

ONTARIO'S KINDERGARTEN PROGRAM

A SUCCESS STORY

(Executive Summary)



How We All Benefit from Quality Public Full-Day Kindergarten



The union represents 83,000 elementary public school teachers, occasional teachers and education professionals across the province. Its Building Better Schools education agenda can be viewed at **BuildingBetterSchools.ca**.



Elementary Teachers' Federation of Ontario Fédération des enseignantes et des enseignants de l'élémentaire de l'Ontario

Elementary Teachers' Federation of Ontario (ETFO) 136 Isabella Street, Toronto, ON M4Y 0B5 416-962-3836 or 1-888-838-3836 etfo.ca

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Author: Dr. Gordon Cleveland

Editor: Lucy Trew

Photography: Anne de Haas and Aylwin Lo. Gordon Cleveland photograph by Ken Jones

Design: Yu-Ming Matsuura, ETFO Staff Style-Guiding: Karen Kindree, ETFO Staff

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Author



There is good evidence that the current Ontario Full-Day Kindergarten model is working well for children and families, and that it contributes to reducing both educational inequalities and the need for special educational services.

Dr. Gordon Cleveland

is Emeritus Associate Professor of Economics at the University of Toronto, Scarborough and has devoted his academic life to studying early learning and child care policies and their impacts on children and families. Dr. Cleveland has written extensively about these subjects in academic and popular journals, books and magazines. He has recently been Honorary Senior Fellow at the Graduate School of Education, University of Melbourne. In 2018, Dr. Cleveland was the main author of a widely acclaimed report to the Ontario Ministry of Education that recommended the provision of free child care services to children of preschool age as the next step to improve affordability of early education and care.

The report you are reading was commissioned by the Elementary Teachers' Federation of Ontario in response to statements made by political leaders in the Ontario government suggesting potentially damaging reforms to Kindergarten programs in Ontario. Dr. Cleveland was asked to assess the potential impacts of these reforms on Ontario's Full-Day Kindergarten model, and on the children and families who benefit from it. Dr. Cleveland has reviewed, analyzed and synthesized evidence from a very wide range of studies in Canada and other countries to perform this assessment.

Dr. Cleveland concludes that if Kindergarten policy is to be evidence-based, the Ontario government should support and champion the existing Full-Day Kindergarten program. There is good evidence that the current Ontario Full-Day Kindergarten model is working well for children and families, and that it contributes to reducing both educational inequalities and the need for special educational services. There is no evidence that increasing class size or reducing educational requirements for teachers will improve children's outcomes. There is no evidence that replacing public Kindergarten with some kind of private-sector alternative will improve the lives of children or families.

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Jane Bertrand

Adjunct Professor, Atkinson Centre, OISE/ University of Toronto

Susan Colley

Vice-President and Senior Consultant, Cleveland Consulting – Early Childhood Education and Care

James Corter

Professor of Statistics and Education, Columbia University (New York)

Pat Dickinson

Retired early childhood, elementary, college and university educator

Elizabeth Dhuey

Associate Professor of Economics, Department of Management, University of Toronto Scarborough and Centre for Industrial Relations and Human Resources, University of Toronto

Jim Grieve

Assistant Deputy Minister of Education – Early Years Division, 2009–2015

Kerry McCuaig

Fellow in Early Childhood Policy, Atkinson Centre, OISE/University of Toronto

Janette Pelletier

Professor of Applied
Psychology and Human
Development, Dr. Eric
Jackman Institute of Child
Study, Ontario Institute
for Studies in Education,
University of Toronto

David Philpott

Professor, Faculty of Education, Memorial University of Newfoundland



Foreword

Charles S. Coffey, O.C. is the former Executive Vice President, Government Affairs and Business Development, for RBC. He has received Honorary Doctor of Laws degrees from Trent University, McMaster University and Ryerson University. Coffey was named an Honorary Chief by the Assembly of Manitoba Chiefs and appointed an Officer of the Order of Canada.

