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ABSTRACT

This study examined the academic experience of college freshmen during their first semester (Fall, 1997) at Champlain-St. Lawrence College (Quebec, Canada) a two-year college in the Quebec Cegep system. Students completed a motivational questionnaire before and after the semester. Analysis was aimed at examining reasons for the 42 percent graduation rate at the school. The study found that students wanted to attend Cegep, and Champlain-St. Lawrence in particular, and had been admitted to the program of their choice. Although most Champlain-St. Lawrence students are French-speaking, this variable was not related to failure or dropping out. Although the persistence rate on individual courses was 89 percent, the major cause of persistence/failure rates in courses was caused by a minority of students who failed or abandoned all their courses. The major reason that students did not graduate was that they failed their core English, French and Philosophy courses or failed one or two of these courses and also failed a required math course. Although students learned to adjust their study skills and strategies to the college setting, they often improved study skills to result in unrealistic and immediate impacts on their academic outcomes. The study concludes that language skills are essential but not sufficient to lead to graduation. Results are interpreted in terms of attributional theory of motivation. Appended are various forms, directions, and reports used in the study. (Contains 23 references.) (DB)

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The Study of the First Semester Academic Experience of Champlain-St. Lawrence College Students.

by

Gilles L. Talbot
Champlain-St. Lawrence

March 11, 1998

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Summary

Graduation rates are about 42% for each cohort of students. From the Fall, 1995 cohort of students 172 reached graduation by the Winter of 1997. Although persistence rates are up and failure rates are down, there will likely be only a smaller percentage of students to graduate. Based on data from Fall, 1996 and Fall, 1997 cohorts of entering students we can expect close to 50% to make it to graduation by December, 1998.

The major difficulty with making it to graduation is that students fail their core English, French and Philosophy courses or students fail one or two of these courses and also fail a required math course. The results are almost identical: Students will not make it to graduation, in most cases, because they leave Saint Lawrence. Future studies will have to determine if students decide to leave because they have failed, for a second time, these critical courses.

In general we find that students wanted to attend Cégep, Saint Lawrence in particular, and got admitted to a program of their choosing. Although most of our clientele considers itself to be French-speaking, none of the data support a bias in failures, abandons or failure to graduate due to this variable. This result is rather startling given that many students admit coming to Saint Lawrence to hone up their English language skills. Data do not support that heavy course loads can be used to explain failure and abandon behaviors. As a matter of fact, the major problem of persistence/failure rates is caused by a minority of students who fail/abandon all their courses.

Although students are quick to realize that an adjustment to their study skills and strategies will be necessary some expect that learning these new skills and strategies will not only directly but also immediately impact on their academic outcomes.

The message from the combined results is clear: Language skills are essential but not sufficient to lead to graduation. We have attained about an 89% level of persistence/achievement which is about as high as it can get given that about a 9% attrition rate is to be expected.

Apparently some types of students are better adapted in their thinking and effort regulation to engage in the daily behaviors that will produce desired outcomes. Other students appear to be disheartened quickly when daily routines don't produce immediate gains. It would seem that some students don't realize that language skill acquisition is a question of practice over time.

These results are interpreted in the context of an attributional theory of motivation. The major faulty causal attribution seems to be that poor language skills is a stable and permanent characteristic. The major conclusion of this report is that we need to help students realize that daily personal investments, rather than sporadic and draconian efforts, will bring about the changes in oneself which will produce the desired academic outcome.

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The Study of the First Semester Academic Experience of Champlain-St. Lawrence College Students.

Gilles L. Talbot
Champlain-St. Lawrence

Introduction

Could students' failures and abandon rates be related to their priority for attending Cégep? -their priority for attending Saint Lawrence Campus? How many different students are generating failure and abandon rates? How are course work and/or course load and previous high school ability related to patterns of failures and abandons? Do students who persist and achieve do so because they have re-adjusted their study skills and learning strategies?

Although there are several more such questions the point is that student entry level motives, beliefs and perceptions, all related to oneself as a learner, may shed light on failure and abandon behaviors. The purpose of this report is to examine the assumptions, which appear later as hypotheses, which we have made about students' first semester cégep experience.

As a general way of assessing student learning orientation we have accepted as our own the definitions by Eison et al. (1986). Student orientations towards learning vary from wishing to *improve themselves (learning orientation)* to *prove* to themselves and others (*grade orientation*) that they are "intelligent." Eison, Pollio and Milton (1986) have described these learning and grade oriented behaviors in a typical college classroom.

For some students, the college classroom is viewed as a context in which they expect to experience new information and ideas that will be significant to them both personally and professionally. For other students, the college classroom is experienced as a crucible in which they are tested and graded and which is endured as a necessary evil on the way to getting a degree or becoming certified in a profession. These markedly different perspectives have been labelled learning orientation (LO) and grade orientation (GO), respectively .. (p.54).

The term **abandon** refers to students who enrol for a course but decide to quit no later than the official abandon date set for each session. The term **dropout** refers to students who stay beyond the official abandon date but fail to continue to attend and/or do the required course work. The dropout student receives a final course grade which distorts the true picture of achievement rates. After all, a student who receives a 35% for not completing all work (**non-persisters**) is qualitatively different from a student who tried (**achievers**) but got the same grade. So, a distinction between persisters and achievers is necessary to avoid confounding the two types of behaviors.

Theoretical Perspective/Review of the Literature

How do students view themselves as learners? What attributional processes are invoked to explain the match, or mismatch, between task demands and one's ability and effort? There can be no doubt that the theoretical framework, as reflected by these questions, rests on the phenomenological-constructivist approach. How do students construct their educational realities? Do they buckle down and do the work, trying to acquire skills as they are needed? Or, do students engage in fault finding, false effort, procrastination and other types of self-defeating and self-handicapping behaviors?

Before we can even hope to address these complex motivational issues at Saint Lawrence we need to understand the entry level characteristics of our students. What are their motives, perceptions, beliefs about ability and effort, etc.? The first step is to build a **grounded theory** which is a "way of thinking about and conceptualizing data (Leedy, 1997; p.163)." In other words a discipline-free theory that will help generate the tools useful for studying the phenomenon. A grounded theory approach is meant to link theoretical formulations to practical considerations. As the number of student cases or observations increase so does a pattern emerge of similarities and differences in the target group. How students construct their realities must be understood in order to plan on how to involve them and to propose effective interventions.

One of the major elements to emerge from a systematic review of the literature from the United States and Canada is that nearly all institutions of higher education eventually deliver to students a tailor-made program to integrate first year students. Barbara McCombs (1988,1991,1994) has been instrumental in showing that student "will and skill" can be linked for the mutual benefits of students, teachers/trainers, and the institution/employer. Paul R. Pintrich (1995), and many colleagues (Johnson et al.1991) at the National Center for Research Into Post-Secondary Teaching and Learning ("NCRIPAL", at The University of Michigan at Ann Arbor), have argued convincingly for a socio-cognitive approach to academic achievement motivation. The essence of the approach resides in convincing students that as they acquire and develop skills they perform better, which is motivating to continue.

Readers who are interested to see these socio-cognitive principles put into practice in a college classroom can read Coppola's account on how he improved chemistry instruction for the mutual satisfaction of students and himself (Coppola, cited in Pintrich,1995). Interested readers are referred to Pressley (1995) who has synthesized the international research and applied it (mostly in American institutions) to the issues of achievement in higher education.

An excellent review of the first year experience in Canada has been succinctly presented by Vale (1996). She quotes Robb, Director of the University of Prince Edward Island " University 100," who reports on the ten-year follow-up to the UPEI program.

The results are impressive. The rate of return for first-year UPEI students as a whole is 61 per cent; for University 100 completers, the rate jumps to 84 percent. There's

another significant difference in time to graduation. For the university as a whole, 56 per cent finish in four to five years; for University 100 completers, that figure rises to 83 per cent. (Rates vary from year to year.)

In our examination of what is going on in the Québec Cégep system, one finds seven thematic approaches to the study of the first year experience. Some colleges have developed Learning Centers (Champlain-St.Lambert; Edouard Montpetit; and de Maisonneuve); some structured thematic workshops (most often in mathematics or core language) (Jonquière, Rivière-du-Loup; Saint Lawrence); Orientation programs (Rimouski, André-Laurendeau; Saint-Jean-sur-Richelieu; Saint Laurent; Limoilou; Saint Lawrence); Scheduling and planning workloads during the semester (Sainte-Foy; de Maisonneuve); Formative feedback at mid-term (Valleyfield, École nationale d'aéronautique; and Champlain-Saint Lawrence); Mastery Learning (André-Laurendeau; Shawinigan; La Pocatière); and, Integrated activities (Shawinigan; Saint Jérôme; Sherbrooke)¹. All of these programs have in one way or another strived

- 1) to develop a learning culture and to introduce students to the institutional climate.
- 2) to increase student retention, promotion and graduation.
- 3) for the cognitive engagement of students in the hopes of stirring students' self-regulated learning;

After examining the approaches that have been studied and field tested in the United States, Canada, and especially in the Québec Cégep system, we are lead to the following conclusions:

- 1) Most institutions, including Cégeps, have developed a personalized approach adapted to the needs of their student population. The institution has a clear definition of the culture of the place which is public knowledge.
- 2) Most institutions have tried varied formats of intervention programs. Orientation weeks, non-credit and credit courses over part or all of the session. Courses have used outside specialists, teachers, peer counsellors or mentors (successful students in the second year) to give courses, lead workshops, run a drop-in or learning centre etc.
- 3) All programs have built in a means to evaluate program effectiveness.
- 4) Most of the programs have resulted from introspective studies and grounded theory.
- 5) Coincidentally most of the programs, and a good deal of academic motivation research, are tied to research on reading skills. This would seem logical since reading comprehension is a major avenue for students to process information in an institution of higher learning.

