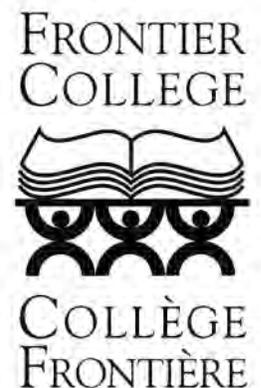




FINAL REPORT

2005-08 RESEARCH

GRADE 7 TO 12 PROGRAMS



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

Introduction

For the past three years, Frontier College has conducted research on the benefits of Grade 7 to 12 programs, their impact on academic performance, and best practices. In total, 13 programs were evaluated including homework clubs, one-to-one tutoring programs, peer tutoring, and in-school tutoring programs. The programs were located in North Bay, Hamilton, Thunder Bay, Waterloo, Thornhill, and Toronto. The research participants included students, tutors, school personnel, and community organizers.

Research Highlights

- In all programs, the students benefit from the individualized attention they receive, and the mentorship the tutors provide to the students
- Students who participate in homework clubs gain homework completion, organizational, communication and study skills
- Homework clubs and tutoring programs have a strong positive impact on the students' attitude towards learning, their motivation level, and their ability to focus
- The students who returned for a second year came back because the program helps them do better academically, and they enjoy the program
- 94% of the students stated that their study skills have improved through the tutoring program
- 100% of students state that they would recommend the tutoring program to their friends (2007-08 research)

Background

In the first year of the research, Frontier College did an extensive literature review on homework clubs and out-of-school programs. Through this review, the benefits of these programs were identified. For example, a study conducted by the U.S. Justice and Education departments found that children who participate in after-school programs are more likely to succeed academically, are more self-confident, have stronger social skills and learn how to handle conflicts in an acceptable manner. This report also concluded that after-school programs help to develop relationships between youth and caring adults, and partnerships between families, schools, and communities. Essentially, innovative programs provide enriching learning activities while offering a safe and healthy after-school environment (Mediavilla, 2001, p. 41).

Out-of-school programs are particularly important for students in low-income areas, as “according to the Organization for Economic Co-operation and Development (OECD), four main factors affect students’ chances for success at school: their parents’ level of education, the language spoken at home, parents’ occupation and income, and parent’s immigration status. Without extra support, students from low-income families, from families where English or French is not the first language, and students who are recent immigrants, are less likely to succeed in school. But, by levelling the playing field with targeted programs and supports, a thriving public education system can provide all students with a comparatively equal chance for success” (People for Education, 2005, p. 1-2). The programs offered by Frontier College focus on these groups of students. They complement the school system by providing academic support, mentoring, and motivation to these students.

Methodology

The following research goals were established at the beginning of this project:

1. To determine the features of a successful homework club
2. To evaluate three or more homework club models
3. To identify effective program practices
4. To determine qualitative and quantitative assessment methods that demonstrate how the learners benefit from their participation in the homework club
5. To determine how homework clubs contribute to student success
6. To identify barriers and challenges which prevent homework clubs from being successful

To achieve these goals, research sites were selected based on previous feedback received about the program, access to academic data, and the program model used. Focus groups, interviews and surveys were conducted with students, tutors, organizers and school personnel. Academic data was obtained where possible to determine changes in academic performance before and after enrolling in the program. In total, 243 participants contributed to this research. The following table summarizes the groups that participated in the research over the past three years:

Table 1: Summary of Research Participants

Research Group	Students	Tutors	Community Organizers	School Personnel	Total
Total	100	109	11	23	243

In terms of ethical considerations, participation in this study was totally voluntary and all participants gave their informed consent. For the students, consent involved the parent or guardian first giving permission for their child to take part in the research and for the school to share academic data with the researcher. Once this was obtained, the students were informed about the study and asked to sign an informed consent form. No incentives were given to the research participants for taking part in this study. The study did not involve any physical

procedures or purposes that were hidden from the participants. The academic information that Frontier College obtained did not include the student's name. All of the research 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 included vulnerable sector screening and a police security check.

Research Results

The research that Frontier College has conducted over the past three years demonstrates that students definitely benefit from the Grade 7 to 12 programs. This is demonstrated by the result that in the 2007-08 research, 100% of students stated that they would recommend the tutoring program to their friends and the program helps them do better in school. As well, 90% of the students rated the programs as very good or excellent. Over 80% of students attended the program because their friends come to the program. Interestingly, only 12% attended because their parent or teacher suggested that they attend the program, however 88% had heard that it is a good program.