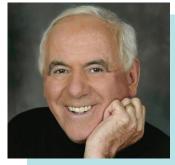
Investment in public education has long been recognized not only as a key driver of economic growth but as a powerful force in combating inequality. In today's globalized economy, which demands constant innovation and relies increasingly on the creation of new knowledge, public education is arguably the most important investment a society can make.

As someone who spent a significant part of my career in the boardrooms of leading financial institutions, I learned to recognize the importance of early childhood education and the significant impact early learning has on children's educational outcomes and ultimately on our economic output and growth. I also came to value the role early childhood education plays in reducing inequality and creating opportunities that everyone can benefit from—regardless of socioeconomic background or geographic location.

Every dollar invested in early childhood education returns upwards of six dollars to the overall economy¹. This return on public investment includes higher incomes and their corresponding higher tax revenues. The most important impact that investment in public education during the early years makes, however, are the positive outcomes visible over the course of a lifetime for those who participate in it. These include greater equity, healthier social adjustment and higher civic engagement.

Ontario is a global leader in early years education. Our world-renowned Kindergarten program was built by education experts working within government, academia and front-line educators and the unions that represent them. The program's success can be largely attributed to the partnership of the Kindergarten team, which underpins the program. This team, composed of a certified teacher and a designated early childhood educator, combines the expertise of two professionals to create a truly innovative learning environment. The benefits of Ontario's Full-Day Kindergarten program include better outcomes in reading, writing, numeracy, self-regulation and social skills.

1 Alexander, Craig, Kip Beckman, Alicia Macdonald, Cory Renner, and Matthew Stewart. Ready for Life: A Socio-Economic Analysis of Early Childhood Education and Care. Ottawa: The Conference Board of Canada, 2017 In this report, Dr. Gordon Cleveland, Emeritus Associate Professor of Economics at the University of Toronto, has performed an extensive review of the existing body of research into Kindergarten and early years education. By looking at the evidence, he provides a comprehensive analysis to inform policy decisions regarding this important program. The conclusions of this report provide a compelling case for maintaining and investing in the Kindergarten model we have now.



It is no secret that over the past two years the provincial government considered changes to Ontario's Full-Day Kindergarten with the objective of saving money. While ultimately the government did not implement those damaging changes to Kindergarten, this report clearly outlines why it would be a grave mistake for future governments to consider doing so. Due to the positive, long-term economic impact of this program, it would ultimately cost much more than it would save to alter its existing structure or model.

Policy makers will find evidence to support additional investment in Ontario's Kindergarten program in this report. They will also find that Ontario's Kindergarten program, based on the unique partnership between a certified teacher and an early childhood educator, is an efficiently run program, as well as the model for other jurisdictions to follow nationally and internationally.

By investing in public education, and in particular in Ontario's Kindergarten program, the government can support economic growth, help address inequality, provide opportunities to all regardless of socioeconomic background, and continue to improve outcomes for all students.

... Ontario's Kindergarten program, based on the unique partnership between a certified teacher and an early childhood educator, is an efficiently run program, as well as the model for other jurisdictions to follow nationally and internationally.





Executive Summary



What is Ontario's Full-Day Kindergarten?

Full-Day Kindergarten is a non-mandatory, publicly funded educational program provided through local public schools to children in Ontario. It is every child's right to receive early education and care during the school day and school year in the two years prior to compulsory elementary education. Kindergarten is the entrance to the Ontario school system for nearly 97 per cent of the children who attend public schools in the province.

The Full-Day Kindergarten program is accessible, research-based, of good quality and much loved by parents and children. The program is positive for children, helping their transition to school. It has a play- and inquiry-based curriculum that is recognized as the most appropriate for learning and child development at this age level. Full-Day Kindergarten has also supported increased maternal employment and enhanced child outcomes in the early years of school.