¹This list is meant to be indicative and not exhaustive.

In Québec the work by Lise Saint Pierre (1993) of Cégep Baie Comeau has been successful in the first year programs of some cégeps. Her work has been instrumental in developing math peer tutoring approaches which are credited in student programs. Cégep Lévis-Lauzon has institutionalized her work. As a matter of fact, her work serves as the pedagogical document for teachers to train and supervise selected peer volunteers to tutor in math.

Readers who are interested in the interactions amongst student perceptions, beliefs and motives, and task requirements; cultural, social and personal demands; student and teacher perceptions; and, how teachers can model (i.e. teach students to learn and practice strategies) are referred to the excellent work by Barbeau (1991,1993; Cégep de Bois-de-Boulogne). Barbeau (1991) uses a phenomenological/constructivist and socio-cognitive model to explain, and model, Cégep students' achievement or failure/abandon behaviors.

Perhaps the most recent work in Québec on the cognitive engagement of students for a college education has been reported by Bélanger et al. (1996a,1996b) at Cégep de Sherbrooke. According to their recent work on *cognitive engagement* students need help with planning and orchestrating strategies for learning. There have been courses to teach students these skills. Sometimes they are intensive or spread out over the semester; and, sometimes they are taught by regular teachers, special counsellors or even by teams of peers. Sometimes it is the college that assumes the burden (learning centres) or student unions use part of their budget to hire their own people. The synthesized results of what "works" better, and under what conditions, is the key factor of making a student into a "good strategy user." The major contribution of Bélanger et al., is to study how cognitive engagement mediates students' thinking and motivation for learning strategies. Their statement,

L'engagement dans les études y est défini comme un processus complexe par lequel les étudiantes et étudiants s'investissent dans la planification de leurs études, la participation aux diverses activités d'apprentissage qui leur sont proposées et l'autoévaluation de leur expérience collégiale (p.5).

Bélanger, in a personal communication to the author, reports that significant improvements in students' scores were observed compared with those from a similar group the previous year. Did these "scores" affect persistence and academic achievement? The answer,

Liens entre engagement dans les études et réussite: ... On observe donc assez peu de différences dans les scores de l'engagement, même en ne comparant que les étudiants les plus forts et les plus faibles. Toutefois, les différences de moyennes sont significatives pour tous les facteurs de la composante Planification. Il est clair alors que des efforts devront être consentis pour améliorer les habiletés de planification chez les étudiants pour pouvoir espérer améliorer l'engagement et la réussite (Bélanger, 1996b; p.6).

So, will and skill can be linked by teaching students about how to plan. *Planning* also implies learning

about the instrumentality of effort (motivational training) and of making timely choices (volitional training). Cognitive engagement, planning and self-regulated learning are key ingredients in learning to work smarter and not harder.

This report presents the results of background information about the cohorts of students from three previous Fall sessions (1995-1997) in order to describe and explore why more students are not making it to graduation. We also present preliminary results about student study skills and learning strategies and how they relate to achievement and persistence rates. In keeping with the tradition, we refer to "First Year Experience" when, in fact we know that the first session is the critical one. So, at Saint Lawrence the First Year Experience is really the "First Session Experience."

Methodology

Subjects:

Background data, for comparison purposes, was gathered from the files of students for the Fall, 1995 through to the Winter, 1997 sessions. The Fall, 1997 cohort of first session students were administered questionnaires to assess their learning orientation, motivation, and beliefs and perceptions about their study skills and learning strategies. About 81% of the 400 entering students completed these questionnaires. There is nothing to suggest that the Fall, 1997 cohort was different in age, gender (still about a 3:2 ratio in favor of females) and mother tongue (see Table 1, page 6); programs of study from previous fall sessions (see Table 2, page 7); enrollments by session (see Table 3, page 8); or by academic load (see Table 4, page 9).

Materials:

The student's attitudes and behaviors towards learning ("learning orientation") were based on a composite instrument we derived (The Motivated Learning Questionnaire-"MLQ") from The Motivated Strategies for Learning Questionnaire ("MSLQ") (Pintrich et al., 1991), the Test de Réactions et d'Adaptation au Collégial ("TRAC") (Larose, Roy and Falardeau, 1991), the Learning and Study Strategies Inventory ("LASSI") (Weinstein, Palmer and Schulte, 1987), and the Learning Orientation / Goal Orientation ("LOGO") questionnaire (Milton, Pollio and Eison, 1986). A copy of the MLQ appears in Appendix 3. The MLQ has been validated for our college sample (Talbot, 1994).

A basic concern we have had is with the issue of student self-awareness. Are students able to notice, and to report on, their study skills and learning strategies? Do they know about their personal learning resources and their own limitations. After all, a self-report is only as good as the person's ability at self-awareness and willingness to communicate it to others. Talbot (1996) has recently shown that Saint Lawrence students who fail and/or abandon courses are able to correctly identify, in themselves, and to report, what it is about their study skills, learning strategies or motivations that is "not working" for them. So, in this respect, we can have faith that students can, and will, accurately report about themselves when doing so is in their own best interest.

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Table 1: New Student Information Survey Results (Fall, 1997) - Age, Gender and Mother Tongue Breakdowns.

AGE GROUPINGS:			GENDER			MOTHER TONGUE:		
Value	Frequency	Percent	Value	Frequency	Percent	Value	Frequency	Percent
16	6	1.9	Female	198	61.3	English	64	19.9
17	218	67.7	Male	125	38.7	French	244	75.8
18	78	24.2				Other	15	4.3
19	14	4.3		<u>323</u>	<u>100%</u>			
20	3	0.9						
21	1	0.3						
23	1	0.3						
25	1	0.3						
34	1	0.3						
	<u>323</u>	<u>99.9%</u>						

Table 2: Enrolments in Programs by Academic Session

	F95		W96		F96		W97		F97	
	N=	%=	N=	%=	N=	%=	N=	%=	N=	%=
80.04 ¹	4	0.5	2	0.3	1	0.1	1	0.1	-	-
81.01 ²	27	3.5	-	-	27	3.5	-	-	17	2.0
81.03 ³	-	-	1	0.1	4	0.5	3	0.4	3	0.4
200.01 ⁴	102	3.2	95	13.2	107	13.8	103	14.2	128	15.0
200.02 ⁵	133	17.2	127	17.6	130	16.8	132	18.2	150	17.6
200.03 ⁶	23	3.0	-	-	21	2.7	-	-	11	1.3
300.01 ⁷	213	27.6	234	32.4	229	29.6	230	31.6	250	29.3
400.01 ⁸	98	12.7	83	11.5	66	8.5	71	9.8	88	10.3
410.12 ⁹	59	7.6	62	8.6	75	9.7	77	10.6	87	10.2
600.01 ¹⁰	114	14.7	118	16.3	113	14.6	113	15.1	119	14.0
Totals	773	100.0	722	100.0	773	100.0	727	100.0	853	100.0

- ¹"1" = Student enrolled to meet university pre-requisites
- ²"2" = Student enrolled in "session d'accueil et intégration"
- ³"3" = Student enrolled in a transition session
- ⁴"4" = Natural Sciences (Health Sciences profile)
- ⁵"5" = Natural Sciences (Pure Sciences profile)
- ⁶"6" = Alpha pre-science (Student is missing a high school science pre-requisite)
- ⁷"7" = Social Sciences
- ⁸"8" = Social Sciences (Commerce profile)
- ⁹"9" = Business Administration Tech.
- ¹⁰"10" = Languages and Letters

Table 3: Enrolments by Number of Student Sessions In Cegep and by Academic Session

Number of Sessions:	Number of Sessions /Academic Session									
	F95		W96		F96		W97		F97	
	N=	%=	N=	%=	N=	%=	N=	%=	N=	%=
1	389	50.3	34	4.7	330	42.7	25	3.4	363	42.6
2	15	1.9	347	48.1	17	2.2	318	43.7	23	2.7
3	240	31	18	2.5	291	37.6	19	2.6	281	32.9
4	115	14.9	307	42.5	114	14.7	344	47.3	152	17.8
5	10	1.3	4	0.6	9	1.2	2	0.3	20	2.3
6+	4	0.5	12	1.7	12	1.6	19	2.6	14	1.6
Totals	773	100.0	722	100.0	773	100.0	727	100.0	853	100.0

Additional materials about student perceptions for attending Cégep, and Saint Lawrence in particular, were assessed with the "New Student Information Survey" (a copy appears in Appendix 6). Academic records, with students' consent, were studied to gather additional background information.

