
The Power of Two: Researching the Effects of Peer Mentoring on Student Retention and Engagement

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Student Mentoring in Life & Education





smile Seneca



Property of Seneca College & the SMILE Mentoring Program

Seneca College

- 4 main campuses + satellite campuses
- 1 year certificate programs
- 2 & 3 year diploma programs
- 4 year applied degree programs
- University partnerships
- 20,000 full time students
- 2500 International students
- 52.5% male, 47.5% female
- 25,000 part time students per semester
- Commuter college, 1300 residence beds

Mentoring in Canada

- Canada is the world leader in providing mentoring programs in career settings
- Over 65% of peer and other mentoring programs in the world are Canadian programs
- 66% of the top 2,000 Canadian corporations provide some type of mentoring program, compared to 17% in the USA (Rey Carr, Peer Resources)

Why Post Secondary Mentoring?

- A public institution with 2,000 freshmen enrolled annually and a dropout rate of 30% can save \$1 million for a 10% decrease in the dropout rate (Levitz, Noel and Richter, 1999)

“Dropouts are expensive. It is far more cost effective to retain a student that has been admitted than to recruit a new one.”

(Dr. Lee Noel, Student Retention Task Force, Nipissing University, March 2006)

Retention

“Successful retention practices provide students with the tools they need to survive – before they know they need them.”

~Noel-Levitz, 2002

About SMILE

- **S**tudent **M**entoring **i**n **L**ife & **E**ducation is a free peer mentoring program that was developed as an intervention strategy to address retention issues faced by the College
- SMILE aims to engage students by providing them with a sense of community, help new students adapt to college life, and transfer knowledge of available college resources
- SMILE focuses on much more than student retention as it fosters the development of transferable skills in our mentors and protégés that will significantly impact their success at college and in the workplace

About SMILE

- The SMILE Program falls under the umbrella of Counselling, Disability, Health and Learning Centres
- SMILE began as a pilot project in 2002. This pilot was initiated in one academic program at one satellite campus with 10 mentors and 20 protégés.
- SMILE currently serves nearly 1300 students annually over three campuses (800 protégés and over 450 mentors)
- SMILE will serve nearly 2000 students over four campuses in the 2010-2011 academic year

SMILE Complement

- Program Coordinator
- 1 Faculty
- 2 Alternate Trainers
- 2 Support Staff/Program Assistants
- 10 -14 Lead Mentors – Work Study
- Mentors – volunteer, senior students
- Protégés – mainly 1st semester students
- Academic Partners

Mentors & Protégés

Mentors

- Volunteer
- 2nd semester and above
- GPA of 3.0 or higher
- Individually interviewed
- Successfully complete 7 hours of mentor training

Protégés

- 1st semester students who request a mentor
- Matched with a mentor based on their program or program area
- Option to request a mentor of same gender, and cultural or linguistic background

Benefits to Protégés

- Accelerated adaptation to the college
- Increased success at college
- Navigate through college with foresight rather than hindsight
- Get connected to resources and services
- Get answers to questions about their program and College life
- Network and meet new people
- Awareness of opportunities for engagement in the college e.g. to become a mentor, club membership and other volunteer positions

Benefits to Mentors

- Develop leadership and communication skills
- Gain transferable skills for future employment
- Mentoring experience leads to more co-op and job opportunities as well as student awards
- Become re-energized in own program
- Get involved in the College and meet new people
- Make a difference in another student's life
- Receive a certificate of achievement
- Receive a notation on academic and co-curricular transcript

Benefits to College

- Cost effective retention program
 - Mentoring increases student retention according to SMILE and other research (Astin, 1977)
 - Mentoring helps students stay in college and succeed in their studies (Pan-Canadian Study of First Year College Students, 2007)

- Transferable Skills
 - By participating in the SMILE program, students gain skills that employers are seeking, which may not have been fully developed through academic studies alone

SMILE Mentoring Program Activities

- Recruitment
- Applications & Screening
- Training
- Matching
- Database
- Marketing
- Lead Mentor Program
- Mentoring Month
- Campus Events
- Recognition Ceremony
- Leadership Award
- Program Maintenance & Evaluation
- Liberal Arts Credit
- Research