A team of educators with complementary skills works in each classroom: a university-educated teacher and a college-educated early childhood educator. The teacher is a certified teacher registered with the Ontario College of Teachers (OCT) qualified to teach at the primary and junior levels. The early childhood educator typically has a two-year college diploma and is registered with the College of Early Childhood Educators (CECE).

Maintaining the average class size of 26 children with two educators in the classroom allows for small-group work and individualized attention to student needs. The per-student cost of Full-Day Kindergarten is reasonable and has remained stable since the program's inception.

As it was only implemented in September 2010, the Full-Day Kindergarten model is relatively new for the province of Ontario. The priority should be to ensure that this excellent model works to its full potential.



The Current Government's Uneasy Relationship with Kindergarten

Ontario's current government has discussed making some drastic changes to Full-Day Kindergarten. Any one of these changes would dramatically alter the current model and significantly damage an already successful program. In early 2019, there was a flurry of news reports about possible reforms:

- larger class sizes in Kindergarten;
- reducing or eliminating university-educated certified teachers in Kindergarten;
- abolishing public-school-based, universally available Full-Day Kindergarten andinstead subsidizing some form of early learning through child care centres (without university-educated teachers);
- replacing Full-Day Kindergarten with a half-day program.



The Government of Ontario, under pressure from the Elementary Teachers' Federation of Ontario and from many parents and families, has now guaranteed that Full-Day Kindergarten will be maintained in its current form until at least 2022. The current Kindergarten model is an excellent one and is working well.

The research on children and families tells us that:

- **A.** Early childhood is a vital time for investing in children's development;
- **B.** Kindergarten is good for children, parents and society;
- **C.** When Kindergarten is of particularly high quality, its effects are even better;
- **D.** Kindergarten has a big role to play in reducing inequality;

66 The current Kindergarten model is an excellent one and is working well.

- E. Full-Day Kindergarten programs have been proven to be better than half-day Kindergarten programs;
- **F.** Ontario's Model of Full-Day Kindergarten is especially positive for children and parents;
- **G.** Full-Day Kindergarten is often where children's educational needs are first discovered and addressed;
- H. Increasing class sizes will lower Kindergarten quality;
- I. Lowering teacher education qualifications will lower Kindergarten quality; and
- J. Ontario's Full-Day Kindergarten is already delivered in a cost-effective way.

In summary, expanding class sizes in Ontario's Full-Day Kindergarten would lower the program's quality. Reducing teacher qualification requirements in Full-Day Kindergarten would also lower its quality and permanently alter or destroy the successful team approach to education inherent in Ontario's Kindergarten model. Moving Full-Day Kindergarten out of local public schools and into child care centres would dramatically lower both quality and access, particularly for lower-income families. Any one of these moves would be unpopular with parents.



Early Childhood is a Vital A Time for Investing in **Children's Development**

Children develop rapidly in the years before compulsory school. They develop cognitive skills such as language, vocabulary, the ability to reason and solve problems, the ability to remember and to access memory, the ability to speak and listen, and the ability to count and to reason mathematically. Equally as important in the early years are the non-cognitive or social- emotional skills, which are closely associated with what we think of as the child's personality. These include social skills, the ability to negotiate and interact positively with others, conscientiousness, perseverance, self-control and the ability to self-regulate, self-esteem, empathy, and honesty. These non-cognitive skills are vital to a child's ability to learn how to interact socially and for later success in life.

The curriculum, pedagogy, staffing and program model of Full-Day Kindergarten in Ontario was designed to encourage the cognitive, noncognitive and physical skills of young children in an environment based on child-motivating play and inquiry. As Nobel Prize-winning economist James Heckman reminds us, early investments in children return lifelong fiscal and social benefits for the child and for the community. It makes no sense to propose politically motivated short-term cost-cutting reforms to the education of Ontario's youngest children when the long-term benefits of that investment have been clearly demonstrated.





