

March 2009
Project Update

CURA Transition Study

Principal Researchers: Dr. Dennis Sharpe and Dr. Dale Kirby



KILLICK CENTRE FOR E-LEARNING RESEARCH
A COMMUNITY-UNIVERSITY RESEARCH ALLIANCE



KEY FINDING:
High school distance e-learners are more likely to report higher levels of computer and reading self-efficacy.

A Snapshot of High School Distance e-Learners

A recent national review of on-line learning in each of the provinces and territories in Canada highlighted the steady growth of student enrolment in web-based distance education course in Newfoundland and Labrador's rural schools. The report, titled *A Snapshot State of the Nation Study: K-12 Online Learning in Canada*, noted that the number of students taking courses provided by the Centre for Distance Learning and Innovation (CDLI) has increased from 200 in 2001-02 to approximately 900 students in the 2007-08 school year.

One of the questions that has emerged as more and more students take part in distance e-learning courses is: what are the characteristics of this group of students? This precise question was recently considered by researchers with the CURA Transition Study in Memorial University of Newfoundland's Faculty of Education.

The Transition Study is part of the Killick Project for E-Learning Research, a five-year Community-University Research Alliance (CURA) focused in the area of e-learning research. The lead researchers for the Transition Study, Dr. Dennis Sharpe and Dr. Dale Kirby, are engaged in a multi-year examination of a) student transition to post-secondary education and the workforce after high school, and b) the impact of high school distance learning on students' transition experiences.

Efforts to identify the predisposing characteristics of distance e-learners students are important for two reasons. A better understanding of the characteristics of students who do not choose distance e-learning

courses may be useful in developing strategies to increase and diversify the high school student population enrolled in distance e-learning. This research also enables us to better support distance e-learners and to identify at-risk learners in order to increase their chances of success.

To compare high school distance e-learners with other students, the research team relied on a data collected from surveys of over 1,000 high school students in the province. These surveys, conducted over two consecutive school years (2006-07 and 2007-08), asked students to respond to questions about their experiences with on-line courses, their use of computer technologies and what they planned to do after high school graduation

Statistical analysis yielded significant results that suggest that students enrolled in CDLI courses are more positively disposed toward school and more likely to indicate that they spend some of their time after school completing homework assignments. While they are equally likely to be planning to attend post-secondary education (e.g., apprenticeship, college, university), students in distance e-learning courses are more likely to be planning to enrol in a university-level program. These students are also more likely to report higher levels of self-efficacy with respect to their computer and reading abilities.

While these results provide us some indication of who participates in distance e-learning courses in high school, there is still much to be explored and learned about our growing population of distance e-learners.

More on the CURA Transition Study and the Killick Centre . . .

The CURA Transition Study project is funded through a 5-year grant from the Social Sciences and Humanities Research Council (SSHRC) through the Killick Centre for E-Learning Research in Memorial University of Newfoundland's Faculty of Education. The Killick Centre can be found on-line at <http://www.mun.ca/killick>.

Dr. Charlene Dodd: CURA Doctoral Researcher



Dr. Charlene Dodd was awarded a PhD in Education at Memorial University of Newfoundland in October 2008. Her primary research interests are in the areas of post-secondary studies and educational psychology. Dr. Dodd previously completed a Bachelor of Arts in Psychology at Carleton University and an Master of Education in Counselling at the University of Ottawa. She has worked as a research assistant in the areas of behavioral neuroscience/psychology and education and has more recently been engaged in applied health research. She has presented papers at a number of academic conferences and has been a contributing author on several scholarly papers and articles. Dr. Dodd is currently employed as a Clinical Research Scientist with Eastern Health in St. John's. In the 2006-07 academic year, Dr. Dodd was the recipient of Killick Centre for E-Learning Doctoral Research Fellowship. The two studies discussed below, carried out in collaboration with CURA Transition Study researchers, were the focus of her recently completed doctoral dissertation.

Transition of High School Distance e-Learners to University

An archival study was undertaken to compare the first-year university achievement and persistence of rural students with distance e-learning course experience (i.e., CDLI students) and those without such experience.

Two student cohorts were studied. These were students who graduated high school in rural Newfoundland and Labrador in 2003 and 2004 and enrolled at Memorial University.

Students who had distance e-learning course experience did not significantly differ from students who did not with regard to high school

achievement across cohort years. Overall, 81.4 per cent of the students with distance e-learning course experience successfully completed their first year of university studies and returned for the following Fall semester compared to 68.2 per cent of students with no distance education course experience

As is illustrated in Figure 1, the results indicated the probability of persistence beyond the first-year of university increased for both student groups as their grade point averages (GPAs) increased.

