



FINAL REPORT

2006-08 RESEARCH

KINDERGARTEN TO GRADE 6 PROGRAMS



Frontier College would like to thank the Ontario Ministry of Education for their support.

Introduction

Over the past two years, Frontier College has conducted research on its programs for children in Kindergarten to Grade 6. These programs include reading circles, after-school programs, and in-school tutoring programs. The goal of this research was to obtain valid reading assessment data, to identify best practices, and to investigate the impact of these programs. In total, 12 programs in Sudbury, Thunder Bay, Hamilton, Kingston, Halifax and Toronto were evaluated.

Research Highlights

- 91% of the research participants rate the programs as very good or excellent
- 62% of the children in the program increased their instructional reading level by one grade level or more
- Over 80% of the research participants consistently stated that the children's comprehension skills and reading fluency had improved or greatly improved
- 83% of parents state that their children are more interested in books, 81% state that they read more often, and 70% say that their school work has improved
- Over 80% of research participants state that effective program practices are followed frequently or all the time in the program

Benefits of Community-based Child Literacy Programs

Community-based child literacy programs play a key role in building children's literacy skills and helping them to succeed academically. The Ontario Ministry of Education (2003) identified four factors that influence the ease and speed with which a child progresses from *learning to read* to *reading to learn*.

1. Exposure to a rich language environment in the preschool years
2. The quality and quantity of reading instruction in the early school years
3. Focused early intervention for those who are at risk of reading failure
4. Ongoing support from the family and community

Community-based programs contribute to three of these factors as they provide rich language environments, reading instruction, and family support.

It is vitally important that children learn to read by age seven, as children who experience reading difficulties after Grade 3 seldom catch up later (Ontario Ministry of Education, 2003), and the most important predictor of dropping out of school is that the student is reading far below grade level

(Farkas, 1997). This research suggests that interventions occurring at or before school entry, with follow-up in the early elementary years, are the most effective means of improving children's school achievement and preventing later academic problems (Slavin, 1989; Madden et al, 1993; Slavin et al, 1995; Wasik and Slavin, 1993; Reynolds, 1992 as cited by Farkas, 1997). Child literacy programs provide these interventions as through these programs:

- Children's reading comprehension and fluency increased significantly.
- The literacy skills of children living in poverty are raised, especially with curriculum-based tutoring.
- Academic performance is improved.
- Children raise their self-confidence, develop social skills, and set higher aspirations for their future (Chung, 2000; Research Works! For Child Literacy, 2006).

Methodology

Research has been conducted over the past two years by Frontier College on its programs for children in Kindergarten to Grade 6. This research included a literature review on the role of families and communities in building children's literacy skills, quantitative and qualitative research methods. The following research goals were established at the beginning of this project:

1. To determine the features of a successful reading circle
2. To identify the program structure that is most effective in helping the children to develop their literacy skills
3. To utilize various qualitative and quantitative assessment methods that will demonstrate the impact of reading circles on children
4. To assess how the literacy skills of the children improve as a result of participating in a reading circle
5. To identify barriers and challenges that prevent reading circles from being successful

To obtain the quantitative data, Frontier College tutors conducted initial and final reading assessments with children in the programs. These reading assessments included an Oral Reading Test, and an Instant Word Survey Test. In both tests, the level of difficulty increased as the child read passages (for the Oral Reading Test) or words (for the Instant Word Survey Test). Through these reading assessments, changes in the children's independent and instructional reading levels were determined. Qualitative data was obtained through focus groups, interviews and surveys that were conducted with school personnel, tutors, parents and community organizers. The focus group, interview and survey questions focused on program impact, tutoring techniques, and program quality. A total of 256 individuals took part in the research, 124 in 2006-07, and 132 in 2007-08. The following chart presents a profile of the research participants:

Table 1: Research Participants

Research Group	Tutors	Parents	School Personnel	Community Organizers	Students	Total
Total	89	56	12	12	87	256

In terms of ethical considerations, participation in this study was totally voluntary and all participants gave their informed consent. For the students, consent initially involved either the parent or guardian giving permission for their child to be involved in the research. No incentives were given to the research participants for their participation in this study. The study did not involve any physical procedures, or purposes that were hidden from the participants. The reading assessment results that Frontier College obtained did not include the child's name. All of the reports presented aggregate data and no identifying information was included in these reports. All staff and volunteers who took part in the research underwent the Frontier College screening, which includes a vulnerable sector screening and a police security check.

