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## ONTARIO'S FULL-DAY KINDERGARTEN: A BOLD PUBLIC POLICY INITIATIVE

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DR. JANETTE PELLETIER, UNIVERSITY OF TORONTO

**C**an Ontario's universal full-day kindergarten program help to level the playing field? The list of possibilities is long: closing the gap of language experience of kids living in poverty, reaching all vulnerable kids, including those in the middle class,<sup>1</sup> contributing support to families who need child care, and ensuring that care and education are combined in high quality programs that boost overall child development as well as academic skills and economic success. Research has shown that many of these goals can be accomplished by high quality universal early childhood programs.<sup>2</sup>

The Abecedarian and High Scope demonstration projects in the U.S. showed that targeted demonstration projects had significant positive effects for small groups of children who started life in deep poverty and that these effects have lasted across a lifetime.<sup>3</sup> Going beyond small scale demonstrations, recent research from the U.K. shows that high quality early childhood development (ECD) programs have benefits for both academic learning and self-control into the middle school years.<sup>4</sup>

## I. A BOLD INITIATIVE

Ontario's FDK has gone well beyond most other jurisdictions in North America by implementing universal ECD through full-day kindergarten in the education system. This bold step to offer "Full-Day Early Learning Kindergarten" (FDK) (Ontario Ministry of Education, 2010) to 4- and 5-year-old children in Ontario, phased in over five years beginning in fall 2010, was informed by the research literature and by successful pilot programs that integrate half-day kindergarten with child care and parenting supports in elementary schools.<sup>5</sup> The policy is bold, both in terms of the dollars committed, and in terms of the innovations of an "integrated" program for early learning and child development, not simply a doubling of time in school for 4- and 5-year olds.

There were two notable innovations in the program that differentiate Ontario's FDK from other FDK programs in Canada and the U.S. First, child care and kindergarten programs and practice have been brought together through a teaching team of a kindergarten teacher and registered early childhood educator (ECE) in a legislated "duty to cooperate" (Government of Ontario, 2010). This form of "service integration" actually requires a host of organizational and policy changes at many levels beyond the classroom, right up to the merging of child care and kindergarten within the Ontario Ministry of Education. The second notable change is that FDK programming requires a play-based approach to learning and development, a thrust away from drill and kill, paper and pencil, teacher-centred, rote learning or other metaphors describing top-down teaching. Rather, high-quality play, based in and built on children's natural curiosity will provide the foundation for deep learning and expert scaffolding by the educator team. So, is full-day kindergarten working?

With the release of our ongoing research that has followed full-day and half-day kindergarten (HDK) children since FDK was implemented in fall 2010, the answer to "is it working?" depends on who is telling the story. On the day the Year 3 findings of this research were released, the Globe and Mail printed a front-page article entitled, *Full-day kindergarten offers little academic advantage, study says* (Alphonso, March 28, 2014). Letters to the editor quickly followed objecting to this slant and were followed by a second Globe and Mail article entitled, *Full-day kindergarten: Looking beyond the test scores* (Anderson, April 3, 2014). Another article published by Global News was headlined, *Full-day kindergarten children score highest in vocabulary, self-regulation* (Dubé, March 28, 2014). Since the release of these Year 3 results, media cases "for" and "against" full-day kindergarten continue to appear, (e.g., Anderson, 2014; Pedro, 2014; Pill, 2014)

Our research on this innovative yet controversial education policy is following approximately 560 children and families from junior (JK) or senior (SK) kindergarten through to Grade 2 to examine social and academic experiences and outcomes. The research includes the perspectives of staff teaching teams and administrators, as well as parents of the kindergarten children. Children's voices are included as key stakeholders in the provincial policy. The study is being carried out in the Region of Peel, which includes Mississauga and Brampton, home to a growing influx of newcomers to Canada many of whom are

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learning English as an additional language. For the most part, families are in lower income strata despite wide ranges of parental education levels.