Hypotheses:

Descriptive/Exploratory

- H1: Students are motivated to attend Cégep, Saint Lawrence College in particular, and in a program of their first choice.
- H2: Students believe that the daily amount of time invested to study during high school will be sufficient to get them through Cégep.
- H3: As student course loads increase so do the tendencies to fail and/or abandon.
- H4: Declining graduation rates are the results of a gradual decline each session in the number of students who qualify by passing all their courses.
- H5: There is an important number of students ("dropouts") who stop attending classes and doing course work, after the official abandon date, which biases the achievement rates. (A minority of students account for a disproportionate percentage of the failure/abandon rates because they fail/abandon so many courses.)
- H6: Persistence and achievement rates have significant fluctuations (patterns of decline/increase) by discipline and program groups.
- H7: Many more students don't make it to graduation because they don't pass core courses.

Inferential

- H8: Students believe, upon entering Cégep, that their current study skills and learning strategies are sufficient to get them through their Cégep workloads.
- H9: Previous high school overall averages are the single best predictors of academic success during the first session of Cégep studies.
- H10: The learning oriented students will make better adjustments (as measured by changes in the MLQ scores at the entry and the end of the session) to their study skills and learning strategies than will the grade oriented students.
- H11: There are important differences in some students' estimates of daily tactics to be performed to maintain quality work and the overall plan "to learn or pass the course" which are related to persistence /achievement behaviors.
- H12: The learning oriented students will make better use of resources (encadrement, workshop attendance, visits to teachers) than will the grade oriented students.
- H13: The relationship of failures and abandons, controlling for course load and previous high school average, will be inversely proportional to failure and abandon behaviors in the learning oriented students. Also, the relationship of failures and abandons, controlling for course load and previous high school average, will be directly proportional to failure and abandon behaviors in the grade oriented students.
- H14: Students placed on academic probation in the Winter, 1998 session are more likely to come from the grade oriented than the learning oriented groups.

Procedure:

All entering students for the Fall, 1997 were directed, during their orientation process on August 18, 1997, into a large room to complete the Motivated Learning Questionnaire. The directions given to train teacher volunteers appears in Appendix 1. Each student was asked to sign a consent form to gather background information from their dossiers (see Appendix 2). About 81% completed the questionnaires and signed the consent form. These results are considered entry level reports of students' learning orientation, motivation and perceptions and beliefs about their study skills and learning strategies.

The directions given to students to complete the questionnaire appear on the title page of the MLQ (see Appendix 3). All data were recorded by students on standard optical recording sheets (Scantron Form 2052-N; see Appendix 4). During the two days of registration of first year students that followed (August 20-21), students were given copies of their results along with a sheet for interpreting them (see the "Personal Learning Profile" in Appendix 5).

Students were asked to complete the New Student Information Survey (Appendix 6) in one of the Philosophy core classes during the first 2 weeks of classes.

All first year students were traced down through their classes. The teachers in those classes were asked to deliver to the students the open letter from the Academic Dean, the memo from the researcher, and a second copy of the MLQ (written, this time, in past tense) (see Appendix 7 for these materials). Thirty-six students completed this second, or exit level report about their learning orientation, motivation and perceptions and beliefs about their study skills and learning strategies.

The comparisons between students' entry level and exit level questionnaires, along with information from NSIS survey and academic records, makes it possible to draw several inferences about the first semester experience of Saint Lawrence students.

Results

H1: Students are motivated to attend Cégep, Saint Lawrence College in particular, and in a program of their first choice.

Table 5 (next page) reveals that students got into the programs of study of their first choice (93.2%). We know that the person-situation-environment interact to influence student motivation. The first session students are motivated to attend cégep, specifically Saint Lawrence, and in a program of their choosing. Problems with student motivation do not appear to be due to a person-situation interaction.

Table 6 (also on the next page) summarizes the fact that students' seek a cégep education to prepare for the future and its demands, which in many cases means to prepare for university studies. Students report (see Table 7, page 13), with equally strong motivations, that they attend Saint Lawrence "to learn more English or to become more fluent in English as a second language." The second major

reason, which is a good ways lower in importance, is the academic reputation of Saint Lawrence.

Table 5: New Student Information Survey Results (Fall, 1997) - Choice of Program and of SLC as Cégep

	Program of Choice	
	Frequency	%
First	300	93.2
Second	14	4.3
Third	5	1.6

Table 6: New Student Information Survey Results (Fall, 1997) - Reasons for attending a Cégep

Rank Level ¹	Choice Levels			Item Description % of Total	
	First	Second	Third		
3.5	38	38	32	33.5	To obtain a diploma
3.5	26	36	41	32.0	To have a better job opportunity
1.5	109	53	42	63.4	To better prepare my future
7	10	14	17	12.7	To earn more money
	0	0	0	0	To obtain government financial aide
1.5	99	61	34	60.2	To prepare for university studies
	5	2	1	2.5	To satisfy the wishes of my parents
	0	0	0	0	To be able to leave home
	0	0	2	0.6	To keep myself busy
5	17	27	31	23.3	To improve my general education
7	13	18	14	13.9	To improve my abilities in a particular subject/field
	1	0	1	0.6	To be with my friends
7	11	8	17	11.2	For my personal satisfaction
	2	0	0	0.6	Because I couldn't find a job
	3	5	6	4.4	Because I enjoy studying

1. The ranks presented take into account the importance of the difference between the ranks. Ranks 1 and 2 are so close (63.4% versus 60.2%) that 1.5 is assigned to each, rather than to suggest that "to better prepare for my future" results are more important than "to prepare for university studies."

Table 7: New Student Information Survey Results (Fall, 1997) - Reasons for attending Saint Lawrence College

Rank	Choice Levels			% of Total	Item Description	
	Level ¹	First	Second			Third
		8	8	4	6.2	My parents wanted me to attend SLC
3		52	56	25	41.3	Good academic reputation of SLC
		8	12	11	9.6	SLC's reputation for cultural/athletic activities
5		23	34	30	27.0	SLC offers program I'm interested in
		0	4	3	2.1	Because of poor reputation of other cégeps which offer the program I'm interested in
		2	6	5	4.1	SLC's reputation for student services
		4	4	8	4.9	Type/quality of SLC facilities
		0	4	1	1.5	It's easier to be admitted to SLC
		4	6	11	6.5	SLC was recommended to me by my high school counsellors/teachers
		6	5	4	4.7	I wanted to continue to stay at home
		16	4	4	7.4	SLC was the cégep closest to my home
		2	9	6	5.3	SLC was recommended by a friend
		4	2	13	5.8	I read the SLC prospectus
		3	11	8	6.8	It is easier to get accepted into university after having studied at SLC
		0	9	5	4.4	It is easier to get a job after having studied at SLC
		0	0	0	0	Because of the work "stages"/co-op programs
		0	0	0	0	To leave home
1		164	25	1	59.0	To learn more English or to become more fluent in English as a second language
7		6	25	18	15.3	To impress employers or universities with the fact that I was able to do my studies in English

¹ Please note that the ranks presented here take into consideration the relative importance between the ranks. Thus rank 1 is so much more important than the rank that immediately follows it that it receives a rank of 1 and the next rank receives third rank.

H2: Students believe that the daily amount of time invested to study during high school will be sufficient to get them through Cégep.

This is FALSE. Table 8 shows an important trend for students, at the beginning of the session, to increase the daily time devoted to studying and homework. Beginning with the category of "1 hour or more" of time devoted daily to study, 65.7% (99.2% - 33.5%) of high school students are included while 92.1% (99.5% - 7.4%) of cégep students cover this same category. We can see then that in the very beginning of cégep studies (the first 2 weeks) students are devoting substantially more time to daily study.

Table 8: New Student Information Survey Results(Fall, 1997) - Comparison between high school/ cégep daily time devoted to studies

High School	% of Total	Cumulative % High School	Cégep	% of Total	Cumulative % for Cégep	Item Description
18	5.6	5.6	0	0		Less than 15 minutes per day
21	6.5	12.1	1	0.3	0.3	Approximately 1/4 of an hour
38	11.8	23.9	12	3.7	4.0	Approximately 1/2 hour
31	9.6	33.5	11	3.4	7.4	Approximately 3/4 hour
71	22.0	55.5	43	13.4	20.8	Approximately 1 hour
59	18.3	73.8	55	17.1	37.9	Approximately 1 1/2 hours
40	12.4	86.2	49	15.2	53.1	Approximately 2 hours
30	9.3	95.5	76	23.7	76.8	More than 2 hours but less than three hours
12	3.7	99.2	73	22.7	99.5	More than three hours

In Table 9 (next page) one finds that "lack of time (45%)," "lack of discipline (29.8%)," "lack of motivation or interest (24.2%)," and working only to meet teachers' expectations (20.5%) are the four most important reasons why students do not spend as much time on daily homework as they think is needed.

Table 9: New Student Information Survey Results (Fall, 1997) - "What are the main reasons that explain why you do not spend more time, right now during this session, on your studies?"