Kindergarten is Good for Children, Parents and **Society**

University of Toronto economist Elizabeth Dhuey has analyzed the development of Kindergarten over a 70-year period in the U.S. and found that Kindergarten has a substantial impact on children's progress in compulsory school. The strongest positive impacts were seen in immigrant families, lower-income families and families in which English was not the first language.

American researchers have found substantial positive impacts of pre-Kindergarten (similar to our Junior Kindergarten) in the United States:

- Dylan Conger and her colleagues found that children who attended pre-Kindergarten did better in their transitions to Grade 1.
- Hirokazu Yoshikawa and his colleagues found a gain of about one-third of a year in language, reading and math skills from public pre-school programs such as pre-Kindergarten.
- Jonah Gelbach, writing in the American Economic Review, found that the expansion of Kindergarten in the U.S. had strong positive impacts on mothers' employment, hours of work and earnings, and led to a decline in reliance on social assistance.



When Kindergarten is of Particularly High Quality, its Effects are Even Better

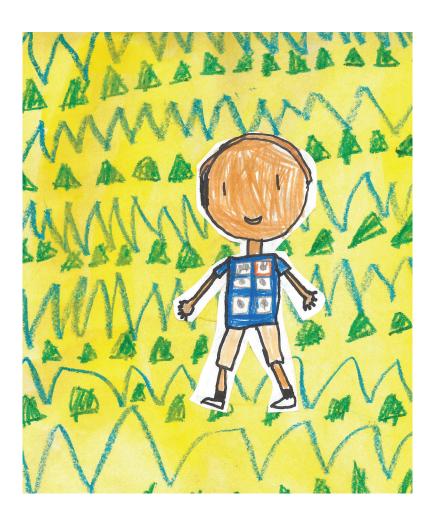
The best-known study of the long-term impacts of Kindergarten is the Tennessee STAR (Student/ Teacher Achievement Ratio) study, in which students were randomly assigned to large and small Kindergarten classes. Small class sizes and more experienced teachers were found to be particularly effective for improving Kindergarten quality.

Raj Chetty, professor of economics at Harvard University, and his colleagues found that students who attend higher-quality Kindergarten classes were more likely to attend college, more likely to attend a higher-quality college, had higher earnings at age 25-27, and scored higher on an index summarizing other indicators (such as home ownership, retirement savings and marital status). In other words, there are clear, positive, long-term effects 20 years and beyond after attending a higher-quality Kindergarten. Translated into numbers. Chetty and his colleagues calculate that an individual who attends a better Kindergarten would have a substantial lifetime earnings gain -nearly \$40,000 (in 2009 U.S. dollars) for each student. In other words, the quality of Kindergarten can matter a great deal, and the value of an investment in Kindergarten can be much higher than the cost.

Bartik, Gormley and Adelstein have studied the long-term impacts of a high-quality pre-Kindergarten program (like Ontario's Junior Kindergarten) in Tulsa, Oklahoma. They found a long-term benefit-cost ratio of between 3:1 and 4:1.

Michel Boivin, from Laval University, and Christa Japel, from University of Quebec in Montreal, and their colleagues have studied Kindergarten students in Quebec. They found that Kindergarten teachers' relatedness with students strongly encouraged students' intrinsic motivation for reading and their reading achievement.

66 Small class sizes and more experienced teachers were found to be particularly effective for improving Kindergarten quality.



Our conclusion is that high-quality Kindergarten is very good for children. Well-trained teachers and small effective class sizes are important in producing this quality. The effects of high-quality Kindergarten experiences are long-lasting, and socio-emotional support is a key part of providing positive Kindergarten experiences.



Kindergarten Has a Big Role to Play in Reducing **Inequality**

High-quality education and care are good for any child, but they are particularly beneficial to children from low-income families, immigrant families, and families with English as a second language. Good-quality child care or early education can narrow cognitive and other gaps brought on by social and economic inequality. This is true whether we are talking about licensed child care for three-year-olds or about Junior and Senior Kindergarten for four- and five-year-olds.