The Ontario Ministry of Education’s commissioned research, released in September 2013, reported that children with two years of FDK showed greater decline in risk from JK to SK in several developmental areas as compared to children with one year of FDK. And those with one year of FDK showed greater decline in risk than those with no FDK (Ontario Ministry of Education, 2013). A related implementation research study, also commissioned by the Ministry of Education, showed that FDK implementation was experiencing growing pains in integrated staff teamwork, but overall there were benefits to children’s learning and to families.<sup>6</sup> The Ministry of Education study drew on EDI data – the Early Development Instrument – a sophisticated teacher rating scale of children’s development in five domains: physical health and well-being, emotional maturity, social competence, language and cognitive development and communication and general knowledge. Ratings were completed at the end of JK and SK, allowing researchers to see change over one year.

Teacher ratings have been shown by researchers to be both accurate representations of children’s learning and development,<sup>7</sup> but are also potentially subject to bias, for instance, with the rater’s knowing she or he was delivering a new program with expected benefits. Furthermore, while the EDI data are highly valued aggregate measures of child development for groups of kindergarten children, they are not individualized direct child measures that can track pathways of development and they do not extend beyond kindergarten. Thus, it is important to add longitudinal direct child outcome data to answer the question of “is it working?” Of course, research also needs to examine the implementation and growing pains, to explain the successes and challenges of system realignment and to hear from parents about whether FDK makes an impact on their daily lives. These questions led to the research collaboration in the Region of Peel, with two large school boards and a university research team.

The research partnership with the municipal government and the two school boards grew out of a shared interest in knowing about both the implementation and impact of Ontario’s provincial policy on children and families. Partners were invested in knowing whether there would be long-term benefits of FDK, how the program would be implemented, how the staff teams of kindergarten teachers and ECEs would come together, and how the system would realign to support the new initiative. The interest of the municipal government shows that this project is not just about education in the narrow sense. It reflects the implications that the integrated FDK model has for child development and child and family services, such as child care and other services traditionally delivered by municipalities in Ontario.

Given the phased-in approach to FDK implementation in Ontario, our research capitalized on a “natural experiment.” Some schools would continue to have half-day kindergarten programs until fall 2014, allowing a comparison of full- and half-day programs over time as the children continued on to the next grades in school. The partners and the research

team were open to what the research results would tell us each year, in essence tracking the stages of implementation and the patterns of development. Teams of trained graduate students, many of whom were teachers, have been carrying out the data collection each year with the children, parents, staff, and key informants in the regional government and school boards. Data are collected between April and June each year and are available for the first three years of implementation of FDK. Year 4 data are being collected in spring 2014, with results to be released early in 2015. Back to the question, “is full-day kindergarten working?”

## II. THE OUTCOMES

One of the first research questions was, “how are the staff teams of registered early childhood educators and kindergarten teachers working out?” The research has gathered systematic data about staff perceptions of the kindergarten teacher/ECE team over time. Results have been consistent with some of the stories of teachers having more power than ECEs in the classroom and with inequities in working conditions but have also shown change over time, showing increasing collaboration and reports of professional benefits. While staff report each year that FDK provides the greatest benefit to families, by Year 3 of FDK implementation, staff members also report that they themselves benefit from working together in a team (see Figure 1). Other data benchmarking progress using Indicators of Change in integration<sup>8</sup> show that teamwork extends to improving the cohesion of classroom programming and engaging families.

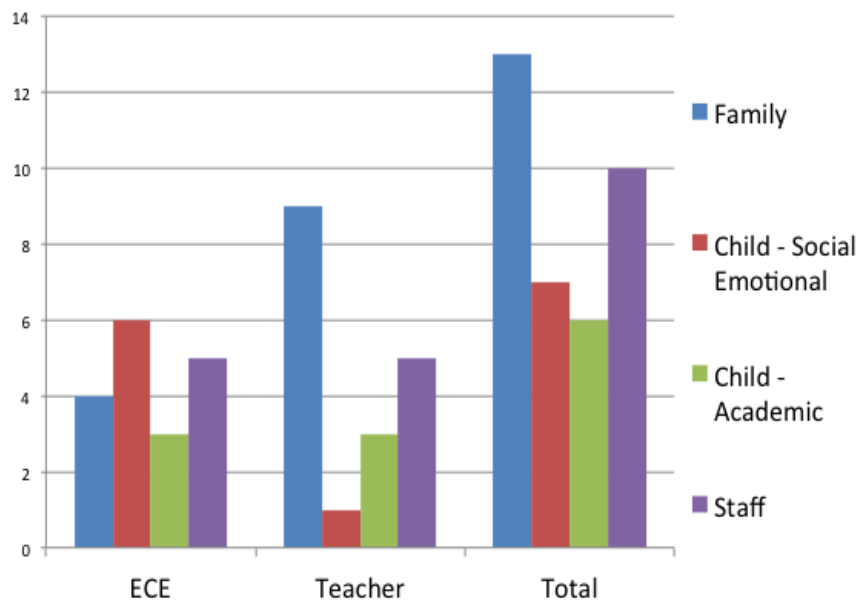


Figure 1: Staff-reported benefits of the integrated early learning team in Year 3 FDK implementation.