Rank Level ¹	Choice Levels			% of Total	Item Description
	First	Second	Third		
1	1	2		1.2	Lack of space
0	0	0		0	Lack of materials
9	9	7		7.8	Lack of tranquility
1	104	28	13	45	Lack of time
2	2	6		3.7	Lack of support or encouragement (from parents, peers, teachers or others (specify_____))
6	40	27	11	24.2	Lack of motivation or interest
6	24	31	17	22.4	Lack of concentration
3.5	40	36	20	29.8	Lack of discipline
7	17	20	16	16.5	Lack of organization
1	2	5		2.5	Disorder around me
8	9	9		8.1	Personal problems
2	10	10		6.8	My friends
6	5	6		5.4	My grades as such are good enough
6	45	8	13	20.5	I did the work that as expected of me by the teachers

¹ Please note that the ranks presented here take into consideration the relative importance between the ranks. Thus rank 1 is so much more important than the rank that immediately follows it that it receives a rank of 1 and the next rank receives a rank of 3.5.

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H3: As student course loads increase so do the tendencies to fail and/or abandon.

Tables 10 through 14 (pages 17-21) show that, if anything, during the Fall sessions as course loads increased the failure rates tended to decrease! So, this hypothesis is rejected. We learn from these data that very few students fail or dropout with heavy courseloads (7,8 or even 9 courses).

It is interesting to note that students with overloads probably needed a course overload in order to make it to graduation. The argument that existing course loads are too demanding, and that students cannot manage because coursework requirements are too difficult, is not borne out from these data. If current workloads and task difficulty were indeed too demanding then one could not reasonably expect that students who had experienced some difficulty --how else could they have fallen behind?--- could then make it through an extra heavy course load!

Table 10: Overall Persistence/Achievement by Course Load, Course Results² and by Academic Results³ (Fall, 1995).

Course Load=1	Disc#1	Disc#2	Disc#3	Disc#4	Disc#5	Disc#6	Disc#7	Disc#8	Disc#9	TOTALS ³ :						
1	2	3	4	1	2	3	4	1	2	3	4					
6	0	0	1	2	3	4	1	2	3	6	0	0	1			
Course Load=2	Disc#1	Disc#2	Disc#3	Disc#4	Disc#5	Disc#6	Disc#7	Disc#8	Disc#9	%	86	14				
1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	
3	0	1	1	3	1	0	1	2	3	6	1	1	1	1	1	
Course Load=3	Disc#1	Disc#2	Disc#3	Disc#4	Disc#5	Disc#6	Disc#7	Disc#8	Disc#9	%	60	10	10	20		
1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	
8	3	0	0	8	2	1	0	7	2	1	0	1	2	3	4	
Course Load=4	Disc#1	Disc#2	Disc#3	Disc#4	Disc#5	Disc#6	Disc#7	Disc#8	Disc#9	%	72	22	6			
1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	
39	5	1	3	34	6	5	3	37	4	3	4	37	5	3	3	
Course Load=5	Disc#1	Disc#2	Disc#3	Disc#4	Disc#5	Disc#6	Disc#7	Disc#8	Disc#9	%	77	10	6	7		
1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	
90	21	4	1	88	16	11	1	88	16	10	2	92	17	4	3	
Course Load=6	Disc#1	Disc#2	Disc#3	Disc#4	Disc#5	Disc#6	Disc#7	Disc#8	Disc#9	%	78	14	6	2		
1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	
241	27	2	1	217	46	7	1	208	48	14	1	215	34	19	3	
Course Load=7	Disc#1	Disc#2	Disc#3	Disc#4	Disc#5	Disc#6	Disc#7	Disc#8	Disc#9	%	83	13.5	3	0.5		
1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	
255	20	2	2	242	31	3	3	233	29	15	2	231	29	16	3	
Course Load=8	Disc#1	Disc#2	Disc#3	Disc#4	Disc#5	Disc#6	Disc#7	Disc#8	Disc#9	%	85	11	3	1		
1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	
281	1	0	0	27	2	1	0	29	0	1	0	25	2	3	0	
Course Load=9	Disc#1	Disc#2	Disc#3	Disc#4	Disc#5	Disc#6	Disc#7	Disc#8	Disc#9	%	92	4	3	1		
1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	
28	1	1	0	27	2	1	0	29	0	1	0	27	2	1	0	
TOTALS ³ :	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
1343	219	55	9	1343	219	55	9	1343	219	55	9	1343	219	55	9	1343
1683	196	55	19	1683	196	55	19	1683	196	55	19	1683	196	55	19	1683
3892	535	168	55	3892	535	168	55	3892	535	168	55	3892	535	168	55	3892
83.7%	11.5	3.6	1.2	83.7%	11.5	3.6	1.2	83.7%	11.5	3.6	1.2	83.7%	11.5	3.6	1.2	83.7%

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²"Disc#" is used to refer to any course in a student's course load for the session.

³"1"=60-90% ("achievers"); "2"=30-50% ("failures"); "3"=0-20% ("probable dropouts"); "4"=00% ("definite dropouts")

Table 11: Overall Persistence/Achievement by Course Load, Course Results⁴ and by Academic Results⁵ (Winter, 1996).

Course Load=1	Disc#1	Disc#2	Disc#3	Disc#4	Disc#5	Disc#6	Disc#7	Disc#8	Disc#9	TOTALS:00
1	2	3	4							1 2 3 4
11	1	0	0							11 1 0 0
Course Load=2	Disc#1	Disc#2	Disc#3	Disc#4	Disc#5	Disc#6	Disc#7	Disc#8	Disc#9	% 92 8
1	2	3	4	1	2	3	4			1 2 3 4
5	1	0	0	5	0	1	0			10 1 1 0
Course Load=3	Disc#1	Disc#2	Disc#3	Disc#4	Disc#5	Disc#6	Disc#7	Disc#8	Disc#9	% 84 8 8
1	2	3	4	1	2	3	4	1	2	1 2 3 4
9	1	1	0	6	2	1	2	6	3	21 6 3 3
Course Load=4	Disc#1	Disc#2	Disc#3	Disc#4	Disc#5	Disc#6	Disc#7	Disc#8	Disc#9	% 63 18 9 9
1	2	3	4	1	2	3	4	1	2	1 2 3 4
37	7	8	2	42	5	6	1	37	11	153 32 26 5
Course Load=5	Disc#1	Disc#2	Disc#3	Disc#4	Disc#5	Disc#6	Disc#7	Disc#8	Disc#9	% 71 15 12 2
1	2	3	4	1	2	3	4	1	2	1 2 3 4
109	19	5	1	102	19	11	2	101	17	524 85 46 15
Course Load=6	Disc#1	Disc#2	Disc#3	Disc#4	Disc#5	Disc#6	Disc#7	Disc#8	Disc#9	% 78 13 7 2
1	2	3	4	1	2	3	4	1	2	1 2 3 4
180	20	6	1	178	16	11	2	165	29	524 85 46 15
9	Course Load=7	Disc#1	Disc#2	Disc#3	Disc#4	Disc#5	Disc#6	Disc#7	Disc#8	% 84 11 4 1
1	2	3	4	1	2	3	4	1	2	1 2 3 4
241	14	5	2	245	12	3	2	225	20	1646 133 42 13
Course Load=8	Disc#1	Disc#2	Disc#3	Disc#4	Disc#5	Disc#6	Disc#7	Disc#8	Disc#9	% 90 7 2 1
1	2	3	4	1	2	3	4	1	2	1 2 3 4
27	4	0	0	25	6	0	0	28	2	224 21 3 0
Course Load=9	Disc#1	Disc#2	Disc#3	Disc#4	Disc#5	Disc#6	Disc#7	Disc#8	Disc#9	% 84 15 1
1	2	3	4	1	2	3	4	1	2	1 2 3 4
1	0	0	0	1	0	0	1	0	0	224 21 3 0
										% 100
										3646 409 176 45
										85.3% 9.6 4.1 1

(N=4276) Totals

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⁴"Disc#" is used to refer to any course in a student's course load for the session.

⁵"1"=60-99% ("achievers"; "2"=30-59% ("failures"; "3"=0[-29% ("probable dropouts."); "4"=00("definite dropouts"))

Table 13: Overall Persistence/Achievement by Course Load, Course Results⁸ and by Academic Results⁹ (Winter,1997).

