



Full-day kindergarten in Ontario: Reading the fine print

Did those cheerleading for full-day kindergarten actually read the research?

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On the first day of school this year, the media was abuzz with the success of full-day kindergarten in Ontario. [1] The Education Minister did a press conference reporting that the research was in and it was “nothing short of incredible.” Daycare advocate Margaret Norrie McCain claimed the results were “like winning Olympic gold” and advisor to then Premier McGuinty, Charles Pascal, said he was doing cartwheels, so great was his joy. [2]

Yet the research was not actually in. The studies were only made available later in October.

As a result of this red flag, the Institute of Marriage and Family Canada decided to save the calisthenics for later. We asked why this research should be so drastically different from prior research done on the same topic. [3]

As it turns out, having now read the research, it is not different. It shows lacklustre results for Ontario’s children.

The rollout

Ontario launched full-day kindergarten in select schools in September 2010 with the goal of completing the rollout by September 2014. The government simultaneously contracted with Queen’s University and McMaster’s Offord Centre for Child Studies, at a combined cost of about a half a million dollars, to measure the results. [4]

The Ministry of Education also did their own study entitled *A meta-perspective on the evaluation of full-day kindergarten during the first two years of implementation*. [5]

Apparently, the Ministry of Education wasn’t banking on parents reading over 300 pages of research. For the university reports do not say what the government claims they do—and they certainly do not hold the glimmer of “gold medal” results.

What is additionally troubling is that the Ministry of Education actually had both university studies in hand at the time of the press conference in September 2013. Both studies are dated Fall 2012, one year before the press conference.

However, they were not released to the public, which surely would have resulted in different headlines, to put it mildly.

The government is spending 1.5 billion dollars on full-day kindergarten in spite of recommendations from economist Don Drummond to cancel the program altogether, so it appears the pressure is on to prove that our money is being well spent. [6]

How the children are assessed

All three studies use the Early Development Instrument (EDI) to measure children's progress. This data measurement tool examines children in five domains: Physical health and well-being, social competence, emotional maturity, language and cognitive development, and communication skills and general knowledge.

The EDI was developed at McMaster's Offord Centre for Child Studies to measure "school readiness to learn." It has been used to claim that 25 to 30% of children are "at risk" or "vulnerable." [7]

"Vulnerability" is a relative measure defined by scores in the lowest 10th percentile in one or more of the five EDI domains.

Full-day kindergarten was implemented as early intervention to diminish the number of "at risk" children.

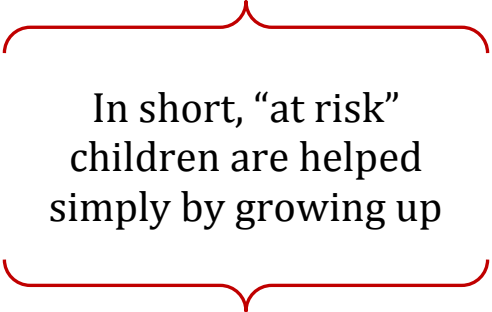
However, the EDI results merely support the consistent finding from other research – that boys, children whose first language is not English or French, and children with birthdays late in the year (ie younger) are all at significantly higher "risk" of being "unready" for school.

Indeed, the McMaster researchers highlight this:

"As children who are more at risk and those who have had the longest exposure to the program should benefit most, a separate set of analyses was performed for Year 2 Senior Kindergarten children exclusively for groups which have been identified in past research as more at risk for poor outcomes: boys, younger children, and children in the EFSL group." [8]

In short, "at risk" children are helped simply by growing up, or in the case of children of new immigrants, getting to know the new language and new culture.

A general note of concern with the EDI is the manner in which it treats three, four and five-year-olds as if they are adults – measuring them as if they are striving to enter an Ivy League university, not the first grade.



