeatedly shown to have larger positive impacts on the development of a child. Higher-quality programming also results in improvements that are more likely to be maintained. The most effective



elements in high-quality programs have been shown to be positive and stimulating interactions. Providing ongoing support and professional development helps ensure that such positive environments are being delivered. When instructional support is high, children benefit more. Providing

ongoing professional development, improving educational requirements, and teacher qualifications are thus important cornerstones of high-quality preschool programs.

### **High quality preschool shows long-lasting benefits and is beneficial for Canada's diverse population**

Although the benefits of preschool on test scores characteristically weaken over time, cumulating evidence suggests that persistence of the impact of preschool into adulthood is seen in a wide range of important outcomes. Enduring benefits, and particularly for those in disadvantaged families, include decreases in school dropout rates, criminal behavior, and drug use, as well as increased adult earnings.

In an ethnically and economically diverse population such as Canada's, public preschool must be beneficial to all members of our population. Positive benefits of high-quality preschool are seen in children from both low- and middle- socio-economic classes, with stronger effects for children in low socio-economic circumstances, dual-language children, and children from immigrant families. Investing in early childhood education programs shows long-lasting societal benefits.

## The benefits of investing in early childhood education far outweigh the costs

Do the benefits of investing in high quality preschool balance the significant cost? Benefits are evaluated by 1) decreases in expenditures on programs such as social assistance, special education, and transfers to families; and 2) a rise in economic production from increased adult earnings and tax transfers. Research has reliably demonstrated that the benefits of preschool outweigh the costs, indicating a prudent economic investment. Indeed high-quality preschool programs are amongst the most cost-effective of the social programs.

## Additional child and family benefits are seen when programs include parent engagement

Optimal development of children is dependent on the quality of the home and school environments. Preschool programs with the best long-term effects on reading, math, and social behaviour also include a parenting component. These focus on optimizing parent-child interaction. Therefore, incorporating parent support components to enhance learning outside of the early childhood education program can augment the impact of preschool programs on child early scholastic achievement.

This letter draws from recent reviews of best available evidence on early childhood education and care:

Yoshikawa, H., Weiland, C., Brooks-Gunn, J., Burchinal, M. R., Espinosa, L. M., Gormley, W. T., Ludwig, J., Magnuson, K., Phillips, D., & Zaslow, M. (2013). *Investing in our future: The evidence base on preschool education*. Ann Arbor, Michigan: Society for Research in Child Development and New York: Foundation for Child Development. Retrieved from: <http://goo.gl/2gxwtS>

Bennett, J. (Ed.). (2011). Childcare – Early Childhood Education and Care. In: *Encyclopedia on Early Childhood Development Online*. Retrieved from: <http://goo.gl/IMhG6j>.

### In partnership with:

The Atkinson Centre for Society and Child Development & The International Network for Early Childhood Knowledge Mobilization

Correspondence for this letter should be directed to

Jennifer Jenkins, Ph. D., C. Psych.  
Atkinson Chair of Early Child Development and Education  
Applied Psychology and Human Development  
University of Toronto  
[jenny.jenkins@utoronto.ca](mailto:jenny.jenkins@utoronto.ca)

Michel Boivin, Ph.D., MSRC/FSRC  
Canada Research Chair in Child Development  
Department of Psychology, Laval University  
[michel.boivin@psy.ulaval.ca](mailto:michel.boivin@psy.ulaval.ca)

Emis Akbari, Ph.D  
Atkinson Centre for Society and Child Development  
Ontario Institute of Studies in Education (OISE)  
University Of Toronto  
[emis.mohebat@utoronto.ca](mailto:emis.mohebat@utoronto.ca)

Sign on at [www.ECinCanada.ca](http://www.ECinCanada.ca)



# FOUNDING SIGNATORIES

**Emis Akbari**

Atkinson Centre for Society and Child Development  
University of Toronto  
Toronto, Ontario

**Michel Boivin**

École de psychologie  
Université Laval  
Québec, Québec

**Jennifer Jenkins**

Atkinson Centre for Society and Child Development  
University of Toronto  
Toronto, Ontario

**Daniel Ansari**

Brain and Mind Institute  
Department of Psychology  
Western University  
London, Ontario

**Meghan Azad**

Department of Pediatrics and Child Health  
University of Manitoba  
Winnipeg, Manitoba

**Rima Azar**

Department of Psychology  
Mount Allison University  
Sackville, New Brunswick

**Jessica Ball**

School of Child and Youth Care  
University of Victoria  
Victoria, British Columbia