Course Load=1	Disc#1	Disc#2	Disc#3	Disc#4	Disc#5	Disc#6	Disc#7	Disc#8	Disc#9	TOTALS: N
1	2 3 4									1 2 3 4
8	1 0 0									8 1 0 0
Course Load=2	Disc#1	Disc#2	Disc#3	Disc#4	Disc#5	Disc#6	Disc#7	Disc#8	Disc#9	%
1	2 3 4	1 2 3 4								89 11
6	1 0 0	6 1 0 0								
Course Load=3	Disc#1	Disc#2	Disc#3	Disc#4	Disc#5	Disc#6	Disc#7	Disc#8	Disc#9	%
1	2 3 4	1 2 3 4	1 2 3 4							86 14
5	1 0 0	4 2 0 0	5 1 0 0							
Course Load=4	Disc#1	Disc#2	Disc#3	Disc#4	Disc#5	Disc#6	Disc#7	Disc#8	Disc#9	%
1	2 3 4	1 2 3 4	1 2 3 4	1 2 3 4						78 22
40	5 2 0	37 4 5 1	37 7 3 0	36 9 1 1						
Course Load=5	Disc#1	Disc#2	Disc#3	Disc#4	Disc#5	Disc#6	Disc#7	Disc#8	Disc#9	%
1	2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4					80 13 6 1
95	23 3 1	96 21 4 1	90 24 7 1	92 22 7 1	93 17 7 5					
Course Load=6	Disc#1	Disc#2	Disc#3	Disc#4	Disc#5	Disc#6	Disc#7	Disc#8	Disc#9	%
1	2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4				76 17 5 2
201	19 5 0	191 26 8 0	188 25 11 1	187 26 8 4	196 24 5 0	194 23 7 1				
Course Load=7	Disc#1	Disc#2	Disc#3	Disc#4	Disc#5	Disc#6	Disc#7	Disc#8	Disc#9	%
1	2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4			86 11 3
242	16 3 1	241 14 7 0	234 22 4 2	233 24 4 1	245 12 4 1	246 11 5 0	252 7 3 0			
Course Load=8	Disc#1	Disc#2	Disc#3	Disc#4	Disc#5	Disc#6	Disc#7	Disc#8	Disc#9	%
1	2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4		92 6 2
39	2 0 0	39 1 1 0	38 2 1 0	38 1 2 0	39 1 1 0	40 1 0 0	40 1 0 0	41 0 0 0		
Course Load=9	Disc#1	Disc#2	Disc#3	Disc#4	Disc#5	Disc#6	Disc#7	Disc#8	Disc#9	%
1	2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	95 3 2
0	0 0 1	0 0 1	0 0 1	0 0 1	0 0 1	0 0 1	0 0 1	0 0 1	0 0 0	Disc#9
										100
										3823 397 118 22
										87.8% 9.1 2.7 0.4

(N=4360)

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⁸"Disc#" is used to refer to any course in a student's course load for the session.

H4: Declining graduation rates are the results of a gradual decline each session in the number of students who qualify by passing all their courses.

FALSE. Table 15 shows that the initial 100% pass rates (students passing in all courses for which they registered) are relatively stable throughout the four consecutive sessions. As a matter of fact, it appears that the graduation rate ---in this case of the Fall, 1995 cohort--- that will appear in the fourth session is fairly close to the performance level of students in their first session. *The implication is that whatever is operative during the normal cycle of four sessions of study has its roots during the very first session of study.* It is on the basis of these results that we conclude that the study of the first year (session)) experience of students becomes important.

The results in Table 15 also suggest that many students persist (see "% of Total of the Fall, 1995 Cohort" column). As many as 72.67% of students are registering for their fourth session of study. The 283 students (72.67% of 389 who registered) does not compare favorably with the real graduation rates that will take place between May and Winter, 1997 sessions [105 (W97), 14 (Summer '97) and 53 (W97), respectively ---these figures are taken from Table 30, page 40]. This means that 172 students (105 + 14 + 53) of the original 389 eventually graduated. That's 44.26% of the original cohort, and not 72.67% as registration figures would suggest, who make it eventually to graduation. Students persist but do not necessarily achieve.

Second, the graduation rate, we are told in government reports is about 27%. This corresponds to 26.8% of the total number of students registered in Cégep. It is rather bizarre to use as a basis of comparison the total number of students who are actively registered in a cegep, rather than the number of students in each cohort who register for the first time in a session. We took in 389 students. Eventually (between Winter, 1997 and Fall, 1997) 172, or **44.26%**, made it to graduation. Doesn't it seem more logical to keep the same reference point ---after all isn't that what a "baseline" or comparison point is for?---- then to have the comparison point fluctuate with the variations in student populations?

Table 15: 100% Pass Rates for All Courses Registered By Session and Academic Year for The Cohort of Students Who Matriculated in Fall, 1995.

Academic Year/Session		N=	n=	% of Total Students Registered in Cégep	% of Total of the Fall, 1995 Cohort
Fall, 1995	/First	389	207	26.8%	53.21%
Winter, 1996	/Second	347	199	27.6	57.35
Fall, 1996	/Third	291	205	26.5	70.45
Winter, 1997	/Fourth	344	250	34.4	72.67

Table 16 (next page) shows a very important positive correlation between passing and courseload while controlling for session of study. In other words there is a group of students who can carry a heavy load quite well. Then again there is another group of students who appear to be more prone to the effects of courseload (the important negative correlations for "failed" and "dropout"). The change in the proportions of correlations between the Failed and the Dropout groups has nearly reversed itself between Fall, 1995 and Fall, 1997. In the Fall, 1995 session it was -0.0798/-0.1919 and in the Fall, 1997 session it was -0.1287/-0.1946. These partial correlation results suggest that the **encadrement project has had its greatest impact on getting students to stay and to work to pass the course** (which is apparently working since the partial correlations for each of the fall sessions has gradually increased from 0.1582 (F95), 0.1816 (F96) to 0.2079 (F97)). More students are staying and passing their courses.

Table 16: Partial Correlation Coefficients¹ Between Academic Results² and Course Loads³ While Controlling for Session of Study.

SESSION:		FALL-1995	WINTER-1996	FALL-1996
Academic Results:	Passed and Dropout	Failed and Dropout	Failed and Dropout	Failed and Dropout
Course Load:	.1582	-.0798	-.1919	-.1742
		.2310	-.1580	-.2018
		-.2355	-.1824	-.0855
		.1816	-.1780	

SESSION:		WINTER-1997	FALL-1997
Academic Results:	Passed and Dropout	Failed and Dropout	Failed and Dropout
Course Load:	.2350	-.2278	-.1009
		-.2260	.2079
		-.1287	-.1946
		-.2079	

- (1) All correlation coefficients are significant (2-tailed tests) at 0.001 level (99.9%).
- (2) Academic results are "Passed," "Failed," "Dropout," or the combination of "Failed and Dropout" since a student may receive a failure grade for either eventuality.
- (3) Course load means the number of courses any one student took during the session (1 to 9).

H5: There is an important number of students ("dropouts") who stop attending classes and doing course work, after the official abandon date, which biases the achievement rates. (A minority of students account for a disproportionate percentage of the failure/abandon rates because they fail/abandon so many courses.)

False and True, respectively: Tables 17 through 21 (pages 25-29) reveal that probable dropouts (group 3) and definite dropouts (group 4) appear as negligible inputs into these overall results. From Fall, 1995 through to Fall, 1997 the rates for probable dropouts and definite dropouts are (Very bottom, right hand corner): 3.6% and 1.2% (Table 10: F95); 4.1% and 1.0% (Table 11: W96); 4.3% and 0.6% (Table 12: F96); 2.7% and 0.4% (Table 13: W97); and 3.1% and 0.4% (Table 14: F97). So, the dropout rate is not biasing the achievement/persistence statistics.

However, a more accurate picture emerges when we consider how many different students generate the percentages of failures/abandons as a function of their course load. Tables 17 (Fall, 1995) through 21 (Fall, 1997) show that the effects that a few students can have on performance statistics. For example, in the Fall, 1995 session 29 students (3.8% of all students) failed and/or dropped out from all their courses for a total of 174 student-course-spaces wasted. That's nearly as many wasted student-course-spaces (188) as were generated by 157 different (78.7%) students! This phenomenon appears to fluctuate through all five comparison tables but the very large disparity always remains - **a handful of students, who fail/abandon all their courses, have the greatest impact on the failure/abandon rates.** So, the second part of the hypothesis is correct. A minority of students do account for a disproportionate percentage of the failure/abandon rates.

Table 22 (page 30) shows that the failure rates (at the bottom in bold print) are about twice as high than the dropout rates for the Fall, 1995; Winter, 1996; and, Fall, 1996 sessions (36.61% vs 16.69%; 33.24% vs 15.93%; and 32.34 vs 15.01%, respectively). Apparently the greatest improvement is with controlling the dropout rates. The Winter, 1997 failure rate is 33.43% compared to 11.14% for the dropout rate. The Fall, 1997 rates are 29.43% and 11.84%, respectively. Apparently students are not dropping out as much and without failing for so much (Table 23, page 31). The failure rates tend to decrease 36.61%(F95), 33.24% (W96), 32.34 (F96), 33.43(W97), and 29.43% (F97) as we move from the Fall, 1995 to the Fall, 1997 sessions.

These results, taken collectively suggest that persistence and achievement in passing courses has risen dramatically. But, as we will see, the graduation rate is not necessarily increased for as much.

Table 17: Individual Rates of Failures AND Abandons per student for Fall, 1995.

Value Label Number of Courses Failed and/or Abandoned:	Value	Frequency	Valid Percent	Cum Percent
None	.0	451	58.3	58.3
1/8 courses:	12.5	9	1.2	1.2
1/7 "	14.3	49	6.3	6.3
1/6 "	16.7	38	4.9	4.9
1/5 "	20.0	21	2.7	2.7
1/4 "	25.0	9	1.2	1.2
2/7 "	28.6	31	4.0	4.0
1/3 "	33.3	26	3.4	3.4
2/5 "	40.0	11	1.4	1.4
3/7 "	42.9	12	1.6	1.6
1/2 "	50.0	27	3.5	3.5
4/7 "	57.1	16	2.1	2.1
3/5 "	60.0	9	1.2	1.2
2/3 "	66.7	13	1.7	1.7
5/7 "	71.4	4	.5	.5
3/4 "	75.0	3	.4	.4
4/5 "	80.0	8	1.0	1.0
5/6 "	83.3	6	.8	.8
6/7 "	85.7	1	.1	.1
all	100.0	29	3.8	3.8
Total		773	100.0	100.0

Table 18: Individual Rates of Failures AND Abandons per student for Winter, 1996.