Another research question addressed parents’ experiences with full-day and half-day kindergarten. Using the Parenting Daily Hassles Survey<sup>9</sup> we showed that parents of FDK children report significantly less stress in the form of fewer daily hassles than HDK parents in activities such as transporting their children from child care to kindergarten and finding out how their children are doing at school. We also wanted to know whether par-

ents of children in FDK would rate their children as more “ready” for school than parents of children in HDK. Results of the analyses confirmed that parents rated FDK children as significantly more ready than parents of HDK children (see Figure 2).

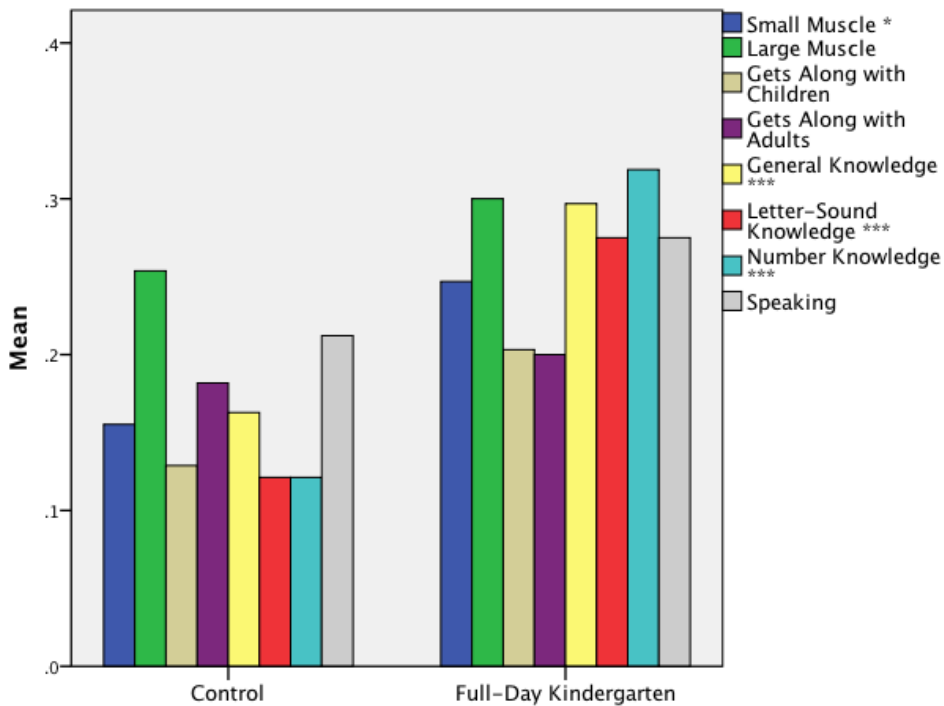
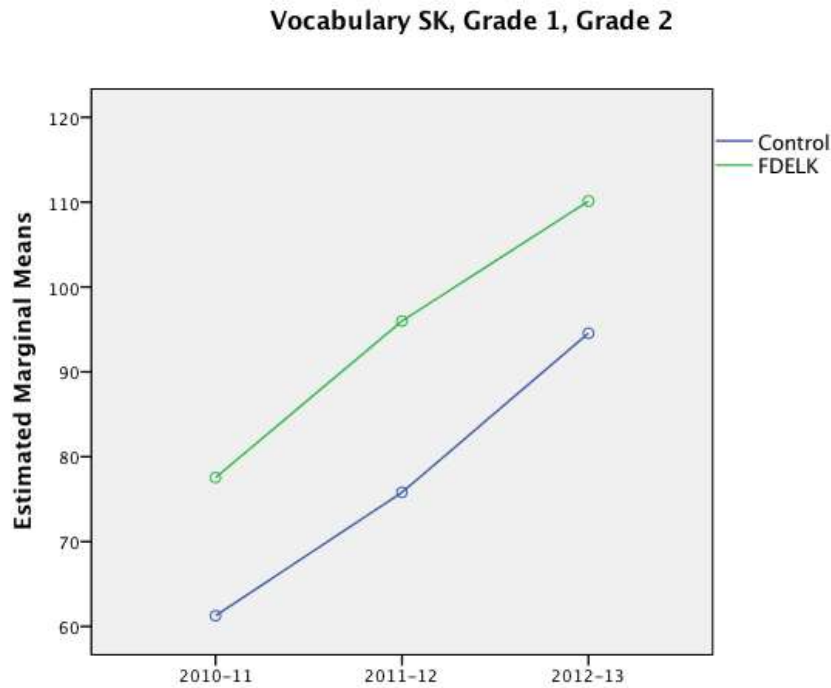