**Ronald Barr**

Department of Pediatrics, Faculty of Medicine  
University of British Columbia  
Vancouver, British Columbia

**Marco Battaglia, MD**

Département de psychiatrie et de neurosciences  
Université Laval  
Québec City, Québec

**Joanne Baxter**

Department of Child and Youth Studies  
Mount Royal University  
Calgary, Alberta

**Miriam Beauchamp**

Département de psychologie  
Université de Montréal  
Centre de recherche de l'Hôpital Ste-Justine Laboratoire de  
neuropsychologie développementale ABCs  
Montréal, Québec, Canada

**Annie Bernier**

Département de psychologie  
Université de Montréal  
Montréal, Québec

**Marc Bigras**

Département de psychologie  
Université du Québec à Montréal  
Montréal, Québec

**Nathalie Bigras**

Département de didactique  
Université du Québec à Montréal  
Montréal, Québec

**Elizabeth Kay-Raining Bird**

School of Human Communication Disorders  
Dalhousie University  
Halifax, Nova Scotia

**Catherine Birken**

Department of Pediatrics, University of Toronto  
Paediatric Medicine, The Hospital for Sick Children  
Toronto, Ontario

**Jeff Bisanz**

Department of Psychology  
University of Alberta  
Edmonton, Alberta

**Cindy Blackstock**

Executive Director, First Nations Child and Family Caring  
Society of Canada  
Faculty of Extension  
University of Alberta  
Edmonton, Alberta

**Linda Booij**

Department of Psychology and Psychiatry  
Queen's University  
Kingston, Ontario

**Signe Bray**

Departments of Radiology  
University of Calgary  
Alberta Children's Hospital Research Institute for Child and  
Maternal Health (ACHRI)  
Calgary, Alberta

**Monique Brodeur**

Faculté des sciences de l'éducation  
Université du Québec à Montréal  
Montréal, Québec

**Marni D. Brownell**

Department of Community Health Sciences, College of  
Medicine, Faculty of Health Sciences  
University of Manitoba  
Winnipeg, Manitoba

**Jean-François Bureau**

École de psychologie  
Université d'Ottawa  
Ottawa, Ontario

**John Cairney**

Department of Family Medicine  
McMaster University  
Hamilton, Ontario

**Barbara Cameron**

Department of Equity Studies  
Department of Political Science  
York University  
Toronto, Ontario

**France Capuano**

Département d'éducation et formation spécialisées  
Université du Québec à Montréal  
Montréal, Québec

**Mariette Chartier**

Department of Community Health Sciences  
College of Medicine, Faculty of Health Sciences  
University of Manitoba  
Winnipeg, Manitoba

**Pat Cleave**

School of Human Communication Disorders  
Dalhousie University  
Halifax, Nova Scotia

**Gordon Cleveland**

Department of Management  
University of Toronto Scarborough  
Scarborough, Ontario

**Jean Clinton**

Department of Psychiatry and Behavioural Neuroscience  
McMaster University  
Hamilton, Ontario

**Patricia Conrod**

Département de psychiatrie  
Université de Montréal  
Montréal, Québec

**Rob Coplan**

Department of Psychology  
Carleton University  
Ottawa, Ontario

**Penny Corkum**

Departments of Psychology and Neuroscience; Psychiatry;  
Pediatrics  
Dalhousie University  
Halifax, Nova Scotia

**Carl Corter**

Dr. Eric Jackman Institute of Child Study  
Department of Applied Psychology and Human Development  
University of Toronto  
Toronto, Ontario

**Sylvana Côté**

Département de médecine sociale et préventive  
Université de Montréal  
Montréal, Québec

**Wendy Craig**

Department of Psychology  
Queen's University  
Kingston, Ontario

**Hélène Deacon**

Department of Psychology and Neuroscience, Department  
of Pediatrics  
Dalhousie University  
Halifax, Nova Scotia

**Alain M. Desrochers**

École de psychologie  
Université d'Ottawa  
Ottawa, Ontario

**Elizabeth Dhuey**

Department of Management  
University of Toronto Scarborough  
Scarborough, Ontario



**Adele Diamond**

Department of Psychiatry  
University of British Columbia  
Vancouver, British Columbia

**Ginette Dionne**

École de psychologie  
Université Laval  
Québec City, Québec

**Lise Dubois**

Institute of Population Health  
Department of Epidemiology and Community Medicine  
University of Ottawa  
Ottawa, Ontario

**Marc-André Dugas**

Directeur, Département de pédiatrie  
Chef du département de pédiatrie  
Université Laval  
Québec, Québec

**Jim Dunn**

Department of Health, Aging, and Society  
McMaster University  
Hamilton, Ontario