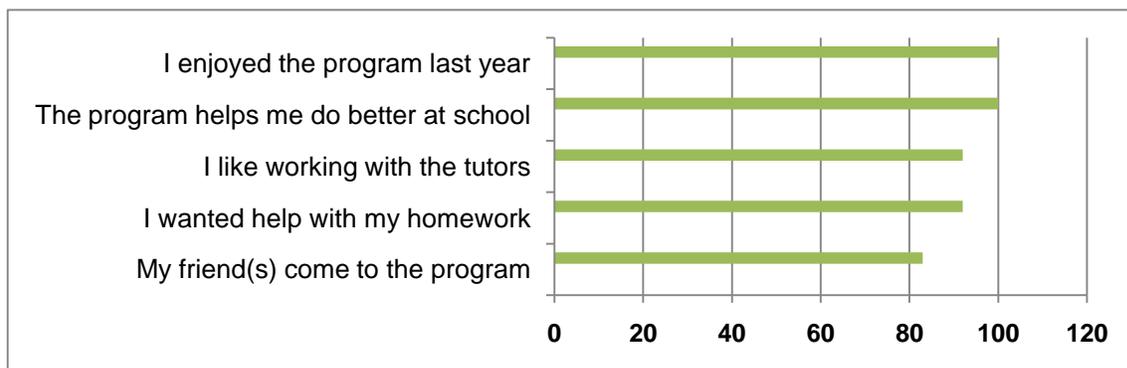
To present the research results, the following areas will be discussed:

- a) Long-term Benefits
- b) Academic Performance
- c) Impact on Skills
- d) Impact on Attitude
- e) Program Models

a) Long-term Benefits

In several programs, the students attend for more than one year. The following chart presents why students returned to the program for a second year:

Figure 1: Reasons for Returning to the Program for a Second Year



Through the focus group discussions, the following long-term benefits of the programs were identified: exposure to a professional environment at the workplace homework clubs, informing students about future opportunities, and increased structure in the students' lives.

b) Academic Performance

Extensive studies on the impact of after-school programs have been done in the United States. The After-School Corporation in a review of current literature on after-school programs found that “students in after-school programs show higher academic achievement than comparable students not in after-school programs. After-school participants behave better and are more respectful toward others, attend school more, have higher graduation rates, and are more likely to continue their education after high school than students not in after-school programs (2002, p. 4).

The key ingredient to better school performance, one study revealed, was that students receive personalized assistance from the tutors. In these programs, the tutors have the time to explain assignments, ensure that the students master a problem, and define vocabulary. As a result, students go home with more completed schoolwork and often read more as a result of participating in a homework program (Mediavilla, 2001, p. 42; Chi, M., Siler, S. Jeong, H. Yamauchi, T. and Hausmann, R., 2001, p. 472).

These findings were confirmed by the Frontier College research. The research participants identified that the main academic benefits of the grade 7 to 12 programs are homework completion, improved grades, and increased skill development. Frontier College collected data on the academic performance of 26 students over the past two years. This data included report cards, and results from the Ontario Secondary School Literacy Test (OSSLT). In total, 62% (16 out of 26) of the students showed a net improvement.

Report card results for 19 students were analyzed. All of the students' academic subjects were analyzed, including English, Math, Science, History and Geography. 63% of these students improved their report card results. The following table summarizes these results.

Table 2: Summary of Report Card Results – 2006 to 2008

Research Results	Average increase	Range
All students (19)	1.35	-6.55 to +12
Students who improved (12 – 63%)	3.86	+1.18 to + 12

These preliminary results show that there is a small but significant gain in academic performance for a majority of students who participate in the homework clubs. It would be necessary to conduct research on a much larger group of students to establish the overall impact of homework clubs on students' academic performance, which is beyond the capacity of Frontier College.