Kindergarten has a particularly big role to play in reducing inequality because it reaches all children – it's universal and the overwhelming majority of children go to Kindergarten. There is no social stigma around sending your kids to Kindergarten. On the contrary, it is a social expectation. So, children from low-income families, immigrant families, families where English is a second language, plus other types of families all go to Kindergarten.

Good-quality child care also has the potential to play a big role in reducing inequality, but unlike Kindergarten it's not affordable for many families. It's not universally available, there are not enough subsidies to meet the demand for it, and there is still some stigma associated with receiving low-income child care subsidies. Depending on family location and the child's age, there may be no available spaces at any price. This means that many of the children who could most benefit from good-quality child care are not given an opportunity to attend it.

Kindergarten is usually the first opportunity in a child's life to be with children from all socio-economic backgrounds and participate in a program together. It is a key time for the development of all children. In this way, public Kindergarten plays a central role in addressing educational inequality.



Full-Day Kindergarten Programs Have Been Proven to be Better Than Half-Day **Programs**

Harris Cooper, Professor in the Department of Psychology and Neuroscience at Duke University, together with colleagues, has summarized findings from a large variety of literature on full-day Kindergarten programs. Nearly all of the studies focused on cognitive impacts. Compared with children who attended half-day programs, children's verbal or math achievement was significantly higher by the end of the Kindergarten year when they attended full-day programs. The typical child in a full-day Kindergarten program was found to perform better on academic tests at the end of the school year than 60 per cent of children in half-day Kindergarten programs.

A random assignment study by James Elicker and Sangeeta Mathur from the Department of Child Development and Family Studies at Purdue University compared student experiences in fullday and half-day Kindergarten programs in the U.S. They found that much more time was spent in large-group, teacher-directed activities in half-day Kindergarten. Full-day Kindergarten students had considerably more time in small- group and childinitiated activities. Teachers from both types of Kindergarten classrooms concluded that full-day Kindergarten was better at easing the transition to first grade and that these classes were less stressful and frustrating for children. Readiness for first grade was judged to be significantly higher for full-day Kindergarten children.



Nearly all studies of full-day Kindergarten programs find that students progress better in them than in half-day Kindergarten. However, some studies find that gains made in Kindergarten fade out over the next several years of school. Perspectives on the fade-out issue have changed as more evidence has accumulated. It now appears that although accelerated performance on academic tests does tend to fade out, social and emotional development advantages do not. These are the basis of many elements of life success - in later schooling, in the labour market and in relationships. The encouragement of social skills, self-regulation, conscientiousness and other noncognitive skills in Full-Day Kindergarten continues to play a major role as students move through life.

A similar pattern has been seen in many early learning situations. There was fade-out of IQ gains in the Perry Preschool Project, but still very large differences in the life experiences of treated and control groups up through age 40. There was fade-out by Grade 8 of the effects of the Tennessee STAR experiment, but very substantial life advantages of quality in Kindergarten classrooms were measured at ages 25 to 27. In fact, as economist James Heckman and his colleagues argue, the fade-out of advantages on IQ and achievement tests is normal, and does not imply the absence of important long-term advantages of good early development and learning programs.



Ontario's Model of Full-Day Kindergarten is Especially Positive for Children and **Parents**

Ontario's Full-Day Kindergarten is unique in its design. It is a two-year program (i.e., lasting for the year in which children turn four and the year in which they turn five), whereas most Kindergarten programs in other jurisdictions cover only one year, usually for five-year-olds. Typically, children in Full-Day Kindergarten will have the same teaching team for both their years of Kindergarten. This provides continuity and stability in their first acquaintance with schooling.

Ontario's Kindergartens also have a mandated play- and inquiry-based approach to learning, moving away from teacher-centred, rotelearning approaches. The purpose of Full-Day Kindergarten in Ontario is to provide a strong foundation for learning and life in a safe and supportive environment where physical, social, emotional and cognitive skills are promoted for all children.