**Joan Durrant**

Department of Family Social Services, Department of  
Community Health Sciences  
University of Manitoba  
Winnipeg, Manitoba

**Frank J. Elgar**

Institute for Health and Social Policy  
Department of Psychiatry  
McGill University  
Montréal, Québec

**Rachel Eni**

Department of Family Social Sciences  
University of Manitoba  
Winnipeg, Manitoba

**Steven Feldgaier**

College of Medicine  
Department of Clinical Health Psychology  
University of Manitoba  
Winnipeg, Manitoba

**Alison Fleming**

Department of Psychology  
Fraser Mustard Institute for Human Development  
University of Toronto Mississauga  
Mississauga, Ontario

**Pierre Fortin**

Département des sciences économiques  
Université du Québec à Montréal  
Montréal, Québec

**Sid Frankel**

Faculty of Social Work  
University of Manitoba  
Winnipeg, Manitoba

**Marie-Hélène Gagné**

École de psychologie  
Université Laval  
Québec City, Québec

**Marie-Claude Geoffroy**

Institut universitaire en santé mentale Douglas  
Université McGill  
Montréal, Québec

**Andrea Gonzalez**

Department of Psychiatry and Behavioural Neurosciences  
McMaster University  
Hamilton, Ontario, Canada

**Hillel Goelman**

Faculty of Education, Educational and Counselling  
Psychology, and Special Education  
University of British Columbia  
Vancouver, British Columbia

**Pierre Gosselin**

School of Psychology  
University of Ottawa  
Ottawa, Ontario

**Jean-Philippe Gouin**

Department of Psychology  
Concordia University  
Montréal, Québec

**Susan Graham**

Department of Psychology  
Alberta Children's Hospital Research Institute Hotchkiss  
Brain Institute  
University of Calgary  
Calgary, Alberta

**Martin Guhn**

Human Early Learning Partnership, School of Population and  
Public Health  
Faculty of Education, Educational and Counselling  
Psychology, and Special Education  
University of British Columbia  
Vancouver, British Columbia

**Ana Hanlon-Dearman**

Department of Pediatrics and Child Health  
University of Manitoba  
Winnipeg, Manitoba

**Jane Hewes**

Faculty of Health and Community Studies, Early Learning  
and Child Care  
Grant MacEwan University  
Edmonton, Alberta

**Wendy L.G. Hoglund**

Department of Psychology  
University of Alberta  
Edmonton, Alberta

**Nina Howe**

Department of Education  
Concordia University  
Montréal, Québec

**Sophie Jacques**

Department of Psychology and Neuroscience  
Dalhousie University  
Halifax, Nova Scotia

**Janet Jamieson**

Department of Early Childhood Education  
Red River College  
School of Health Services and Community Services  
Red River College  
Winnipeg, Manitoba

**Zeenat Janmohamed**

Atkinson Centre for Society and Child Development  
University of Toronto  
George Brown College, School of Early Childhood  
Toronto, Ontario

**Magdalena Janus**

Department of Psychiatry and Behavioural Neurosciences  
Department of Clinical Epidemiology and Biostatistics  
McMaster University  
Hamilton, Ontario

**Christa Japel**

Département d'éducation et formation spécialisées  
Université du Québec à Montréal  
Montréal, Québec

**Charlotte Johnson**

Department of Psychology  
University of British Columbia  
Vancouver, British Columbia, Ontario

**Alan Katz**

Departments of Community Health Services and Family  
Medicine  
University of Manitoba  
Winnipeg, Manitoba

**Paul Kershaw**

School of Population and Public Health  
University of British Columbia  
Vancouver, British Columbia

**Isabel Killoran**

Faculty of Education  
York University  
Toronto, Ontario

**Sara Kirk**

School of Health and Human Performance  
Dalhousie University  
Halifax, Nova Scotia

**Terry Klassen**

Manitoba Institute of Child Health  
Children's Hospital Research Institute of Manitoba  
Faculty of Medicine  
University of Manitoba  
Winnipeg, Manitoba

**Bryan E. Kolb**

Department of Neuroscience  
Canadian Centre for Behavioural Neuroscience  
University of Lethbridge  
Lethbridge, Alberta

**Michael Kramer**

Institute of Human Development, Child and Youth Health  
Department of Pediatrics  
McGill University  
Montréal, Québec

**Éric Lacourse**

Département de sociologie  
Université de Montréal  
Montréal, Québec

**Rachel Langford**

School of Early Childhood Studies  
Ryerson University  
Toronto, Ontario

**John LeBlanc**

Departments of Pediatrics, Psychiatry, Community Health,  
Epidemiology  
Dalhousie University  
Halifax, Nova Scotia