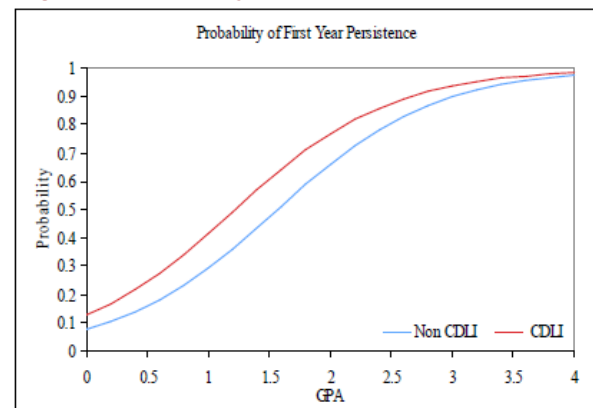
Interestingly, students who completed distance e-learning courses in high

school had a higher probability of persistence than students without distance education experience.

Overall, these results suggest that students who com-

plete distance e-learning courses in high school are not disadvantaged during the first-year university transition period. In fact, these students had a higher probability of persisting to the second year of study.

Figure 1: Probability of Student Persistence and GPA



Student Coping During the University Transition

Coping, defined as an individual's attempt to deal with, modify or adapt to stress, plays an integral role in student transition to post-secondary education.

The role of coping as a mediator in the post-secondary context is of interest because of its impact on student adjustment and success. Also, student coping skills are likely to impact the process by which they make decisions to leave their program or continue on with studies.

To examine the role of coping in the transition process, 289 first-year Memorial University students' responses to a survey containing the Student Coping Scale (SCOPE) were analyzed. The SCOPE is designed to assess student academic coping – specifically emotion- and problem-focused coping responses.

Data collected using the SCOPE instrument was matched to student achievement and enrolment data. Statistical analyses were carried out to assess the

effect of coping style on first-year achievement and university attrition.

A total of 123 of the participating students had completed high school distance e-learning courses and the remaining 166 had not.

A larger proportion of students with distance e-learning course experience persisted to the second year of university studies (87.8 per cent) as compared to students with no distance e-learning course experience (83.4 per cent).

The results revealed that avoidance-focused coping, which involves removing oneself from exposure to stressors, had a significant effect on student achievement and attrition. In other words, students who tended toward an avoidance-focused coping strategy performed more poorly academically and were less likely to resume university studies after the first-year.

There were no differences between students with distance e-learning course experience and those without.

High School Students' On-Line Activities

Internationally acclaimed author and education consultant Marc Prensky has suggested that "our students today are all 'native speakers' of the digital language of computers, video games and the Internet".

Indeed, our current generation of tech-savvy youth is often better acquainted with the world of podcasts, blogs, wikis, and social networking than are their parents and educators.

In fact, on-line social networking is now so deeply embedded in the lifestyles of young people that it now competes with television for their attention.

For the 2008 Transition

Study survey, we asked students in rural communities about their Internet usage and the range of Internet activities in which they regularly participate.

Ninety-three per cent of students indicated that they had access to the Internet from a computer in their home.

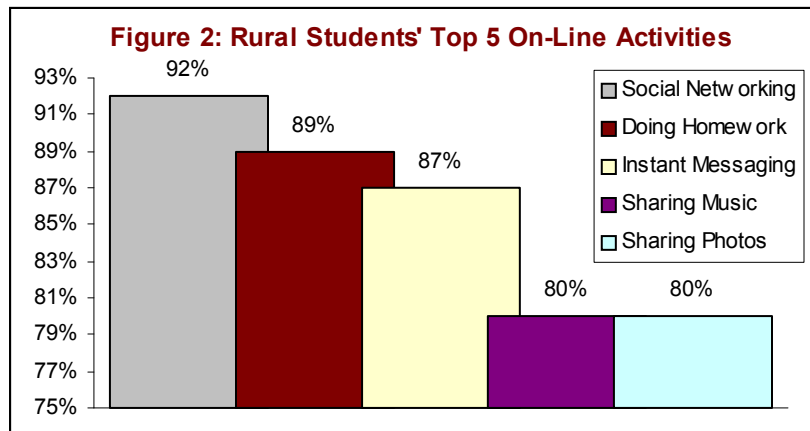
A total of 33 per cent of students said they spent over 20 hours using the Internet each week and 47 per cent of students spent

5 or more hours each week using the Internet to complete their homework assignments.