Perhaps the most distinct feature of Ontario Kindergarten is the educational partnership known as the Kindergarten team, where there is both a certified teacher and a designated early childhood educator in each classroom



66 The purpose of Full-Day Kindergarten in Ontario is to provide a strong foundation for learning and life in a safe and supportive environment where physical, social, emotional and cognitive skills are promoted for all children.



University of Toronto's Elizabeth Dhuey and her colleagues find that, in comparison to half-day Kindergarten, Ontario's Full-Day Kindergarten program promotes an increase in full-time work, particularly for mothers with only one child. These mothers are about 11 per cent more likely to work full-time, increasing their hours worked by about eight per cent. A second study of full-day French Kindergarten in Ontario by Dhuey, Eid and Neill found modest positive employment effects for mothers in two-parent families, but large effects on employment and hours of work for single mothers.

The most complete study to date of child outcomes due to Ontario's Full-Day Kindergarten program comes from Janette Pelletier, Professor of Applied Psychology and Human Development at the Ontario Institute for Studies in Education, and James Corter, Professor of Statistics and Education at Columbia University. They followed the experiences of about 600 Peel Region children in Kindergarten and through their first years of school. Some of those students attended half-day Kindergarten, but others were among the first to attend Full-Day Kindergarten as it was phased in. Eighteen public schools in Peel participated in the study, and about 60 per cent of the families in the study spoke a language other than English at home, reflecting this multicultural region.

The study team administered a series of tests of cognitive and non-cognitive outcomes at the end of Senior Kindergarten, Grade 1 and Grade 2. The cognitive tests assessed receptive vocabulary, early reading ability, early mathematics (numerical concepts and relationships) and early writing skills. Non-cognitive tests included "head-toes- knees-shoulders" (a test of aspects of self-regulation, the ability of the child to regulate and control instinctual behaviour), and a measure of social experience based on a drawing exercise. This meant there were six child outcome variables for each year.

The children who attended Full-Day Kindergarten scored better than the children who attended half-day on virtually every measure. This was true at the end of Senior Kindergarten, Grade 1 and Grade 2. Children with English as a first language who attended full-day scored higher in vocabulary, and children in full-day, on average had statistically significantly higher scores in reading and number knowledge (mathematics). They also scored higher on the measure of selfregulation. The children in full-day were also ahead in writing ability and in a drawing exercise (with the complexity of the drawing considered to be a measure of social experience). In some of these measures, there is evidence of a narrowing of differences as children progress in school, but there is still a clear Full-Day Kindergarten advantage in Grade 2.

There is also evidence about results on EQAO standardized tests held in Ontario in Grade 3. Pelletier and Corter found that children who attended Full-Day Kindergarten were significantly more likely to reach provincial expectations in reading at Grade 3 than children who had attended half- day Kindergarten.

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Full-Day Kindergarten is Often Where Children's Educational Needs are First Discovered and Addressed

According to Ontario Ministry of Education data, 15.2 per cent of children in elementary education (i.e., Kindergarten to Grade 8) were receiving special education programs or services in 2017-18. Information available through the administration of the Early Development Instrument (EDI) tells us that nearly 12 per cent of children in Ontario Kindergartens have special needs. More broadly, nearly 30 per cent of Ontario children in Senior Kindergarten are vulnerable in at least one of the five areas assessed by the EDI.

About 60 per cent of children with educational needs have literacy/numeracy lags, language delays, behavioural challenges, or some combination. Canadian researchers find that participation in quality early childhood programs can significantly lower the intensity of supports required for children with special needs during their time in school.