**Leanne Leclair**

Department of Occupational Therapy  
University of Manitoba  
Winnipeg, Manitoba

**Catherine M. Lee**

Professeur, École de psychologie  
Université d'Ottawa  
Ottawa, Ontario

**Kang Lee**

Dr. Eric Jackman Institute of Child Study  
University of Toronto  
Toronto, Ontario

**Donna S. Lero**

Department of Family Relations and Applied Nutrition  
University of Guelph  
Guelph, Ontario

**Nicole Letourneau**

Faculties of Nursing and Medicine (Pediatrics & Psychiatry)  
University of Calgary  
Calgary, Alberta

**Kathryn A. Levine**

Faculty of Social Work  
University of Manitoba  
Winnipeg, Manitoba

**Patrick Lewis**

Faculty of Education  
University of Regina  
Regina, Saskatchewan

**Sonia Lupien**

Département de psychiatrie  
Université de Montréal  
Montréal, Québec

**Stephen Lye**

Fraser Mustard Institute for Human Development  
University of Toronto  
Toronto, Ontario

**Harriet MacMillan**

Departments of Psychiatry and Behavioural Neurosciences  
Offord Centre for Child Studies  
McMaster Children's Hospital/Hamilton Health Sciences  
McMaster University  
Hamilton, Ontario

**Sheri Madigan**

Department of Psychology  
University of Calgary  
Calgary, Alberta

**Daphne Maurer**

Department of Psychology  
McMaster University  
Hamilton, Ontario

**Bernice McLeod**

Atkinson Centre for Society and Child Development  
University of Toronto  
George Brown College, School of Early Childhood  
Toronto, Ontario

**Patrick McGrath**

Departments of Psychology, Pediatrics, and Psychiatry  
Dalhousie University  
Halifax, Nova Scotia

**Jonathon McGuire**

Departments of Pediatrics and Health Policy, Management  
and Evaluation  
The Hospital for Sick Children  
University of Toronto  
Toronto, Ontario

**Douglas McMillan**

Department of Pediatrics, Faculty of Medicine  
Dalhousie University  
Halifax, Nova Scotia

**James McNinch**

Faculty of Education  
University of Regina  
Regina, Saskatchewan

**Philip Merrigan**

Département des sciences économiques  
Université du Québec à Montréal  
Montréal, Québec

**Michael Meaney**

Departments of Psychiatry, Neurology, and Neurosurgery  
McGill University  
Montréal, Québec, Canada

**Javier Mignone**

Department of Family Social Sciences  
University of Manitoba  
Winnipeg, Manitoba, Canada

**William J. Montelpare**

Department of Applied Human Sciences  
University of Prince Edward Island  
Charlottetown, Prince Edward Island



**Jacques Montplaisir**

Département de psychiatrie  
Université de Montréal  
Montréal, Québec

**Chris Moore**

Department of Psychology and Neuroscience  
Dalhousie University  
Halifax, Nova Scotia

**Greg Moran**

Department of Psychology  
Western University  
London, Ontario

**Gina Muckle**

École de psychologie  
Université Laval  
Québec City, Québec

**Elizabeth Munroe**

Faculty of Education  
St. Francis Xavier University  
Antigonish, Nova Scotia

**Nathan C. Nickel**

Department of Community Health Sciences  
University of Manitoba  
Winnipeg, Manitoba

**Anne-Monique Nuyt**

Faculté de médecine  
Université de Montréal  
Montréal, Québec

**Isabelle Ouellet-Morin**

École de criminologie  
Université de Montréal  
Montréal, Québec

**Sophie Parent**

École de psychoéducation  
Université de Montréal  
Montréal, Québec

**Charles Pascal**

Department of Applied Psychology and Human Development  
University of Toronto  
Toronto, Ontario

**Janette Pelletier**

Dr. Eric Jackman Institute of Child Study  
University of Toronto  
Toronto, Ontario

**Deborah Pepler**

Department of Psychology  
York University  
Toronto, Ontario

**Michal Perlman**

Dr. Eric Jackman Institute of Child Study  
University of Toronto  
Toronto, Ontario

**Tara Perrot**

Department of Psychology and Neuroscience  
Dalhousie University  
Halifax, Nova Scotia

**Ray DeV Peters**

Department of Psychology  
Queen's University  
Kingston, Ontario

**David Philpott**

Faculty of Education  
Memorial University of Newfoundland  
St. John's, Newfoundland