New Initiatives ~ 2010

- Targeted mentoring in previously underserved programs using selected Lead Mentors
- Lead Mentors mentoring 5 – 10 students each, individually and in small groups
- Mentors are no longer program specific and work more proactively
- Working with students who are in a bridging program having failed first semester
- Considering how this new model of mentoring can articulate with the needs of different departments
- Running new mentoring program parallel to regular peer mentoring program

SMILE's Involvement in Research

- SMILE has been involved in four research projects:
 - HRSDC in School of Accounting and Finance in 2006
 - Foundations for Success 2007 – 2009
 - Quantitative evaluation of SMILE program's effectiveness 2008 -2009 in partnership with Market Probe Canada
 - Research into Proactive Mentoring with at risk students in three Business Schools 2009 - 2010

SMILE Research

Outcome Evaluation of Seneca College's SMILE Mentoring Program 2008-2009

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Reasons for Research

- College President requested quantitative evaluation of program
- Anecdotal and qualitative support for the program; however its efficacy had never been measured quantitatively
- Establishing the efficacy of mentoring is important for College Administration decision-making and resource allocation

Research Objectives

- Primary objective of study was to determine the efficacy of the SMILE Mentoring Program in increasing retention rates among first year, full-time students at Seneca College
- Other objectives were to assess if the program:
 - Increased engagement in college activities
 - Positively impacted student academic performance (GPA)

Partnerships

- Required both internal and external partnerships
- Market Probe Canada was paid as the lead researcher

- Decision to contract an external research firm was made to remove internal bias

- Internal partners included:
 - VP, Student Success and Enrolment Services
 - Information Technology Department
 - Office of Research and Innovation

Research Design

- Quasi-experimental design:
 - SMILE is a self-selecting program and service cannot be denied to any student who requests a mentor in all programs serviced by SMILE
 - Control group consisted of students who did not request a mentor

- Sample size:
 - Treatment group was 305
 - Mirror image control group was 305

Treatment Group Selection

- Treatment group was selected from a pool of 1st semester students who requested a mentor
- Research participant recruitment:
 - All protégés were contacted by email, phone or at Orientation by our Research Assistant or Lead Mentors to inform them about the research and why they should participate
 - Consent forms submitted in person or electronically

Control Group Selection

- Informed consent not required for control group
- Control group mirrored treatment group on the following variables:
 - Age
 - Gender
 - Program of study
 - 1st language
 - Citizenship (visa, landed or regular)
 - Mature student status (19+)
 - # of parents who completed PSE
 - English levels – remedial or college English

Control Group Selection

- Quality of Treatment-Control Group Match:
 - 4.3% were matched on all 8 criteria on the 1st attempt
 - 95.7% were matched on the 2nd attempt:
 - Age, gender, and remedial English were rigid
 - 1st language – English/non-English
 - Citizenship – regular/non-regular
 - Mature student status – any
 - Program of study – any
 - # of parents completing PSE - >0
 - A third attempt with more flexible criteria was not required

Data Collection

- Data for analysis were collected from various sources:
 - Re-affiliation rates after one and then two semesters
 - Difference in Grade Point Average (GPA) between Treatment and Control group
 - Online questionnaire to research participants November 2008 (50% response rate)
 - Focus groups with protégés and mentors

Results Summary – GPA

	c-group	t-group
	Total	Total
GPA Fall 2008 (n =)	304	304
	2.65	2.68
Standard deviation	1.20	1.26
t-Test	0.30	
Winter 2009 (n =)	231	231
	2.79	2.92
Standard deviation	1.10	1.07
t-Test	1.41	

Results Summary – Re-affiliation

	c-group	t-group
	Total	Total
Re-affiliated	%	%
January 2009 (n =)	305	305
%	86.2	91.1
z-Test	-1.92*	
September 2009 (n =)	305	305
%	59.2	79.0
z-Test	-5.29**	

*Indicates a significant difference at a 90% Confidence Interval.