Value Label Number of Courses Failed and/or Abandoned:	Value	Frequency	Percent	Valid Percent	Cum Percent
None	.0	444	61.5	61.5	61.5
1/8	12.5	6	.8	.8	62.3
1/7	14.3	37	5.1	5.1	67.5
1/6	16.7	43	6.0	6.0	73.4
1/5	20.0	27	3.7	3.7	77.1
1/4	25.0	17	2.4	2.4	79.5
2/7	28.6	24	3.3	3.3	82.8
1/3	33.3	12	1.7	1.7	84.5
3/8	37.5	1	.1	.1	84.6
2/5	40.0	9	1.2	1.2	85.9
3/7	42.9	8	1.1	1.1	87.0
1/2	50.0	21	2.9	2.9	89.9
4/7	57.1	1	.1	.1	90.0
3/5	60.0	6	.8	.8	90.9
5/8	62.5	1	.1	.1	91.0
2/3	66.7	9	1.2	1.2	92.2
5/7	71.4	7	1.0	1.0	93.2
3/4	75.0	3	.4	.4	93.6
4/5	80.0	7	1.0	1.0	94.6
5/6	83.3	5	.7	.7	95.3
6/7	85.7	2	.3	.3	95.6
ALL	100.0	32	4.4	4.4	100.0
Total		722	100.0	100.0	

Table 19: Individual Rates of Failures AND Abandons per student for Fall, 1996.

Value Label Number of Courses Failed and/or Abandoned:	Value	Frequency	Percent	Valid Percent	Cum Percent
None	.0	487	63.0	63.0	63.0
1/9	11.1	1	.1	.1	63.1
1/8	12.5	3	.4	.4	63.5
1/7	14.3	51	6.6	6.6	70.1
1/6	16.7	34	4.4	4.4	74.5
1/5	20.0	18	2.3	2.3	76.8
1/4	25.0	13	1.7	1.7	78.5
2/7	28.6	25	3.2	3.2	81.8
1/3	33.3	18	2.3	2.3	84.1
3/8	37.5	2	.3	.3	84.3
2/5	40.0	11	1.4	1.4	85.8
3/7	42.9	13	1.7	1.7	87.5
1/2	50.0	17	2.2	2.2	89.7
4/7	57.1	10	1.3	1.3	90.9
3/5	60.0	10	1.3	1.3	92.2
2/3	66.7	5	.6	.6	92.9
5/7	71.4	5	.6	.6	93.5
3/4	75.0	6	.8	.8	94.3
4/5	80.0	9	1.2	1.2	95.5
5/6	83.3	4	.5	.5	96.0
6/7	85.7	4	.5	.5	96.5
7/8	87.5	1	.1	.1	96.6
ALL	100.0	26	3.4	3.4	100.0
Total		773	100.0	100.0	

Table 20: Individual Rates of Failures AND Abandons per student for Winter, 1997.

Value Label Number of Courses Failed and/or Abandoned:	Value	Frequency	Percent	Valid Percent	Cum Percent
None	.0	465	64.0	64.0	64.0
1/8	12.5	5	.7	.7	64.6
1/7	14.3	39	5.4	5.4	70.0
1/6	16.7	42	5.8	5.8	75.8
1/5	20.0	28	3.9	3.9	79.6
1/4	25.0	9	1.2	1.2	80.9
2/7	28.6	13	1.8	1.8	82.7
1/3	33.3	29	4.0	4.0	86.7
2/5	40.0	19	2.6	2.6	89.3
3/7	42.9	7	1.0	1.0	90.2
1/2	50.0	16	2.2	2.2	92.4
4/7	57.1	9	1.2	1.2	93.7
3/5	60.0	7	1.0	1.0	94.6
5/8	62.5	1	.1	.1	94.8
2/3	66.7	5	.7	.7	95.5
3/4	75.0	3	.4	.4	95.9
4/5	80.0	7	1.0	1.0	96.8
5/6	83.3	6	.8	.8	97.7
6/7	85.7	2	.3	.3	97.9
ALL	100.0	15	2.1	2.1	100.0
Total		727	100.0	100.0	

Table 21: Individual Rates of Failures AND Abandons per student for Fall, 1997.

Value Label Number of Courses Failed and/or Abandoned:	Value	Frequency	Percent	Valid Percent	Cum Percent
None	.0	575	67.4	67.4	67.4
1/8	12.5	-	-	-	-
1/7	14.3	41	4.8	4.8	73.3
1/6	16.7	32	3.8	3.8	77.0
1/5	20.0	31	3.6	3.6	80.7
1/4	25.0	11	1.3	1.3	81.9
2/7	28.6	18	2.1	2.1	84.1
1/3	33.3	21	2.5	2.5	86.5
3/8	37.5	1	0.1	0.1	86.6
2/5	40.0	8	0.9	0.9	87.6
3/7	42.9	15	1.8	1.8	89.3
1/2	50.0	24	2.8	2.8	92.1
4/7	57.1	4	0.5	0.5	92.6
3/5	60.0	10	1.2	1.2	93.8
5/8	62.5	-	-	-	-
2/3	66.7	12	1.4	1.4	95.2
5/7	71.4	4	0.5	0.5	95.7
3/4	75.0	3	.4	.4	96.0
4/5	80.0	6	0.7	0.7	96.7
5/6	83.3	4	0.5	0.5	97.2
6/7	-	-	-	-	-
ALL	100.0	24	2.8	2.8	100.0
Total		853	100.0	100.0	

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Table 22: Failure and Dropout Frequencies For Each Student As A Function of Number of Courses Taken and Session of Study.

SESSION: Academic Outcome:	Fall, 1995			Winter, 1996			Fall, 1996			Winter, 1997			Fall, 1997		
	Failed n= (%)	Dropout n= (%)	Failed n= (%)	Failed n= (%)	Dropout n= (%)	Failed n= (%)	Failed n= (%)	Dropout n= (%)	Failed n= (%)	Failed n= (%)	Dropout n= (%)	Failed n= (%)	Failed n= (%)	Dropout n= (%)	
# of courses:															
1/9	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
1/8	10(1.3)	2(0.3)	6(0.8)	1(0.1)	4(0.5)	1(0.1)	2(0.3)	1(0.1)	7(1.0)	2(0.3)	8(0.9)	2(0.2)	2(0.2)	---	
1/7	50(6.5)	33(4.3)	42(5.8)	47(6.5)	14(1.9)	50(6.5)	36(4.7)	35(4.8)	35(4.8)	50(6.5)	16(2.2)	39(4.6)	39(4.6)	14(1.6)	
1/6	37(4.8)	31(4.0)	47(6.5)	22(3.0)	19(2.6)	36(4.7)	30(3.9)	29(4.0)	53(7.3)	36(4.7)	12(1.7)	46(5.4)	46(5.4)	25(2.9)	
1/5	25(3.2)	13(1.7)	20(2.8)	12(1.7)	19(2.6)	30(3.9)	7(0.9)	13(1.8)	29(4.0)	30(3.9)	11(1.4)	31(3.6)	31(3.6)	16(1.9)	
1/4	8(1.0)	6(0.8)	20(2.8)	7(1.0)	12(1.6)	7(0.9)	4(0.5)	4(0.6)	4(0.6)	7(0.9)	15(1.8)	6(0.7)	6(0.7)	---	
2/7	34(4.4)	8(1.0)	23(3.2)	7(1.0)	32(4.1)	4(0.5)	5(0.7)	5(0.7)	5(0.7)	4(0.5)	21(2.5)	2(0.2)	2(0.2)	---	
1/3	37(4.8)	7(0.9)	14(1.9)	7(1.0)	15(1.9)	5(0.6)	7(1.0)	7(1.0)	7(1.0)	5(0.6)	18(2.1)	8(0.9)	8(0.9)	---	
3/8	---	---	---	1(0.1)	---	---	---	---	---	---	1(0.1)	---	---	---	
2/5	9(1.3)	3(0.4)	11(1.5)	8(1.1)	11(1.4)	6(0.8)	7(0.9)	5(0.7)	5(0.7)	6(0.8)	13(1.5)	4(0.5)	4(0.5)	---	
3/7	12(1.6)	2(0.3)	8(1.1)	2(0.3)	10(1.3)	7(0.9)	5(0.6)	3(0.4)	---	7(0.9)	14(1.6)	1(0.1)	1(0.1)	---	
1/2	21(2.7)	4(0.5)	19(2.6)	3(0.4)	16(2.1)	5(0.6)	1(0.1)	1(0.1)	3(0.4)	5(0.6)	20(2.3)	2(0.2)	2(0.2)	---	
4/7	8(1.0)	1(0.1)	4(0.6)	2(0.3)	6(0.8)	1(0.1)	1(0.1)	1(0.1)	1(0.1)	1(0.1)	2(0.3)	1(0.1)	1(0.1)	---	
3/5	9(1.2)	2(0.3)	11(1.5)	2(0.3)	8(1.0)	5(0.6)	8(1.1)	1(0.1)	1(0.1)	5(0.6)	7(0.8)	1(0.1)	1(0.1)	---	
2/3	11(1.4)	1(0.1)	4(0.6)	3(0.4)	3(0.4)	---	---	2(0.3)	2(0.3)	---	8(0.9)	1(0.1)	1(0.1)	---	
5/7	---	---	---	1(0.1)	---	5(0.6)	1(0.1)	1(0.1)	1(0.1)	5(0.6)	1(0.1)	2(0.2)	2(0.2)	---	
3/4	2(0.3)	1(0.1)	---	2(0.3)	4(0.5)	1(0.1)	1(0.1)	1(0.1)	1(0.1)	1(0.1)	1(0.1)	3(0.4)	3(0.4)	---	
4/5	3(0.4)	2(0.3)	2(0.3)	---	3(0.4)	5(0.6)	---	---	---	5(0.6)	1(0.1)	3(0.4)	3(0.4)	---	
5/6	3(0.4)	1(0.1)	---	2(0.3)	1(0.1)	---	---	2(0.3)	2(0.3)	---	1(0.1)	4(0.5)	4(0.5)	---	
6/7	2(0.3)	12(1.6)	---	---	1(0.1)	---	---	1(0.1)	---	---	---	---	---	1(0.1)	
all	2(0.3)	---	11(1.5)	5(0.7)	11(1.5)	3(0.4)	3(0.4)	8(1.0)	4(0.6)	3(0.4)	3(0.4)	2(0.2)	2(0.2)	7(0.8)	
TOTALS	n=283	129	115	240	115	250	116	116	243	251	81	251	251	101	
	36.61%	16.69%	15.93%	33.24%	15.93%	32.34%	15.01%	15.01%	33.43	29.43%	11.14%	29.43%	29.43%	11.84%	
	N=773	773	722	722	722	773	773	773	727	853	727	853	853	853	