Children with special education needs and their families are likely to be dramatically and negatively affected if Kindergarten is moved out of public schools and into private child care centres. Similarly, reforms that make class sizes larger, or reduce or eliminate the role of universityeducated teachers in Kindergarten classrooms, are likely to result in strongly negative experiences for vulnerable children. The Ontario school system has invested much time and resources in developing systems for identifying special education needs and providing special supportive educational services for those children who need them, at no cost to parents. Although there are also some special developmental supports provided through Ontario municipalities for children in licensed child care, these are more difficult to access and are not as well resourced. In addition, many families who have children with special needs are not able to access or afford licensed child care, whereas Kindergarten is both universal and free.

All children, including those with special education needs, benefit from the current Ontario Kindergarten model. The task should be to improve what exists, not to destroy what has been carefully built.



Increasing Class Sizes Will Lower Kindergarten Quality

There are many studies on the effects of class size on classroom experiences and student progress, both in Kindergarten and other grades.

Nina Bascia from the Ontario Institute for Studies in Education found strong positive effects of Ontario's class size reduction initiative in the 2004–08 period in primary classes. She found that students in smaller classes learn more, are more engaged and are less disruptive.

One of the best-known Kindergarten class- size studies using random assignment was the Tennessee STAR study, where larger classes had 20 students and smaller ones had 15. The conclusion was that attending a small class in Kindergarten typically resulted in a significantly increased score on standardized tests. Small class sizes were found to be particularly important for students with an ethnic or racial minority background, and for children from lower-income families. Smaller class size in Kindergarten was found to positively affect student test scores up through Grade 8.

The SAGE program in Wisconsin was a pilot program running from Kindergarten to Grade 3. The main reform was a reduction in the pupil-to-teacher ratio to 15 students per teacher (down from 21–25 students per teacher). Some of the classrooms modelled the option of having two trained teachers per classroom (so a ratio of 30:2 rather than 15:1). The results at the end of Grade 1 were significantly positive for children's academic outcomes in reading, language arts and mathematics. An increase in individualized instruction was found to be among the most effective changes brought about with a smaller class size.

Class size is not the only important factor in Kindergarten. Other studies have found that class size and teacher experience are connected, with more experienced teachers taking better advantage of the opportunities afforded by smaller class sizes. Teacher quality and small class size can work hand-in-hand to improve children's experiences in Kindergarten.

66 Increasing class size in Ontario Kindergartens would have significant negative effects on educational quality and children's learning experiences.



There is some evidence that small class size is particularly important in full-day Kindergarten programs, as compared to half-day programs. With smaller class sizes, there is greater student engagement in the classroom. This means better learning behaviours and more prosocial behaviours, both of which are strongly related to academic performance.

Our conclusion is that increasing class size in Ontario Kindergartens would have significant negative effects on educational quality and children's learning experiences.

Lowering Teacher Education Qualifications Will Lower Kindergarten Quality

Teachers matter. On this point, all education researchers seem to agree. In fact, Harvard professor Raj Chetty and his colleagues have calculated, on the basis of the Tennessee STAR data, that a good teacher is worth \$200,000 per year when measured by their positive impacts on children's lives. Education economist Eric Hanushek estimates the value of a good teacher at over \$400,000 per year.

Nearly all Kindergarten teachers in North America have the same background: a university bachelor's degree plus specialized teacher training and classroom experience. So, it's not generally possible to use direct observational data to find the effects of different teacher qualifications. As a result, much of the evidence about teacher qualifications is based on results from preschools or pre-Kindergartens with fouryear-old children.

There is good research evidence here that teacher qualifications matter for what happens in a classroom. We find it in a number of meta-analyses that summarize the results of other studies, and from Raquel Bernal's work in Colombia when an education program on child development was phased in for child care workers. Similarly, a Danish study using administrative data on over 30,000 children found that children in Denmark who attended preschools with a higher percentage of teachers trained as pedagogues (requiring three and a half years of bachelor education) did significantly better in Danish language skills at the end of elementary school in ninth grade.