Figure 2: Parent Ratings of Children’s Readiness in Full-Day and Half-Day Control Kindergarten Programs

Another set of questions asked about children’s experiences and outcomes in FDK. Children drew pictures of themselves at school, were interviewed with finger puppets about their day, were observed during play and took part in academic and self-regulation tasks to measure their learning and development. Results of children’s social experiences showed that all children, whether FDK or HDK, enjoyed kindergarten, especially play. Observations in class showed that children were more engaged and self-regulated when they were playing than when they were sitting in whole group. Children’s drawings depicted friendships and play more than any other theme in kindergarten. It was abundantly clear that children need play, are engaged during play and control their behavior better during play than during whole class lessons. Children in FDK scored significantly higher on a task of self-regulation involving inhibitory control than their peers in HDK, adding further support for the importance of a full day with more play opportunities, and consistent with the research on the self-regulation benefits of play.<sup>10</sup>

On the academic measures, the older group of FDK children (those who started FDK in SK) began ahead of their HDK peers at the end of SK and stayed significantly ahead in vocabulary and literacy until Grade 2 when their participation ends. The HDK group caught up in number knowledge by Grade 2. The younger group of FDK children (those who started FDK in JK) began ahead of their HDK peers in vocabulary and have stayed ahead

in Grade 1 vocabulary, the last point of testing for this group. However, this younger group did not stay ahead in literacy or number knowledge (see Figures 3 and 4 for vocabulary results).



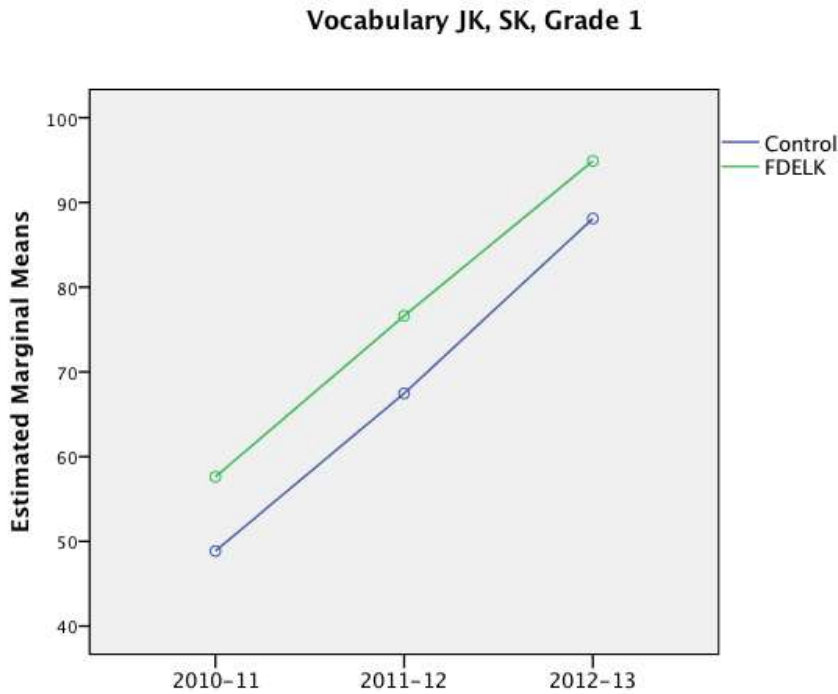
Covariates appearing in the model are evaluated at the following values: ParEd = 4.3421, Age in Months at Time 1 = 68.33,  $p = .001$