Table 23: A Comparison of Achievement/Persistence Rates Amongst Students in Their First Session Versus All Other Sessions for the Fall, 1995, Fall, 1996 and Fall, 1997 Cohorts.

Year:	Session:	N=	%=	2 or more	Session:	N=	%=
Fall, 1995	1	2418				2209	
	Passed	1951	81%	Passed	1920	87%	
	Failed	318	13%	Failed	218	9.9%	
	Probable Dropout	108	4.5%	Probable Dropout	61	2.8%	
	Definite Dropout	41	1.7%	Definite Dropout	10	0.5%	
Fall, 1996	Session:	N=2134	%=	Session:	N=2485	%=	
	1	1771	83%	2 or more	2182	88%	
	Passed	260	12%	Passed	188	7.6%	
	Failed	96	4.5%	Failed	94	3.8%	
	Probable Dropout	7	0.3%	Probable Dropout	21	0.8%	
	Definite Dropout			Definite Dropout			
Fall, 1997	Session:	N=2349	%=	Session:	N=2872	%=	
	1	2068	88%	2 or more	2563	89%	
	Passed	196	8.3%	Passed	214	7.5%	
	Failed	76	3.2%	Failed	80	2.8%	
	Probable Dropout	9	0.4%	Probable Dropout	15	0.5%	
	Definite Dropout			Definite Dropout			

H6: Persistence and achievement rates have significant fluctuations (patterns of decline/increase) by discipline and program groups.

AND

H7: Many more students don't make it to graduation because they don't pass core courses.

Tables 24 through 26 (pages 34-36) report¹² on a comparison between first session students compared to all other students in the cégep. The results study the effects of program (left column) and course load (1 through 8, top row) interactions while taking into account the numbers of students who passed ("1"), failed ("2"), probably dropped out ("3"), or definitely dropped out ("4"). First session student failure rates dropped from 13% (F95, Table 24) to 12% (F96, Table 25) to 8.3% (F97, Table 26). And, we can see that more students passed more courses also (81% in F95; 83% in F96, and, 88% in F97). The students from other sessions improved slightly. They went from a failure rate of 9.9% (F95) to 7.5% (F97), and with pass rates moving from 87% (F95) to 89% (F97). Apparently, the encadrement has had its greatest impact on first session students with the results that these students are passing courses in greater numbers. The single most affected are students in the 81.01 program. They are consistently performing poorly. Apparently, if the students from the 81.01 program are taking advantage of the encadrement, it is not being translated into better academic performances.

We have been insisting on the fact that more students pass more courses. However, the real critical question is related to graduation rates. Tables 27-29 (pages 37-39) report on the relationship of disciplines to programs of study for each of the three Fall cohorts (F95 to F97). The picture that emerges from these data is that students may pass more courses but will not get to graduate for several reasons. First, about 9% attrition is normal: 2% will leave during their first session for personal reasons; 2% will not be allowed back under probation for the Winter term; and, about 5% of students fail all their courses and choose to leave at some point in the term. Second, a first session student who fails all three core courses English and French and Philosophy will rarely make it to graduation. Third, failing two of these three core courses in the first session, and failing two of the three again in the second (winter) session has about the same effects.

Commerce students appear to have some problems with mathematics. When possible, these students switch to the Social Sciences program. In the Social Sciences, students have considerable problems with the Initiation to Research Methods (IM-300) course. However, it is only when Social Science/Commerce students take, and fail very poorly or probably dropout, either mathematics or IM and fail two other required Common Trunk courses (or two core courses) that students do not make it to graduation.

¹²NOTE: We draw your attention to the numbers of students (in Tables 24-29), and not the percentages, because sample (cell) sizes vary considerably as a function of the simple fact that the number of core English, French and Philosophy courses required in student programs differs considerably from the number for other disciplines listed.

The message from these results is clear: Language skills are at a premium, and for students in nearly all programs (except Languages), so are math. The mathematics courses have a critical role in determining whether a student stays in the Commerce program or switches to the Social Science program.

We have nearly attained, with achievement rates at 89%, as high a level of persistence and achievement on a student/course basis as we can get (recall that about 9% attrition is to be expected which leaves about 91% as the benchmark).

Some cégeps have required reduced course loads during the first session for certain students. Other cégeps try to balance the type of courses the students can take so as to minimize taking certain combinations of courses which have been shown to effect persistence and achievement in programs of study. These considerations are, of course, in the hands of the Minister of Education and college administrators. For example, how many students leave Saint Lawrence but register elsewhere? Only central records in the Minister of Education Computer can sort out the variables at a program and institution level.

FALL, 1995	COURSE LOADS - FALL, 1995										(STUDENTS in Session 1)																										
	1	2	3	4	5	6	7	8	9	10	1	2	3	4	5	6	7	8	9	10																	
Program:	1	2	3	4	5	6	7	8	9	10	1	2	3	4	5	6	7	8	9	10																	
81.01	13	1	13	10	3	1	4	14	7	2	7	13	5	1	9	10	5	1	12	6	2	1	4	1													
200.01	56	3	55	4			52	6			50	7		1	50	6	1	45	6																		
200.02	64	2	60	5			57	9			57	8	1		58	7		52	5																		
200.03	18	4	13	6	4		15	4	4		17	3	1		13	3	1	12	2																		
300.01	76	8	4	65	19	3	4	65	11	10	5	61	10	14	5	64	13	5	4	63	11	4	1	47	2	3	1	1	3								
400.01	42	3	1	42	3		1	40	3	2	1	37	5	2		29	12	4		42	2																
410.12	19	5	1	16	8	1	1	18	5	3	20	2	3		20	3	1	20	1																		
600.01	42	6		40	7	1	39	6	2	1	42	4	1		44	2	2	37	6																		
330	44	5	7	304	62	12	7	290	58	28	9	291	52	27	7	287	56	19	5	283	39	8	3	162	7	6	3	4	0	3	0						
FIRST SESSION Achievement Results:																																					
1951	Passed																																				
318	Failed																																				
FIRST SESSION Persistence Results																																					
108	Probable Dropouts																																				
41	Definite Dropouts																																				
2418	Grand Total																																				
COURSE LOADS - FALL, 1995																																					
Program:	1	2	3	4	5	6	7	8	9	10	1	2	3	4	5	6	7	8	9	10																	
Note 1																																					
200.01	42	1	38	2	2		35	6	2		35	6			35	3	1	24	3																		
200.02	63	4	60	5	2		54	9	1		54	9	4		55	6		46	1																		
Note 1																																					
300.01	104	12	3	92	19	7	94	10	10		94	12	5	1	87	12		60	8	1	1	40	7														
400.01	49	3	48	1	1		45	4	1		45	2	3		44	2		36	3			24	1														
410.12	21	10	1	21	6	3	1	22	7	2	22	3	5	1	21	2	3	2	15	4	1	6	4														
600.01	60	5	1	54	9	1	56	5			56	3	1	1	52	4		1	36	6																	
339	34	5	1	313	42	16	1	306	41	16	0	306	35	18	3	294	29	4	3	217	25	2	1	119	12	0	1	26	0	0	0	0					
Achievement Results for OTHER THAN First Session:																																					
1920	Passed																																				
218	Failed																																				
Persistence Result for OTHER THAN First Session:																																					
61	Probable Dropouts																																				
10	Definite Dropouts																																				
2209																																					



