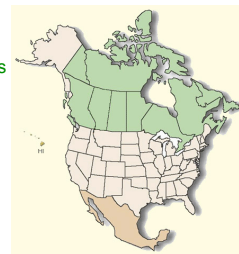


Secondary Students Perceptions of Web-Based Learning



Newfoundland and Labrador

- area of the island is 43,359 square miles, while Labrador covers 112,826 square miles
- according to the 2001 Census population for Newfoundland and Labrador was 512,930 (down from 551,795 in 1996)
- 305 schools (down from 343 just three years ago)
- 81,458 students (down from 118,273 a decade ago)
- average school size 233 pupils (over 40% have less than 200)



Centre for Distance Learning and Innovation

The CDLI was founded in December 2000 by the Department of Education, in response to the recommendations of the 1999 Sparks-Williams Ministerial Panel on Educational Delivery.

The vision of the Centre is to

- provide access to educational opportunities for students, teachers and other adult learners in both rural and urban communities in a manner that renders distance transparent;
- eliminate geographical and demographic barriers as obstacles to broad, quality educational programs and services; and
- develop a culture of e-learning in our schools which is considered to be an integral part of school life for all teachers and students.



Centre for Distance Learning and Innovation

Synchronous – Online

- 30% to 80%, depending on subject area
- taught via a virtual classroom (e.g., *Elluminate Live*)



Asynchronous – Offline

- remainder of their time
- taught via a course management system (e.g., *WebCT*)
- usually consists of independent work from posted homework or assignments or from their textbooks



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Unit 01 ▶ Section 01 ▶ Lesson 01

You will learn | You should know | Lesson | Activities | Test Yourself

- **You Will Learn** – briefly lists, in student friendly language, the instructional outcomes for the lesson;
- **You Should Know** – lists, and when necessary elaborates on, knowledge and skills students are expected to have mastered prior to the lesson;
- **Lesson** – is self-explanatory and may be broken into multiple pages;
- **Activities** – contains further instructional events the student that students need to carry out in order to master the lesson outcomes; and
- **Test Yourself** – offers an opportunity for the student to gauge the degree to which the outcomes were achieved.

Research Questions

1. What virtual school learning components do secondary students recognize as helpful in their learning process?
2. What virtual school learning components do secondary students recognize as challenging in their learning process?

Findings

Helpful tools in their virtual school course

Internet tool	Mean response (1-5)
Virtual Classroom	4.82
E-mail	4.00
Discussion Forums	3.24
Interactive Items	3.03
File Transfer Protocol (FTP)	3.03
Audio Clips	2.84
Chat	2.74
Video Clips	2.50

Findings

Problems encountered in their virtual school course

Problem	Percentage of students who selected this problem
Technical problems	71.1
Lack of time	50.0
Difficulty understanding goals/objectives of the course	34.2
Can't find the information I need in order to be successful	15.8
Lack of sense of community	13.2
Other – can't always get in contact with the instructor	7.6
Lack of adequate Internet knowledge	2.6
Other – slow Internet connection	2.6
Other – large classes	2.6

Findings

Factors important for success in a virtual school course

Factor	Percentage that responded				Mean (1-4)
	Not important	Somewhat important	Important	Very Important	
Clear objectives		11.1	36.1	52.8	3.42
Well-organized content	2.6	7.9	33.3	67.7	3.67
Exercises	5.3	13.2	50.0	36.8	3.24
Quizzes	7.9	34.2	44.7	34.2	3.11
Tutor Feedback		7.9	18.4	34.2	2.83
Motivation of the student			21.6	70.3	3.62
Time management of the student		10.5	21.1	76.3	3.78
Technology comfort level			42.1	44.7	3.35

Sample

Pseudonym	Grade	School	CDLI Courses
Deirda	12	All grade • 200 students • 15 teachers	3 courses successfully 1 course dropped
Lisa	12	All grade • 200 students • 16 teachers	3 courses successfully
Linda	11	All grade • 30 students • 5 teachers	6 courses successfully
Annette	12	All grade • 200 students • 12 teachers	1 course successfully 1 course dropped
Kim	12	All grade • 150 students • 13 teachers	2 courses successfully
Becky	12	All grade • 150 students • 19 teachers	6-7 courses successfully
Ronald	12	All grade • 200 students • 15 teachers	2 courses successfully

Findings

- students indicated that they liked their synchronous classes, often more so than their face-to-face classes
- six students said they liked their scheduled synchronous classes, citing reasons such as their teachers and a perceived sense of community
- technical difficulties were not a major issue, and only two students mentioned technical problems

Findings

- students also enjoyed the sense of control over their own learning
- within a virtual school course there was the potential for two communities of learners to develop: one among the group of students who were in the class online and one among the local group of students who sat in the room together
- the process of local students working together, particularly during their asynchronous class time, may have also had negative consequences

Findings

- one of the reasons why students may have spent significant periods of their asynchronous class time engaged in off-task behavior was because of the nature of the asynchronous course content
- in order to be successful in online learning environments, the students recommended new students should become independent and have self-discipline

Ramifications

- the ability of adolescents to learn in independent learning environments is less than that of adult learners because of differences in their development
- the reality of the challenges being faced by rural schools is forcing more and more secondary school students into these independent learning environments

Ramifications

- secondary student perceptions of the helpful and challenging characteristics of learning in this type of environment is the consistency between what they have indicated are the important factors for success and what the various adult populations have identified

Ramifications

- there may be differences in the things that secondary students find useful and the things that they find challenging compared to their older counterparts, how to best situate them for success remains relatively the same - ensure that learners are provided with well designed and organized content, and provide them with time management and motivational skills to be able to work effectively in this independent environment

Conclusions

- many adolescent learners probably won't possess these two skills
- more will need to be done at the secondary school, and even middle school level, to prepare students for learning in these environments
- this is particularly true in rural jurisdictions, where many students do not have a choice on whether or not to enrol in these virtual school courses because this is the only means that they have to access, in some cases, these required courses

Your
Questions
and
Comments





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