c) Impact on Skills and Knowledge

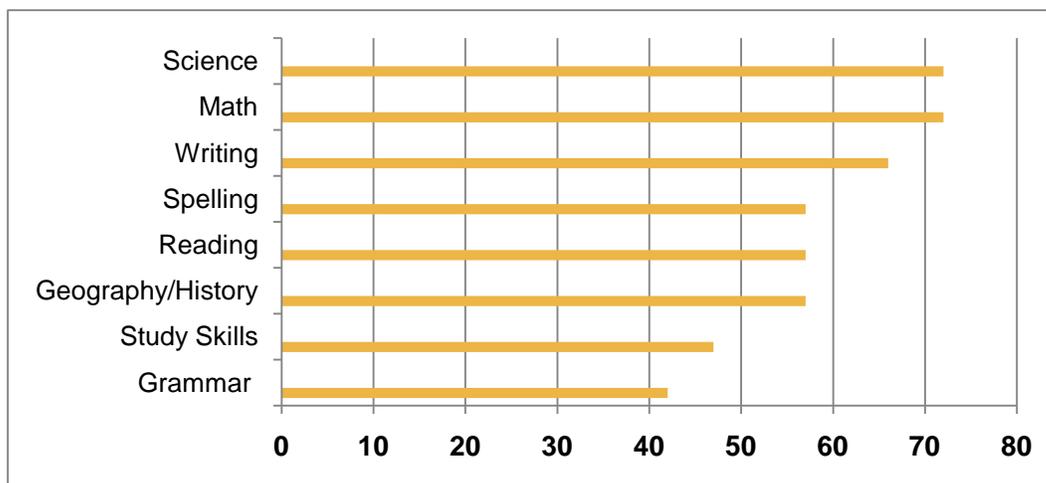
The tutoring programs have a positive impact on the students' study skills, academic skills, and knowledge level. For example, in 2007-08, 94% of the learners stated that their study skills have improved through the homework club or tutoring program. The following table outlines the study skills they work on at the tutoring programs:

Table 3: Study Skill Development

Study Skill	% of Students who Worked on this Study Skill
Focusing on my work	73%
Answering questions	72%
Asking for help	70%
Working on my own	64%
Organizing my work	64%
Time management	43%
Setting goals	43%
Doing research	39%

These results indicate that the tutors work on a wide range of study skills with the students. The skills that the tutors could focus on more are: time management, research, and goal setting. The following figure outlines the subjects that the students and tutors work on.

Figure 2: Subject Areas Worked on



The subjects that they spend the most time on are math, science and writing. These results have been consistent over the past three years. This means that tutors need to be recruited that have skills in these areas, and math, science and writing resources should be available to the students.

d) Impact on Attitude

Consistently, the research participants spoke about how the tutors are strong role models to the students. They share their experiences so that the students learn about different work environments and post-secondary education. They encourage and motivate the students, and thus create a strong bond. As a result, over the past three years, the research participants have consistently spoken about how the program helps to increase the self-confidence of the students. However, programs need to focus more on the following two areas: improving the students' attitude towards school, and encouraging positive behaviour.

These results are supported by the research literature that shows that youth who attend high-quality out-of-school time programs have been found to have better peer relationships, emotional adjustment, grades, and conduct in school (National Institute on Out-of-School Time, 2000, p. 3)

e) Program Models

To engage the students, Frontier College staff members have found that one-on-one programs work effectively with Grade 7 and 8 students. For high school students, drop-in programs and in-school tutoring work well. The students benefit from all of these programs through the individualized attention they receive, and the mentorship the tutors provide to the students. The following chart presents the strengths, challenges and indicators for appropriate use of the different program models.

Table 4: Comparison of Program Models

Program	Strengths	Challenges	Indicators for use
One-to-one tutoring/ Peer tutoring	<ul style="list-style-type: none"> -The tutor and the student develop a strong bond -The student receives individualized attention and help with his or her learning challenges - The tutor and the student can identify areas to explore further 	<ul style="list-style-type: none"> -The program does not work if the tutor or the student do not attend the program consistently -The match between tutor and student may not work out, and can be difficult to change -The tutor and student need a quiet work space 	<ul style="list-style-type: none"> -This model works well with Grade 7 and 8 students -It is important that there is a good pool of committed volunteers - It is important that the students have enough homework -Fewer students can receive support with this model
Drop-in homework club	<ul style="list-style-type: none"> -This program is flexible and accommodates the students' schedule - Tutors enjoy this program as they work with different 	<ul style="list-style-type: none"> -It is difficult to predict how many students will show up each week, or what their learning 	<ul style="list-style-type: none"> -This program model works best when there is a large group of motivated students who will attend the