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Queen's University study: What the research actually says

The Queen's executive summary speaks to results both good and bad. There were classes with optimal environments, but there were also classes that were overcrowded. Here, the researchers caution that:

"Overcrowded classes had less opportunity for play-based learning because they could not house proper play-based equipment, and **they also had more behavior issues because students found it difficult to self-regulate when their personal space was consistently invaded.**" [9] (Bolding is ours.)

The researchers certainly spoke of significant challenges that were left off the government press release, particularly for students with special needs:

"While a number of FDELK classes had positive emotional climates, many experienced challenges. The greatest challenge to a positive emotional climate arose in large classes (e.g., 30 students) with a number of students with special education needs who were not receiving proper support. The issue was compounded in smaller physical classrooms. **Even with two adults, meeting the needs of 30 demanding young children is difficult, but this is even more challenging (if not impossible) in classes with students who need more support, like in the case of students with special education needs.**" [10] (Bolding ours.)


Space and child-staff ratios, then, are real concerns for the future. In a time of serious provincial deficits, what is the likelihood that children in overcrowded classrooms will see improved adult-child ratios?

Moving into more specifics from the Queen's study, the results for senior kindergarten students in English-language schools were lacklustre. In most areas, there were no improvements at all. There were a few very slightly higher outcomes for high need schools, but there were a number of negative effects in so-called "low need" schools—the majority of schools across Ontario:


"This suggests full-day early learning kindergarten had a positive effect on the youngest junior kindergarten students in high needs schools **but a reverse finding in low need schools.**" [11] (Bolding ours.)

The Queen's report clearly cautions that some students were worse off in full-day kindergarten, as contrasted with the non-full-day kindergarten group:

"A final observation of the findings worth noting is that on several measures, **the non-FDELK programs were associated with more positive outcomes. This was especially true for non-FDELK programs in low need schools, on the EDI measure of Emotional Maturity and Communication Skills and General Knowledge. To be clear, some children appear to have done worse with the FDELK than with the non-FDELK.**" [12] (Bolding ours.)



There were a number of negative effects in so-called "low need" schools – the majority of schools across Ontario



In conclusion, the Queen's report highlights no effect for senior kindergarten students. Good results were limited to junior kindergarten students in high need schools – the minority of schools in Ontario.

“There was a pattern for JK FDELK students to show higher school readiness scores in classrooms in high need schools. If this effect can be replicated in future studies with more representative samples, and possibly more sensitive measures, it suggests that FDELK may be able to contribute to a decrease in the academic gap currently seen in many high need primary schools. **However, these results must be interpreted with caution as this was not the case for SK students.**” [13] (Bolding ours.)

McMaster University study: What the research actually says

Throughout the McMaster study, many of the chart results appear to be so close as to be inconsequential.

In the authors' own words, in year one of implementation, senior kindergarten children with two years of full-day kindergarten had better outcomes than the other two groups (one year of full-day kindergarten and no full-day kindergarten). However, in year two, this result was not replicated, and the opposite was true, with children with no full-day kindergarten faring best:



“In almost all domains, children in the No full-day kindergarten group had better scores than children in either of the groups with full-day kindergarten, and sometimes this difference was statistically significant.” [14] (Bolding ours.)

The researchers conclude:

“While some results reported here are promising in indicating a small advantage for children who participate in the FDK learning, most of the outcomes are inconclusive, or even opposite to expectations. It is crucial to view these results in the appropriate perspective. The study at best examines changes over only one full year of FDK, during the first two phases of program implementation, which have likely been challenging due to its novelty.” [15]

The research is in—and it isn't good

Remaining questions about the full-day kindergarten “success” abound. Here are a handful:

- **Full-day kindergarten was started in schools in higher need areas.** Research over the years has shown that higher need students are more likely to benefit from

full-day kindergarten while low needs schools and students do not benefit. Could the purported gains of full-day kindergarten in Ontario be the result of this? What will happen when the program is rolled out across all of Ontario's low need schools, where the effects of full-day kindergarten on children have been shown to be negative? By that time, such a program would be entrenched and more difficult to cancel, even if it was shown to be harmful overall.