Figure 1 outlines student participation in five different on-line activities. Social networking using websites like Facebook and MySpace was the most popular on-line activity, with 92 per cent of students taking part in this activity.

Web browsing to complete homework assignments (89 per cent) and instant messaging (87 percent) were the next most popular on-line activities.

An equal percentage of students (80%) indicated that they spend a portion of their time using the Internet to share music and photos.



Factors Influencing High School Students' Post-Secondary Choices

As with our 2007 high school student survey, the vast majority (90%) of the students surveyed in 2008 indicated that they intended to pursue some form of post-secondary education after high school.

One of the questions asked of students in the 2008 rural high school student survey was designed to investigate the key factors that influenced the choice of a particular post-secondary program.

This survey item asked students to rate a list of 12 factors that might have influenced their choice on a scale of 1 (not important at all) to 4 (very important).

Table 1 outlines the top ten influences on student choice of a particular post-secondary program.

The factors with the most influence on the students' decisions were the availability of a desired program (83 per cent) and the reputation of the institution or program (79 per cent).

The factors that had the least amount of influence (not included in Table 1) were extra-curricular activities (42 per cent) and the fact that a program was located in or close to a student's hometown (37 per cent).

Table 1: Influences* on Post-Secondary Choices

Influencing Factor	% Students
1. Availability of a specific program	83
2. Reputation of the institution/program	79
3. Family influence	68
4. Total cost of education	66
5. Student/institution facilities	65
6. Influence of friends/peers	54
7. Tuition fees	54
8. Length of the program	47
9. Offer of a scholarship	45
10. Size of the institution	43

*Includes "fairly important" and "very important" influences

Spotlight on Our Research Assistants

One of the primary objectives of the Community-University Research Alliance (CURA) program is to enhance student learning and employability by providing diverse opportunities for university students to build their knowledge, expertise and skills through hands-on research and related experience.

The primary way in which students have been involved and engaged in the research of the CURA Transition Study is through part-time Research Assistantship (RA) positions.

These research assistantships provide employment opportunities for students at all levels including bachelor's, master's and doctoral candidates.

Student positions with the CURA Transition Study have provided opportunities for research assistants to gain valuable work experience and develop skills that are crucial to social sciences and educational research.

Our research assistants have performed a variety of essential duties including assisting in the preparation

and administration of surveys and interviews, conducting basic statistical analyses, carrying out reviews of the relevant research literature, and liaising with our Transition Study partners, participants and stakeholders.

Since the project's inception in January 2007, the CURA Transition Study has provided seven undergraduate and graduate student research assistants at Memorial University with close to 1,450 combined hours of paid employment.

The work carried out by these students has proved invaluable as our research has progressed through each phase.

To date, our very able research assistants have included: Monique Bourgeois (Sociology), Melanie Greene (Education), Megan Foote (Arts), Jubayer Hoque (Math and Statistics), Meghan Mitchell (Education), Tracy Perry (Arts), and Liam Walsh (Education).

Our Winter 2009 semester research assistants are profiled below.

Melanie Greene - CURA Research Assistant

Melanie Greene is a student in the Post-Secondary Studies program in the Faculty of Education. She has completed an MA in Sociology from McMaster University and a BA (Honours) in Sociology from Memorial University.

Melanie is hoping to begin graduate work at the Ontario Institute for Studies in Edu-



cation at the University of Toronto in the coming fall semester. She has conducted research in the areas of deviance and crime, the sociology of sport, and research ethics.

Monique Bourgeois - CURA Research Assistant

Monique Bourgeois is completing her Master's degree in Sociology at Memorial University. Her research focuses on post-secondary education and women from rural Newfoundland.

Monique also holds an honours degree in Sociology and Criminology from St. Thomas University, and she has just begun the PhD program in Anthropology at Memorial. In addition to her longstanding interest in educational



issues, Monique hopes to pursue research related to women's needlework in Newfoundland and Labrador.

What's happening? What's on the horizon?

Following on consultations with our partners, an Advisory Committee for the CURA Transition Study was recently established. This committee will provide input on research plans as we move into the final two years of the study. Later this month we will begin a series

of follow-up interviews with high school graduates from the Class of 2008. These interviews will explore students' education and workforce experiences since their departure from high school. A follow-up survey with students at Memorial University is planned for Winter 2010.

Contact Us

If you have ideas that you would like to share or would like to provide feedback to the CURA Transition Study research team, please contact Dr. Dale Kirby at dkirby@mun.ca.

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The Killick Centre is funded by the Social Sciences and Humanities Council of Canada (SSHRC) through the Community-University Research Alliance (CURA) program.

