Key findings from Year 1 of Full-Day Early Learning Kindergarten in Peel

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PURPOSE OF THE RESEARCH

The research reported here is part of an ongoing longitudinal study in collaboration with the Regional Municipality of Peel, the Peel District School Board and the Dufferin-Peel Catholic District School Board. For three years, the research has been examining the implementation and impact of school-based integrated early childhood services, specifically kindergarten, child care and parenting support in the Peel Best Start program (Region of Peel, 2011). The Best Start study builds on the previous work of our research team in the Toronto First Duty project (e.g., Corter & Pelletier, 2010; Pelletier, 2012). In 2010, the Peel research expanded to include full-day early learning/kindergarten (FDELK).

The purpose of the FDELK research is to examine the implementation and impact of FDELK in three areas: 1) kindergarten children, 2) parents of FDELK children, and 3) staff teams of early childhood educators and kindergarten teachers as well as environment quality. The study is being carried out over time from JK/SK until children are in Grade 3. This report provides preliminary information on Year 1 of FDELK implementation when children were in JK or SK.

METHODOLOGY

Procedures. Following ethics approval from the University of Toronto and from the two school boards, informed consent was given for parent and child participation in the research. Seven FDELK school sites (one had been a Best Start site) are participating in the research. The larger study includes five half-day kindergarten control group sites and five Best Start sites that provide integrated child care, kindergarten and parenting supports. For purposes of this preliminary report, the FDELK and control group sites are compared in the first year that children participated in the research.

Data were collected from staff, parents and children generally between January and May although some staff data were collected at two time points, in the fall and winter terms. Teams of researchers collected staff data through surveys, interviews and on-site focus groups. Parent data were collected through surveys. Child data were collected in individual sessions in the child’s school in a quiet space provided by the school. Children took part in research tasks with a trained graduate student or postdoctoral researcher who had extensive experience with young children. Children enjoyed their time and were never asked to participate if they were shy or unwilling.

Participants. Junior and senior kindergarten child participants included 184 FDELK and 183 control group children (age range 48-76 months), 51% were boys and 59% were English Language Learners. All senior kindergarten children had one full year of half-day junior kindergarten the preceding year. Parent participants included 171 mothers or fathers of kindergarten children in the FDELK sites. Of those, 89 completed a “daily hassles” survey and a survey about services in their community. Staff participants at the seven FDELK sites included 32 kindergarten teachers, 28 early childhood educators and four principals/vice-principals who participated in focus groups at their schools and through surveys.

Measures. Measures are described in the following sections for children, for parents, and for staff and environment.
1) Child measures included vocabulary, early reading (alphabet knowledge, conventions of print, meaning), phonological awareness, number knowledge, early writing, drawing (“draw yourself doing something here”), and a finger puppet interview (tell about your day, series of questions about what educators do, social problem solving such as what to do when someone won’t share).

2) Parent measures included a survey about services available in the community and a “parenting daily hassles” survey that measures day-to-day stresses of being a parent of a young child, for example, transporting their child to child care and kindergarten (Arimura, 2008; Arimura & Corter, 2010). Parents also completed ratings of their child in terms of relative “readiness” (more/less ready than or about the same as other children their child’s age) in small/large muscle development, getting along with children and adults, general knowledge, letter-sound knowledge, number knowledge and speaking.

3) Staff measures included a survey that tapped feelings about the collaborative ECE/kindergarten teacher team and about perceived benefits of the FDELK approach. Staff also participated in a focus group using the Indicators of Change Tool, (developed by Jane Bertrand and the TFD research team, see Pelletier, 2012). This tool measures the degree to which staff teams and the early learning program function in an integrated way. Classroom environment quality was measured using two subscales of the widely-used Early Childhood Environment Rating Scale-Revised (Harms, Clifford & Cryer, 2005): 1) Space and Furnishings and 2) Activities.

Coding and analysis. Qualitative and quantitative data were coded by trained Masters and PhD graduate students. Qualitative data from staff and child interviews and child drawings were coded thematically and were also scored for frequency count. Inter-rater reliability of at least 80% was obtained for all data requiring interpretation (for example, children’s drawings). Data were entered in separate databases for children, for parents and for staff and environment. Children’s age and maternal education level were controlled in the analyses. Descriptive analyses were carried out on qualitative data and statistical analyses were carried out on numerical data using SPSS v.19 data analysis software. The Principal Investigator carried out the quantitative analyses in consultation with an education statistics consultant.