Research Results

The research over the past two years confirms that the Kindergarten to Grade 6 programs are high quality programs that have a positive impact on children. For the 2007-08 research, 92% of the research participants rated the programs as very good or excellent. As well, the results from the focus groups and surveys confirm that the children definitely gain reading, comprehension and spelling skills through these programs. These results are further presented below by discussing the following areas:

- a) Reading Assessment Results
- b) Impact on Reading Skills
- c) Impact on Attitude
- d) Program Delivery
- e) Program Models

2007-08 Reading Assessment Results

Frontier College used two reading assessments developed by Dr. Edward Fry, the Oral Reading Test, and the Instant Word Survey Test (Fry, 2001). Dr. Fry has written several books on reading and writing skills, and he developed the Readability Graph which is used to estimate the difficulty level of any book or article. These assessments were selected as they identify the reading level of the child, demonstrate change over time, and are quick and easy to administer.

The 2007-08 reading assessments yielded consistent results that clearly demonstrate changes in the children's reading levels over a five-month period. These results indicate that the reading circles and after-school programs have a positive impact on the children's reading skills. Both the children's instructional reading level (the level at which reading instruction is most effective), and their independent reading level were assessed. 62% of the children increased their instructional

reading level by one grade level or more, and 45% of children increased their independent reading level by one grade level or more over a 5-month period. The reading assessment results are summarized in the following chart:

Table 2: Reading Assessment Results

Reading Assessment Results	Independent Reading Level		Instructional Reading Level	
	Number	Percentage	Number	Percentage
Decreased 1 grade level	2	10%	1	5%
No change	5	25%	6	28%
Increased by .5 grade level	4	20%	1	5%
Increased by 1 grade level	6	30%	8	38%
Increased by 1.5 grade levels	1	5%	1	5%
Increased by 2 grade levels	2	10%	4	19%
Total	20	100%	21	100%

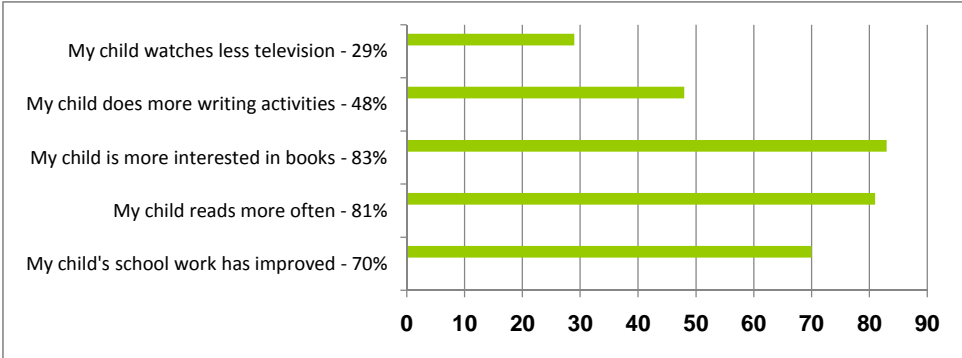
These results indicate that over half of the children in the programs make greater gains than expected in their reading levels. The specific literacy skills they learn through the programs are further discussed in the next section.

Impact on Literacy Skills

The research also showed that the Kindergarten to Grade 6 programs have an impact on children's reading skills. The survey responses indicated that 86% of the research participants reported that the children's comprehension skills improved and 82% expressed that the child's reading fluency improved. Over 60% of the research participants also reported that the children improved the range and complexity of books that they read.

The impact of the program extends as well to the activities the children do at home. Parents expressed that their child's school work has improved, they read more often and they are more interested in books. The following chart presents the changes that parents have observed in their children at home:

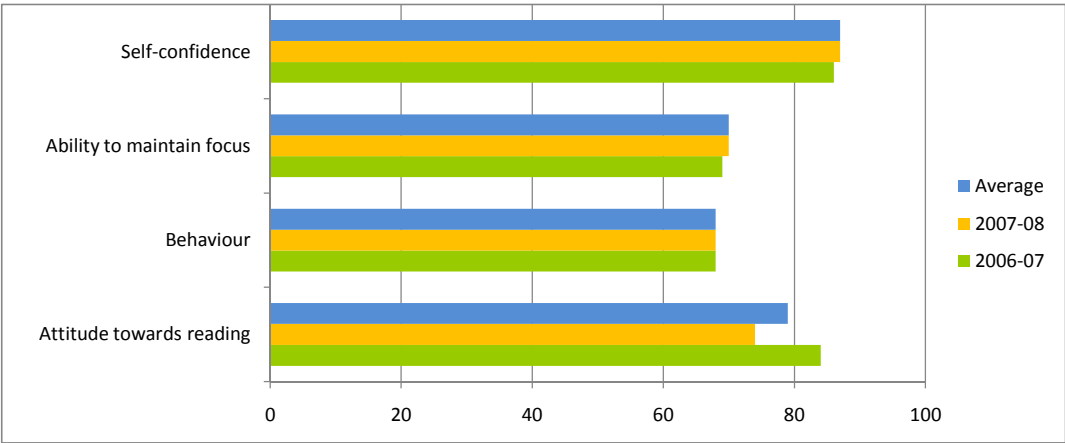
Figure 1: Changes Observed by Parents



Impact on Attitude

The other significant impact of the programs was on the children’s attitude towards reading and enthusiasm about learning. The research participants stated that the programs build social skills, increase the children’s self-confidence, and boost their interest in learning. The survey results were consistent over both years. The survey results shown below indicate the percentage of respondents who noted that the students had improved or greatly improved in each area. The respondents included tutors, parents, organizers and school personnel.

Figure 2: Changes observed in Children’s Attitude and Behaviour



Program Delivery

Through the literature review and the research that was conducted in 2006-07, seven best practices were identified (Smythe (2000); International Reading Association, 1999). The research

participants were asked to what extent these practices were followed in the Frontier College programs. The research results definitely indicate that the programs are well run as over 80% of the research participants stated that effective program practices are followed frequently or all the time. The following table outlines these findings further.

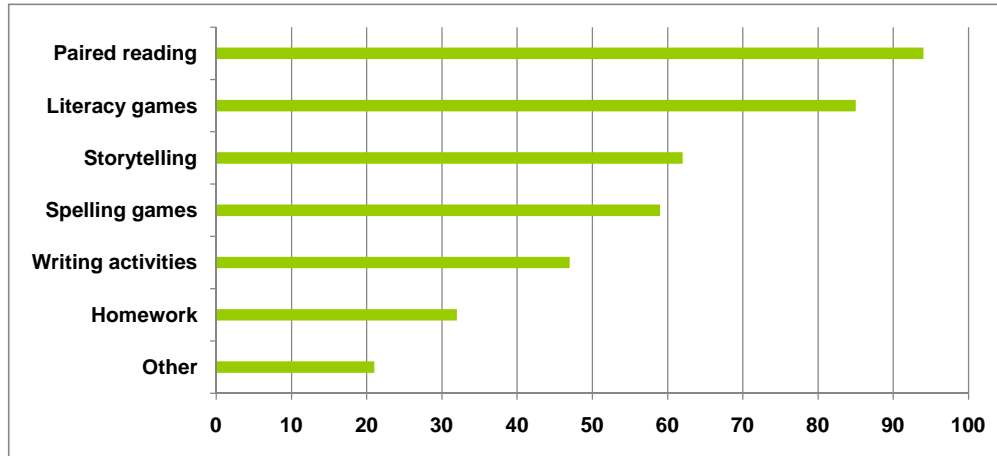
Table 3: Best Practices

Best Practice	% of respondents who stated this practice is followed frequently or all the time
The learning environment is positive, fun, & student-centred	98%
The space is well-lit, comfortable, and conducive to learning	85%
Strong bonds are built between the children and the tutors	96%
The program staff or teachers are easy to approach	97%
Learning resources are provided such as language games, literacy activities, books, etc.	89%
The program is structured with a consistent routine	90%
The program has clear goals, policies and rules	83%
There is a mixture of one-to-one and large group activities	91%
There is good communication between key stakeholders	83%
The tutors are caring and respectful	97%
The tutor training is comprehensive and effective	87%

The research participants also expressed that setting up a one-to-one program, having consistent volunteers, and establishing an accessible program time and location all contribute to the success of the programs. The two best practices that need to be further explored are the evaluation process and the extent to which programs are culturally appropriate and diverse.