Figure 3: Vocabulary gains for SK FDK group

Although the overall results after Year 3 showed significant benefits in vocabulary and self-regulation for *all* FDK children and showed continued gains for the older group of FDK children, some media reports chose to feature the younger group of FDK children who did not stay ahead of their HDK peers in Grade 1 literacy and number knowledge, sidelining the strong findings for vocabulary and self-regulation for this group. The importance of vocabulary and self-regulation as cornerstones of healthy child development<sup>11</sup> are strong evidence of FDK’s benefits for children’s development. And healthy child development, in turn, has been shown to have benefits for later educational and economic success, as well as social adjustment into adulthood. Academic skills are a focus of North American education policy but skills alone will not guarantee healthy, happy and productive citizens. Of course academic skills are important and the FDK model invites continuous improvement of the play-based curriculum platform. In fact, the “Kindergarten Program” (Ontario Ministry of Education, 2010) continues to display “Draft” on the front cover. When we see where children’s skills might be strengthened, we can experiment with new ways of engaging FDK children with mathematics, science or reading through play and inquiry as my university colleagues and their educational partners have begun to do.<sup>12</sup>

### III. A NEW POLICY PERSPECTIVE

Taken together, the results of this research to date paint a positive picture of the implementation and impact of FDK. Staff teams are reporting professional benefits and schools are uniting around the mission to support young children and families. Parents report reduced stress for themselves and greater readiness for their children. Children report the importance and benefit of play – and there is more play time in FDK. Researchers observe children’s engagement and ability to regulate their behavior during play. FDK children score higher in tasks of self-regulation and remain ahead of their half-day peers in vocabulary development. These findings sound like the answer to the question. “Yes, FDK is working” and “it is working for children, parents and staff in ways that support healthy child and family development.”



Covariates appearing in the model are evaluated at the following values: ParEd = 4.3889, Age in Months at Time 1 = 55.68,  $p=.05$

Figure 4: Vocabulary gains for JK FDK group

This research is providing a new perspective on a broad policy approach to education as a provincial government stepped forward during a time of fiscal restraint to provide a universal full-day kindergarten and care program for 4- and 5-year-old children through a bold innovation in program delivery. Co-taught by early childhood educator and trained kindergarten teacher teams, this play-based curriculum is designed to respond to children’s need for play while addressing families’ needs for high-quality full-day programs.

The study addresses themes of equity and poverty by examining how the system is performing for children and families of lower socioeconomic level, significant language diversity, and recent immigrant status. It provides in-depth understanding of implementation

issues from the perspectives of multi-professional staff classroom teams, as well as from the perspectives of the children themselves. This work is intended to provide formative feedback to both local governments and school districts implementing the FDK policy, as well as to the Ontario Ministry of Education which is committed to continuous improvement of the policy.

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DR. JANETTE PELLETIER is Professor of Applied Psychology and Human Development at the Dr. Eric Jackman Institute of Child Study/Ontario Institute for Studies in Education (OISE)/University of Toronto. She carries out research in early education and development, seeking to understand the connections among research, practice and policy. Dr. Pelletier teaches and supervises graduate students in the area of early learning.

Lead Photo Credit: albastrica mititica

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<sup>1</sup> Heymann, Hertzman, Barer & Evans, 2006.

<sup>2</sup> Sylva et al, 2011.

<sup>3</sup> Campbell et al, 2014.

<sup>4</sup> Sylva et al, 2010; 2011.

<sup>5</sup> Corter & Pelletier, 2010; Corter, Janmohamed & Pelletier, 2012; Pascal 2009; Pelletier, 2012.

<sup>6</sup> Vanderlee, Youmans, Peters & Eastabrook, 2012.

<sup>7</sup> Janus & Offord, 2007.

<sup>8</sup> Corter, Janmohamed & Pelletier, 2012.

<sup>9</sup> Arimura & Corter, 2010.

<sup>10</sup> Diamond & Lee, 2011; Diamond, Barnett, Thomas & Munro, 2007.

<sup>11</sup> Hart & Risley, 2003; Moffitt et al, 2010.

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