**Indicates a significant difference at a 95% Confidence Interval.



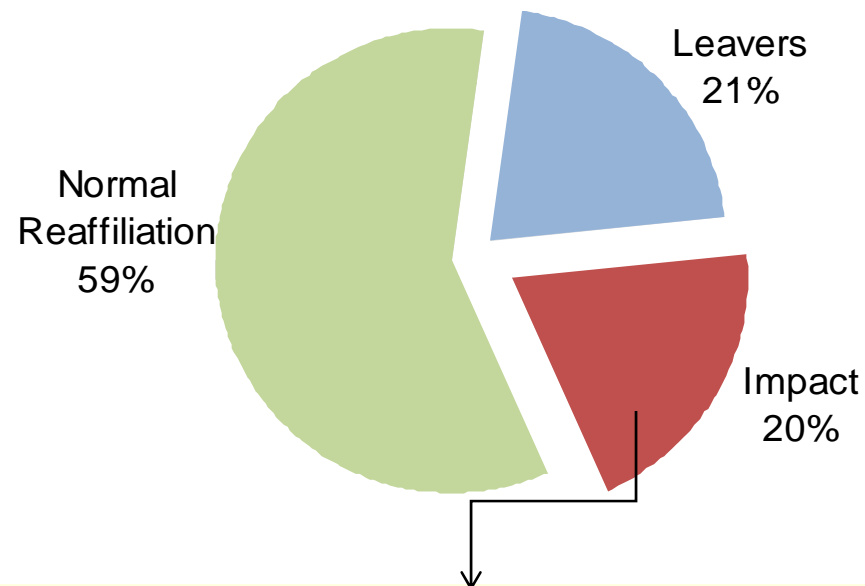
Re-affiliation Results Summary

- Treatment group: 305
- Mirror control group: 305

- T-group: 79% re-affiliated for 2nd year
- C-group: 59% re-affiliated for 2nd year

Impact of Re-affiliation Results

SMILE Program Incremental Impact on the Reaffiliation of 500 students



These students would have dropped out if not for SMILE

- Impact on lost revenue: Savings of \$325,000 - \$650,000
- Impact on retention rates: 100 additional second year students

Financial Implications of Results

- These results translate into significant potential savings for the college
- It has been estimated by Seneca that the college loses \$6500 (tuition + operating grant) for a full time one-weighted student who drops out after first year
- This translates into a total loss of \$6500, \$13000, and \$19500 for students in two-, three-, and four-year programs respectively
- When factored over the student body, mentoring potentially saves the college between \$1.3 and \$3.9 million in lost revenues

Preliminary Qualitative Results from Online Survey and Focus Groups

- An overall perception that mentoring had a positive impact on their College experience
- Perceived that having a mentor:
 - Reduced their anxiety
 - Increased their uptake of student services
 - Increased their involvement in college activities
- Two thirds of protégés recommended the SMILE program to others
- One third wanted to become SMILE mentors
- Most protégés wanted more time with their mentor

Considerations

- Significant ROI for the college
- Seneca can expect the same ROI on every dollar invested
- Self-replenishing source of volunteers (approximately 30% of protégés become mentors)
- Model for other PSE institutions

Lessons Learned/Best Practices

- Synergic relationship needs to be developed between research partners
- College researchers need to have the final word in decision making
- Work within the budget. Do not run out of money towards the end of the project!
- Build research and evaluation into the program from the beginning
- Regularly communicate successes to college stakeholders and external community

SMILE Research, Fall 2009 - 2010

**The Impact of Proactive
Mentoring on Persistence at
College: A Study of First Year
Students at Seneca College,
Toronto**

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Emotional Intelligence and Proactive Mentoring

- The study used Emotional Intelligence (EI) scales to identify students at risk of academic failure and dropping out of college
- College Achievement Inventory developed by Dr. James Parker of Trent University was used to measure EI and at-risk status
- Research has shown a correlation between Emotional Intelligence and persistence (Parker 2002)
- Academically successful students have significantly higher levels of certain emotional competencies (Parker et al, 2005)

Research Objectives

- The primary objective was to measure the impact of intrusive/proactive mentoring on the retention of at-risk first year, full time students from first to second year
- A further objective was to evaluate whether intrusive mentoring influences the EI levels and thus the at-risk status of the students in the study

Potential Benefits of Research

- Research results will help SMILE make informed decisions with regard to program development and expansion
- The differing needs of students will be taken into account
- Resources will be allocated more effectively
- SMILE is partnering with three academic areas in this research. This type of intrusive mentoring program may be more appealing to certain academic areas which have high dropout rates

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Thank You

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