	students on a variety of subjects - Students can work on specific assignments or to prepare for tests and exams	challenges will be - The tutors need to do continuous outreach to maintain consistent numbers	program consistently - This program works well with high school students - Attendance of tutors and learners may not be consistent
In-school tutoring program	-Tutors have easy access to the students -Teachers can identify students who will benefit from the help -Extensive resources are available at the school	-The students may be withdrawn from the classroom - Tutors may be asked to do administrative tasks by the teachers	-There is strong support from the teachers and administration - Students are identified by the teachers

Lessons Learned

Through this research, Frontier College has learned the following about its programs for children in Grade 7 to 12:

1. It is important to have regular communication between the tutors and school personnel. This can be achieved through meetings, regular updates, email communication, etc.
2. Tutors with expertise in math, science and writing should be recruited for these programs
3. The tutors should use tutoring techniques such as building prior knowledge, and helping the students to both complete and organize their work

Features of a Successful Program

The following ten features are important to have in a successful community-based program for children in Grade 7 to 12:

1. The program space is conducive to learning and a positive learning environment is created
2. Diversity and mutual respect are encouraged
3. The tutors are caring, respectful, and consistent so that strong bonds are built between the students and the tutors
4. Resources are available such as dictionaries, atlases, textbooks, and computers if possible
5. The program has a clear structure with goals, policies, rules, and regular program evaluation
6. There is a strong orientation and training for the tutors

7. There is good communication between Frontier College, the community partners, tutors and students
8. The tutor to student ratio is low
9. The program staff are approachable, personable, and effective
10. The program focuses on students who are motivated and committed to learning and who will benefit from the program

Testimonials from Tutors

One person had to drop down to applied due to low self esteem, and went back up [to academic] after she realized she could do it. The homework club was the support she needed.

St. David's Catholic High School, Waterloo

The students – they are very friendly and give you a sense of purpose. They're inviting and welcoming.

Heydon Park Secondary School, Toronto

The program provides students with the opportunity to meet and experience the business side – to interact with Manulife's employees.

Manulife Homework Club, Toronto

Testimonials from Students

I feel more confident; I know how to study.

Our Lady of Lourdes Catholic School, Toronto

The tutors taught me how to really study (I question myself after I read instead of just reading the text book).

Our Lady of Lourdes Catholic School, Toronto

Testimonials from School Personnel

The students see a professional environment. They consider more options for the future.

St. Mary's Catholic School, Toronto

Conclusions

Frontier College has gained significant knowledge about its grade 7 to 12 tutoring programs in Ontario over the past three years. This knowledge has been gained through collecting academic data as well as focus group, interview and survey results. Through this research, Frontier College has learned about the impact of its tutoring programs, identified features of successful programs, tracked students over two years, determined how best to train volunteer tutors, and assessed which students are most likely to benefit from the tutoring programs.

Essentially, the tutoring programs are effective because a strong bond is established between the tutors and the students. Through these tutoring programs, students develop their study skills, improve their grades, and learn about future career choices. The students also gain increased self-confidence, more effective study skills, and a greater motivation to learn.



REFERENCES

Chi, M., Siler, S. Jeong, H., Yamauchi, T. and Hausmann, R. (2001) Learning from Human Tutoring. *Cognitive Science* 25 (2001) 471-533. Austin, Texas: Cognitive Science Society, Inc.

Mediavilla, C. (2001). Why Library Homework Centers Extend Society's Safety Net. *American Libraries*, December 2001. Chicago, IL: American Library Association.

National Institute on Out-of-School Time, (2000). *Understanding Basic Standards for a Quality out-of-School Time Program*. Wellesley, M.A.: National Institute on Out-of-School Time.

People for Education, (2005) *New Strategy for Urban Schools*. Toronto, ON: People for Education

The After-School Corporation (2002) *After-School Programs: An Update of the Need, The Benefits and Public Opinion*. New York, New York: The After-School Corporation.

U.S. Department of Education. (1998). *Safe and Smart: Making After-School House Work for Kids – June 1998*. [On-line]. Available: <http://www.ed.gov/pubs/SafeandSmart/chapter2.html>