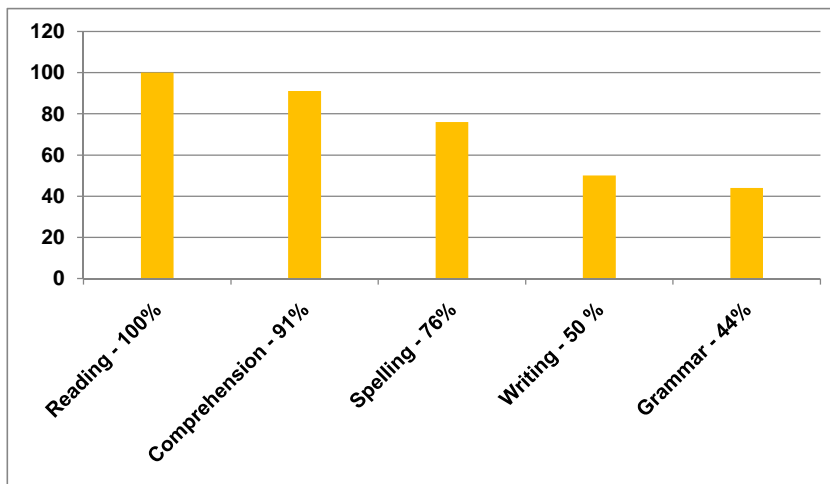
In terms of program activities, the literature states that four core steps should be included in all programs – reading a familiar book, doing word work, doing a writing activity and then reading a new book at the end. These core steps are generally followed; however, programs could be improved by incorporating more writing activities. Different learning styles also need to be considered, which are visual, auditory, kinesthetic and tactile. The following figure presents the main activities that the tutors and program staff do at the programs.

Figure 3: Program Activities



The tutors and program staff work with the children to develop specific skills. The following figure outlines the extent to which they focus on each of five skill areas during each session:

Figure 4: Skill Development



The research participants were also asked about the tutoring techniques that they use with the children. These tutoring techniques are outlined in the table below according to how often they are used.

Table 4: Tutoring Techniques

The following tutoring techniques are used once a week:	Tutoring Techniques
80% of the time	Reading aloud Breaking words down Discussing phonics
60 to 80% of the time	Choosing different reading materials Playing word games Using different learning styles
Less than 60% of the time	Doing writing activities Practicing spelling

Program Models

Three program models were researched this year – reading circles, after-school programs and in-school tutoring programs. The findings showed that all three program models have an impact due to the individualized attention the children receive, the extra time the children can spend on specific areas, and the encouragement from the tutors. The following table outlines the strengths and challenges of each program model, and the indicators for appropriate use.

Table 5: Comparison of Program Models

Program	Strengths	Challenges	Indicators for use
Reading Circle	<ul style="list-style-type: none"> -Focus on literacy skills -Easy to set up -Minimal resources required -Most reading circles use a one-on-one format 	<ul style="list-style-type: none"> -Usually only run once a week -One-on-one format works best -Volunteers need to be consistent for the program to work - Need a good supply of books 	<ul style="list-style-type: none"> -Strong leadership by community organizers -Access to books and literacy materials -Committed volunteers
After-school program	<ul style="list-style-type: none"> -Programs run Monday to Friday -Programs incorporate different activities -Programs have designated program staff 	<ul style="list-style-type: none"> -Need to have sustainable financial and human resources -Parents may need to pay a fee -Highly qualified staff are needed to run an effective program 	<ul style="list-style-type: none"> -There is a consistent and stable funding source -Resources are available to run the program – space, materials, snacks, etc. -Well-trained staff can be recruited
In-school tutoring program	<ul style="list-style-type: none"> -Tutors have easy access to children -Teachers can identify students who will benefit from the help -Extensive resources are available at the school -Work well in neighbourhoods where children cannot attend after-school programs 	<ul style="list-style-type: none"> -Children are withdrawn from the classroom -Tutors may be asked to do administrative tasks 	<ul style="list-style-type: none"> -There is strong support from the teachers and administration -Students are identified who will benefit from the tutoring -The tutoring should not interfere with the instruction children receive

Testimonials from Parents

My child has gained confidence in reading and now wants to read. My child is learning in French at school (no English). So, English learning has really improved solely through this program and home.... You are doing a great job! Please keep up the great work. My daughter cannot wait to come to Readers for Leaders each week. She has become so confident in reading because of the program. Thanks to everyone involved in running and funding the program.

Brodie Street Public Library Reading Circle, Thunder Bay

At school, I have seen a 180 degree turn in my child – there is no more struggle with reading.

Brodie Street Public Library Reading Circle, Thunder Bay

My child is now more involved, completes more homework, and is more interested to learn.