- **The reports highlight issues with large classroom sizes.** But better child-staff ratios require more money, money Ontario does not have. Will Ontario's children ever see the ratios required for this program to work?
- **The research speaks of "leveling the playing field."** With high needs students benefitting and low needs students doing poorly in full-day kindergarten, is it not possible that the leveling comes from bringing the low needs students down? Consider that even by EDI measurement standards, the vast majority—about 75% of Ontario students—are low need students.
- The research reports are clear that they do not track with specific students from junior kindergarten through to senior kindergarten and onwards. They call for this, asking for measurement through to grade three. What would this research show?

Finally, even the meta-analysis by the Ministry of Education speaks to the benefits of the program fading in the long term. They couch it this way:

"It is important to note that longitudinal monitoring cannot focus solely on the impact of full-day kindergarten in the overall academic achievement of Ontario students. If this is the case, the findings are predictable—that sometime in the future, the measureable impact of full-day kindergarten will fade." [16]

It is never wise to take any government press release at face value because they have people working full-time on spin.

In this particular instance, the misrepresentation of the research is so egregious, one is forced to consider whether those cheering it on actually bothered to read it.

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Endnotes

- [1] Brown, L. (2013, September 3). Full-day kindergarten gives kids huge step up, study shows. *Toronto Star*. Retrieved from http://www.thestar.com/yourtoronto/education/2013/09/03/fullday_kindergarten_gives_kids_huge_step_up_study_shows.html
- [2] *Ibid.*
- [3] Mrozek, A. (2013, September 11). Full-day kindergarten doesn't merit the superlatives, or expense. *Ottawa Citizen*. Retrieved from <http://www.ottawacitizen.com/opinion/oped/Full+kindergarten+doesn+merit+superlatives+expense/8900205/story.html>
- [4] The Queen's research came at a cost of \$231,435. McMaster's price tag was \$259,280. Ministry of Education, Government of Ontario. (2013, October). A meta-perspective on the evaluation of full-day kindergarten during the first two years of implementation, p. 4. Retrieved from <http://www.edu.gov.on.ca/kingergarten/FDKReport2013.pdf>
- [5] Ministry of Education, Government of Ontario. (2013, October). A meta-perspective on the evaluation of full-day kindergarten during the first two years of implementation. Retrieved from <http://www.edu.gov.on.ca/kingergarten/FDKReport2013.pdf>
- Queen's study: Vanderlee, M.L., Youmans, S., Peters, R., Eastabrook, J. (2012, Fall). Final report: Evaluation of the implementation of the Ontario full-day early learning-kindergarten program. Retrieved from http://www.edu.gov.on.ca/kingergarten/FDELK_ReportFall2012.pdf
- McMaster study, Offord Centre for Child Studies: Janus, M., Duku, E., Schell A. (2012, October). The full-day kindergarten early learning program final report. Hamilton: McMaster University. Retrieved from http://www.edu.gov.on.ca/kingergarten/ELP_FDKFall2012.pdf
- [6] "Given the difficulties with such an approach, and the prohibitive cost of the program overall at this time, the Commission recommends cancellation of the full-day kindergarten (FDK) program, without prejudice to schools that already had FDK before the introduction of this government strategy." Commission on the Reform of Ontario's Public Services. Retrieved from <http://www.fin.gov.on.ca/en/reformcommission/chapters/ch6.html#ch6-e>
- [7] Information about the EDI can be retrieved from http://www.offordcentre.com/readiness/files/2011_06_Descriptive_Report.pdf
- [8] McMaster study, p. 77.
- [9] Queen's study, p. 7.
- [10] *Ibid.*
- [11] Queen's study, p. 66.
- [12] Queen's study, p. 85.
- [13] Queen's study, p. 9.
- [14] McMaster study, p. 86.
- [15] McMaster study, p. 87.
- [16] Ministry of Education meta-analysis, p. 18-19.