Virtually all jurisdictions, in North America at least, require a bachelor-educated teacher in Kindergarten classrooms. All researchers agree that teachers matter enormously for what happens in classrooms. We also note that virtually all quality assessment frameworks and regulatory frameworks for licensed child care presume that education and training matter for the provision of high-quality early childhood education services.

And experience from successful early childhood education demonstration projects finds that well-educated teachers matter.

While looking for savings in the public education budget, the Ontario Government considered removing the requirement for a certified university- educated teacher in the Kindergarten classroom (or reducing the teacher's role to half a day). Instead, each Kindergarten classroom would have (at most) two college-educated early childhood educators. Quite possibly, Kindergarten would move out of local public schools and be offered in privately owned and operated child care centres, with provincial educational funding flowing to those centres. The primary motivation appears to be to save money.

The research tells us that the result of implementing these possible reforms would be a dramatically reduced quality of educational experience in Kindergarten. These reforms are also likely to be highly unpopular. In a recent survey of Ontario residents (not just those with a child in Kindergarten), over 70 per cent favoured keeping the teacher educator team in Ontario Kindergarten classes (only 7 per cent disagreed). And, when asked whether there should be a certified teacher in the Kindergarten classroom full-time, 76 per cent of Ontario residents said yes (with only 7 per cent saying no).





Ontario's Full-Day Kindergarten is Already Delivered in a Cost-Effective Way

The Ontario Ministry of Education publishes figures annually showing the amount of spending per student at different grade levels for elementary and secondary education. When we compare spending in 2010–11, the early days of implementing of Full-Day Kindergarten, to spending in 2019–20, we find that per-student spending was flat over this period, taking inflation into account.

As far as Kindergarten is concerned, this pattern implies that in-classroom spending per full-time-equivalent student does not change in real terms over this period. In other words, a Kindergarten program that is twice as long each day is being

delivered for just about exactly twice as much money per child. And this is true even with both a teacher and an early childhood educator in a class of 26 (the average) instead of one teacher in a maximum class size of 20. Ontario's new model is much more appropriate for the delivery of a playand inquiry-based curriculum. Arguably, the quality of Kindergarten is substantially improved, but for the same cost per full-time-equivalent student.

In other words, the Full-Day Kindergarten reforms have brought in a very cost-effective early years program, while increasing quality. There is no evidence that costs and expenditures are out of control in Full-Day Kindergarten. It is quite the contrary. Despite enormous changes to the program over time, it is being delivered at essentially the same cost per full-time equivalent student as when Kindergarten was half-day.





Conclusions

This paper has drawn together the research evidence in favour of Ontario's innovative model of high-quality Full-Day Kindergarten and against the potential reforms the government has discussed as cost-saving measures.

Our conclusion is that Ontario's model of Full-Day Kindergarten is a success story. The play- and inquiry-based curriculum is flexible, age-appropriate education. The complementary skills of the Kindergarten team of a certified university-educated teacher and a designated early childhood educator enhance the possibilities of small group work and individualized attention to student needs, which is crucial to quality experiences in Kindergarten. At the same time, the per-student cost of Full-Day Kindergarten is reasonable and has remained stable over time.

Ontario's model of Full-Day
Kindergarten is a success story.
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The evidence so far on children's cognitive and socialemotional development in Full-Day Kindergarten is strongly positive. Existing research gives no basis for believing that expanded class size in Kindergarten or a teaching team without a certified teacher would "enhance" children's educational experiences. But the research does suggest that investments geared to improving Ontario's high-quality Kindergarten program will result in savings on special education costs in later grades.

It is still early days in the development of Ontario's Kindergarten model, so there is room for improvement of relationships, preparation and communication. The priority is to make Ontario's Kindergarten model fulfill all of its promise, while celebrating its fundamentally successful design. The government's focus should be on continuing to build on the success of the Full-Day Kindergarten program.





Elementary Teachers' Federation of Ontario (ETFO) 136 Isabella Street, Toronto, Ontario, Canada 416-962-3836 | 1-800-838-3836 | etfo.ca