**Bruno Piedboeuf**

Département de pédiatrie, Faculté de médecine  
Université Laval  
Québec City, Québec

**André Plamondon**

Département des fondements et pratiques en éducation  
Université Laval  
Québec, Québec

**François Poulin**

Département de psychologie  
Université du Québec à Montréal  
Montréal, Québec

**Susan Prentice**

Department of Sociology  
University of Manitoba  
Winnipeg, Manitoba

**Larry Prochner**

Faculty of Education  
University of Alberta  
Edmonton, Alberta

**Marie-France Raynault**

Département de médecine social et préventive  
Université de Montréal  
Montréal, Québec

**Holly Recchia**

Department of Education  
Concordia University  
Montréal, Québec

**Elisa Romano**

École de psychologie  
Université d'Ottawa  
Ottawa, Ontario

**Leslie L. Roos**

Faculty of Medicine  
University of Manitoba  
Winnipeg, Manitoba

**Noralou Roos**

Department of Community Health Sciences  
University of Manitoba  
Winnipeg, Manitoba

**Patricia Chorney Rubin**

School of Early Childhood  
George Brown College,  
Toronto, Ontario

**Susan Rvachew**

School of Communication Sciences and Disorders  
McGill University  
Montréal, Québec

**Rob Santos**

Manitoba Centre for Health Policy  
Department of Community Health Sciences  
University of Manitoba  
Winnipeg, Manitoba

**Russell Schachar**

Department of Psychiatry  
University of Toronto  
The Hospital for Sick Children  
Toronto, Ontario

**Kimberly Schonert-Reichl**

Department of Educational and Counselling Psychology, and  
Special Education  
University of British Columbia  
Vancouver, British Columbia

**Jean Séguin**

Département de psychiatrie  
Université de Montréal  
Montréal, Québec

**Monique Sénéchal**

Department of Psychology  
Carlton University  
Ottawa, Ontario

**Lisa Serbin**

Department of Psychology  
Concordia University  
Montréal, Québec

**Prakesh Shah**

Department of Pediatrics and Institute of Health Policy,  
Management, and Evaluation  
University of Toronto  
Toronto, Ontario

**Ann Sherman**

Faculty of Education  
University of New Brunswick  
Fredericton, New Brunswick

**Sheri-Lynn Skwarchuk**

Faculty of Education  
The University of Winnipeg  
Winnipeg, Manitoba

**Isabel Smith**

Department of Pediatrics  
Department of Psychology  
Dalhousie University  
Halifax, Nova Scotia

**Carolyn Snider**

Department of Emergency Medicine  
University of Manitoba  
Winnipeg, Manitoba

**Marla Sokolowski**

Department of Ecology and Evolutionary Biology  
Fraser Mustard Institute for Human Development  
University of Toronto  
Toronto, Ontario

**George Tarabulsy**

École de psychologie  
Université Laval  
Québec, Québec

**Bruce Tefft**

Department of Psychology  
University of Manitoba  
Winnipeg, Manitoba

**Kate Tilleczek**

Faculty of Education  
University of Prince Edward Island  
Charlottetown, Prince Edward Island

**Évelyne Touchette**

Département de psychoéducation  
L'Université du Québec à Trois-Rivières  
Trois-Rivières, Québec

**Suzanne Tough**

Cumming School of Medicine  
University of Calgary  
Calgary, Alberta

**Daniel Trefler**

Department of Economics  
University of Toronto  
Toronto, Ontario

**Richard E. Tremblay**

Département de psychologie  
Université de Montréal  
Montréal, Québec

**Nico Trocmé**

School of Social Work  
McGill University  
Montréal, Québec

**Tracy Vaillancourt**

School of Psychology  
University of Ottawa  
Ottawa, Ontario

**Frank Vitaro**

École de psychoéducation  
Université de Montréal  
Montréal, Québec

**Courtney Ward**

Department of Economics  
Dalhousie University  
Halifax, Nova Scotia

**Ian Weaver**

Department of Psychology and Neuroscience  
Dalhousie University  
Halifax, Nova Scotia

**Janet Werker**

Department of Psychology  
University of British Columbia  
Vancouver, British Columbia

**Sandra Wiebe**

Department of Psychology  
University of Alberta  
Edmonton, Alberta

**J. Douglas Willms**

Canadian Research Institute for Social Policy  
University of New Brunswick  
Fredericton, New Brunswick

**Wynne Young**

Johnson-Shoyama Graduate School of Public Policy  
University of Regina  
Regina, Saskatchewan  
University of Saskatchewan  
Saskatoon, Saskatchewan