**SUMMARY OF RESULTS**

1) Children. Analyses were carried out separately for JK and SK. Only statistically significant findings are reported here. Results show that:

SK children in FDELK were ahead of control group children in vocabulary and reading (especially for alphabet knowledge and conventions of print) (see Figure 1). There were no significant differences between ELL and English First Language children in any of the early reading subtests. A previous study had shown that ELL children are similar to or ahead of English First Language children in alphabet knowledge but can lag behind in extracting meaning (Harper & Pelletier 2008). JK children in FDELK were ahead of control group children in early reading (especially in meaning), but were not significantly ahead in vocabulary. Both JK and SK children in FDELK were ahead of control group children in phonological awareness. In the case of this measure, ELL children scored significantly lower than English First Language children; an analysis comparing only ELL children showed that FDELK ELL children were ahead of the control group ELL children (see Figure 2).
The early writing task asked children to write: “Teacher has five little red crayons” (see Figures 3 and 4 for two randomly selected examples of effective strategies to convey meaning). SK children in FDELK were ahead of the control group in early writing. However in JK, control group children were ahead of FDELK in early writing.

The number knowledge task asked children to count objects, determine “more/less,” understand which of two numbers was bigger and other similar tasks. Both JK and SK children in FDELK were ahead of control group in early number knowledge.

In the area of drawing, across all children, “play” and “social” activities were drawn more often than any other activity (e.g., more than academic activities or physical activities). Analyses of the “complexity” of children’s drawings (degree to which elements are integrated) showed children in FDELK produced more complex drawings than control group children and included more details on characters’ faces and bodies.

Parents’ ratings of children’s learning. Parents of FDELK children in SK rated their children as being “more ready” than parents of control children in: small muscle and large muscle development, getting along with other children, getting along with adults, letter-sound knowledge, number knowledge, and speaking. Parents’ ratings of JK children were higher in getting along with other children, in letter-sound knowledge and in number knowledge (see Figures 5 and 6).
Children’s perceptions of kindergarten. Children in control sites mentioned significantly more often that educators “teach” than did children in FDELK sites where educators were reported to do more assessing (e.g., they watch us). Children in FDELK sites mentioned more “comfort” and “compromise” and strategies in social problem solving such as different preferences for games. Control group children more often mentioned choosing a different game.

2) Parents. Data are reported for FDELK parents regarding services in the community and regarding their daily hassles.

Parents ranked their beliefs about services in the community; the three strongest parent beliefs were:
1. When programs and services work together they are better and easier to find out about
2. As a parent, I enjoy the programs and services in our community
3. My child enjoys the programs and services in our community

Parents also completed a “daily hassles” survey. They rated both “how much” of hassle and “how often” things were a hassle. The highest three ratings for each are presented here:

How “much” of a hassle (how much parents feel stressed by these factors):
1. Getting my child ready in the morning
2. Making alternate child care arrangements when my child is sick
3. Staying in contact with the classroom teacher about day-to-day things

How “often” is this a hassle (how often parents feel stressed by these factors):
1. Getting my child ready in the morning
2. Understanding how things work at my child’s school
3. Knowing what programs and services are available in my community
3) Staff and Environment. Staff members believe that integrating child care and kindergarten into a seamless full-day program for children is beneficial to children and families. The large majority of staff members are supportive of interdisciplinary collaboration (for example, ECEs working with Kindergarten teachers in full-day early learning kindergarten) and of the coordination of child care and kindergarten into one full-day early learning program (see Figure 7). Full-Day Early Learning Kindergarten teachers and ECEs feel strongly supported by their school community (see Figure 8). Both ECEs and Kindergarten teachers do planning; Kindergarten teachers do more long-term planning than ECEs, whereas daily planning is shared.

![Figure 7](image7.png)

Coordination of child care and kindergarten

![Figure 8](image8.png)

I receive positive recognition by our school community

The majority of ECEs and Kindergarten teachers do not perceive a “hierarchy;” however when a hierarchy is perceived, it is more often reported by ECEs. ECEs and Kindergarten teachers generally acknowledge that Kindergarten teachers delegate more tasks to their early learning partner (see Figure 9), and have more authority than ECEs (see Figure 10).

![Figure 9](image9.png)

I delegate tasks to my EL partner

![Figure 10](image10.png)

I have more authority than my EL partner
The Indicators of Change measures the degree to which integrated early learning services in schools (such as kindergarten, child care and parenting support or full-day early learning/kindergarten) work together. Focus groups of early learning staff teams provide levels of “site integration” of programs, staff teams, and parent participation. FDELK sites generally report very high levels of integration even in the first year of implementation. Environment observations in two areas - “space/furnishings” and “activities” – reveal good quality ratings. This shows that Kindergarten teachers and ECEs are making the most of resources such as space, furnishings and materials for activities.

**WHAT DOES THIS MEAN?**

These results show promise for both the implementation and short-term outcomes of FDELK. However the results are preliminary. Conclusions about the long-term effectiveness of the FDELK program cannot be determined without longitudinal analysis. This is the Year 1 progress report of the FDELK study in the Region of Peel; the study will include longitudinal follow-ups from JK/SK until Grade 3, with progress reports each year. A larger provincial evaluation of FDELK, commissioned by the Ontario government, is also underway and will provide independent evidence on the implementation and outcomes of FDELK.

References