Daystrom After-School Program, Toronto

I have cut down on TV time, and rearranged my child’s bedroom. Books are more visible, and I created a more comfortable reading environment.

Brodie Street Public Library Reading Circle, Thunder Bay

The tutors are really open as to what they can do with the kids; they are flexible and I can make suggestions to them.

First Avenue Reading Circle, Kingston

Testimonials from Tutors

My learner greatly improved his reading skills and writing skills when given the one-on-one attention and with a little encouragement realized what he could do. This of course improved his self-confidence. Sometimes all children need is a little praise and someone to pay attention to them for them to succeed.

Lansdowne Public School, Sudbury

The student I work with practices reading more at home now. Her reading really took off – it took a really big step forward.

Lansdowne Public School, Sudbury

My buddy has opened up tremendously – he was very shy and quiet and in the beginning, he hardly talked and was self-conscious about reading out loud. Now, he’s more confident, talks easily, jokes with me, and isn’t afraid to ask questions/ make mistakes.

First Avenue Reading Circle, Kingston

Lessons Learned

Through this research, Frontier College has learned the following about its programs for children in Kindergarten to Grade 6:

1. Set up structured, regular communication between tutors, program staff and school personnel to build connections between the program and the school.
2. Involve parents by giving them structured feedback on what the children learn in the program, and by offering to the parent’s resources and workshops on how to support their child’s education.

3. A structured program is essential for creating a positive learning environment. This structure should include a program schedule, interactive activities, small group work, and a system to encourage positive behaviour.

Frontier College will continue to conduct reading assessments with children in its programs to confirm that the results are consistent over several years. The impact of parent workshops will also be researched this year.

Features of a Successful Program

The following ten features are important to have in a successful community-based program for children in Kindergarten to Grade 6:

1. The learning environment is positive, fun and student-centred
2. The space is well-lit, comfortable and conducive to learning
3. The tutors are caring, respectful, and consistent so that strong bonds are built between the children and the tutors
4. The program staff are approachable, personable, and effective
5. Learning resources are provided such as language games, literacy activities, and books
6. The program is structured with a consistent routine
7. The program has clear goals, policies and rules, and is evaluated regularly
8. There is a mixture of one-to-one, small group, and large group activities
9. There is good communication between key stakeholders
10. The tutor training is comprehensive and effective

Conclusion

Frontier College has conducted research over the past two years on its programs for children in Kindergarten to Grade 6. This research shows that the programs definitely have a positive impact on children's reading levels, academic performance and interest in reading. The parents, tutors, community organizers and school personnel consistently express a high level of satisfaction with the programs. In conclusion, Frontier College can confidently say that these programs consistently follow best practices and that they are of high quality.



ACADEMIC FEEDBACK

"The Frontier College Final Research Report is a comprehensive document. The Report uses accessible language to highlight both the College's many successes, as well as significant areas for improvement. In this regard, the College is to be commended for: a) realizing that providing academic support to students is not a "one size fits all" endeavour; and b) not taking traditional approaches to academic support for granted."

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The evaluation of Frontier College's programs for children in kindergarten to grade 6 which included reading circles, after-school programs and in school tutoring programs provided a better understanding of the outcomes for these children. Frontier College can now use these findings in the design of their programs to impact children's reading levels, academic performance and interest in reading.

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REFERENCES

Chung, A. (2000). *After-School Programs: Keeping Children Safe and Smart*. Washington, DC: U.S. Department of Education.

Farkas, G. (1997). Ten Propositions about Schooling, the Inheritance of Poverty, and Interventions to Reduce this Inheritance. *Research in Social Problems and Public Policy, Vol. 6, pages 125-269*. JAI Press Inc.

Fry, E. (2001). *Dr. Fry's Informal Reading Assessments K – 8*. Westminster, California: Teacher Created Resources Inc.

International Reading Association. (1999). *Using Multiple Methods of Beginning Reading Instruction*. Newark, Delaware: International Reading Association.

Ontario Ministry of Education (2003). *Early Reading Strategy: The Report of the Expert Panel on Early Reading in Ontario*. Toronto, Ontario: Queen's Printer for Ontario.

Research Works! for child literacy (2006). *Midterm Report: January 2004 - June 2006*. Waterloo, ON: Research Works! for child literacy.

Smythe, S. A. (2000). *Weaving Literacy into Family and Community Life*. Ottawa, Ontario: Canadian Association of Family Resource Programs.