FALL, 1997	COURSE LOADS - FALL, 1997										(STUDENTS in Session 1)									
	1	2	3	4	5	6	7	8	9	10	1	2	3	4	5	6	7	8	9	10
Program:	1	2	3	4	5	6	7	8	9	10	1	2	3	4	5	6	7	8	9	10
81.01	11	10	4	3	10	3	4	6	6	4	1	10	3	1	1	10	1	1	4	
200.01	63	62	1		61	2		58	5		59	4			57	3		35	1	
200.02	69	66	7		66	7		61	12		65	8			62	5		42	2	
200.03	5	6	3	2	3	6	2	6	3	2	7	3	1	8	1	1	1	1	1	
300.01	84	79	9	6	78	1	6	1	81	8	2	80	6	4	72	5	5	1	53	7
400.01	43	40	4		40	3	1	40	1	3	34	8	2		40	3	1	36	2	
410.12	19	15	4	2	1	17	2	3	19	2	1	20	2		14	2	1	10		
600.01	36	33	4	1	1	33	4	2	37	2	36	1	1		34	1	1	23	2	
330	24	9	0	311	38	14	2	308	28	18	1	308	37	15	3	311	35	8	2	297
FIRST SESSION Achievement Results:																				
2088	Passed	% = 88																		
196	Failed	% = 8.3																		
FIRST SESSION Persistence Results																				
76	Probable Dropouts	% = 3.2																		
9	Definite Dropouts	% = 0.4																		
2349	Grand Total																			
COURSE LOADS - FALL, 1997										(STUDENTS Other Than Session 1)										
1	2	3	4	5	6	7	8	9	10	1	2	3	4	5	6	7	8	9	10	
Program:	1	2	3	4	5	6	7	8	9	10	1	2	3	4	5	6	7	8	9	10
Note 1																				
200.01	64	58	3	1	49	10	2	51	8		43	9			33	3		9	1	
200.02	75	75	1		64	9		65	3		60	3			49	1	1	18		
Note 1																				
300.01	140	11	3	1	130	18	4	129	16	5	2	258	13	7	3	105	12	8	43	1
400.01	45	1	42	1	38	4	2	39	2	2	34	4	1	1	32	1	1	17	1	2
410.12	48	10	7	38	15	9	1	55	6	1	52	4	3	1	38	4	1	1	26	3
600.01	68	9	2	1	66	4	6	1	62	1	4	1	63	5	3	1	55	4	2	16
440	33	13	2	409	42	20	2	397	46	14	4	528	35	15	5	349	35	12	1	273
Achievement Results for OTHER THAN First Session:																				
2563	Passed	% = 89																		
214	Failed	% = 7.5																		
Persistence Result for OTHER THAN First Session:																				
80	Probable Dropouts	% = 2.8																		
15	Definite Dropouts	% = 0.5																		
2872																				



		NUMBER of First Session FALL, 1995 Students Registered by Program and Discipline																									
FALL, 1995 Program	#Students Reg'd	101	109	201	202	203	203	300	300	320	330/	340	345	350	360	383	385	387	401	410	420	601	602	603	607	609	912
		Biol	P.E.	Math	Chem	Phys	IM	Geo	Hist	Phil	CPhi	Psy	QM	Econ	PolS	Soc	Bus	BA	Com	Fm	CFm	Engl	Spa	Ger			
81.01	27		23	6	2	3	13		8		23	10		9	3	5	5	4			14	26	1				
200.01	59		24	55	55	46		2	3	2	47	1		3	6	4				1	30	59				7	10
200.02	66		22	60	62	53		1	4		51	1		6	10	2	1			1	32	68				10	15
200.03	23	1	11	14	14	15		3	3		13	4		2	1						8	22				16	
300.01	91		83	4			72	21	41	1	80	42	1	29	20	19	3	1			63	99	1				
400.01	46		45	38			17	1	4		44	2		32	1	2	37			5	35	45					
410.12	26		13	22				2	2		18			5	2	3	26	27			16	24	5	35			
600.01	48		48	1				1	3		47	6		2	4					2	1	5	43	73	47		
TOTALS	386	1	269	200	133	117	102	26	69	3	323	66	1	86	45	39	72	36	1	12	241	416	54	52	44		
																											2408
		Number of Student/Course spaces =																									
		NUMBER of First Session FALL, 1995 Students Registered Who Failed/Abandoned Courses by Program and Discipline																									
FALL, 1995 Program	#Students Reg'd	101	109	201	202	203	203	300	300	320	330/	340	345	350	360	383	385	387	401	410	420	601	602	603	607	609	912
		Biol	P.E.	Math	Chem	Phys	IM	Geo	Hist	Phil	CPhi	Psy	QM	Econ	PolS	Soc	Bus	BA	Com	Fm	CFm	Engl	Spa	Ger			
81.01	27		5	3	2	3	10		8		5	3		8	2	4	2	2			7	12					
200.01	59		1	8	8	4								2							2	4				1	4
200.02	66		2	11	7	7			1		2															4	5
200.03	23	1	1	5	6	3			1		4	1		1	1					2		7				3	
300.01	91		10	2			25	4	13		19	6		8	8						11	20					
400.01	46		1	17			2		1		5			5	1	1					1	5					
410.12	26		3	6					1		4			3	1	2	4	5									
600.01	48		4	1																	5	9					
TOTALS	386	27	53	23	17	37	4	25	0	39	10	0	27	12	15	7	9	0	0	0	26	61	7	4	15		
																											418
		Number of Student/Course spaces F/Abd=																									
		PERCENTAGES of First Session Fall, 1995 Students Registered Who Failed/Abandoned Courses by Program and Discipline																									
FALL, 1995 Program	#Students Reg'd	101	109	201	202	203	203	300	300	320	330/	340	345	350	360	383	385	387	401	410	420	601	602	603	607	609	912
		Biol	P.E.	Math	Chem	Phys	IM	Geo	Hist	Phil	CPhi	Psy	QM	Econ	PolS	Soc	Bus	BA	Com	Fm	CFm	Engl	Spa	Ger			
81.01	27		21.7	50	100	100	76.9		88.9		21.7	30		88.9	66.7	80	40	50			50	46.2	0			100	
200.01	59		4.17	14.5	14.5	8.7		0	0	0	0	0		66.7	0	0	0			0	6.67	6.78				14.3	40
200.02	66		9.09	18.3	11.3	13.2		0	25		3.92	0		0	0	0	0			0	0	5.88			0	33.3	
200.03	23	100	9.09	35.7	42.9	20			33.3		30.8	25		50	100						0	31.8				18.8	
300.01	91		12	50			34.7	19	31.7	0	23.8	14.3	0	27.6	40	42.1	0	0			17.5	20.2	0				
400.01	46		2.22	44.7			11.8	0	25		11.4	0		15.6	0	50	2.7			0	2.86	11.1					
410.12	26		23.1	27.3					50		22.2			60	50	66.7	15.4	18.5			0	37.5	0	0			
600.01	48		8.33	100				0	0	0	0	0			0	0	0	0	0	0	11.6	0	14.9				
F/Abd rate per disc=		10	26.6	17.3	14.5	14.5	36.3	15.4	36.2	0	12.1	15.2	0	31.4	26.7	38.5	9.72	25	0	0	10.8	14.7	13	7.69	34.1		17.4

		NUMBER of FALL, 1996 Students Registered by Program and Discipline																		Number of Student/Course spaces =						
FALL, 1996 Program	#Students Reg'd	101 Biol	109 P.E.	201 Math	202 Chem	203 Phys	300 IM	300 Geo	320 Hist	330/ Phil	340 CPhi	345 Psy	350 QM	360 Econ	383 PolS	385 Soc	387 Bus	401 Bad	410 Com	420 Fm	601 CFm	602 Engl	603 Spa	609 Ger	912	
81.01	27		25	8	2	2	13	3	2	2	22	8		6	3	7	5	3			18	27	1	3	4	
200.01	53		41	49	43	36			1		38	2		1	1	1	1				40	53	4	6	26	
200.02	54		40	53	46	46					38	1		3	3		7				44	56	2	2	17	
200.03	21	1	12	16	17	15		1		1	10				2	2	1				7	20		2	11	
300.01	82		80	1			66	14	29		77	45		38	12	27	1			3	64	87	2	3		
400.01	26		21	22			14	1	1		22	3		14	1	1	22			1	22	26		1		
410.12	28		21	16			1	1	1		2	25	1	1	1	2	26	25		1	25	25	2			
600.01	39		36	1				1			37	4			2	3	1			4	51	53	37	30		
TOTALS	330		276	166	108	99	93	21	34	5	269	64	0	60	25	40	64	28	0	9	271	347	48	47	58	
		NUMBER of Fall, 1996 Students Registered Who Failed/Abandoned Courses by Program and Discipline																								
FALL, 1996 Program	#Students Reg'd	101 Biol	109 P.E.	201 Math	202 Chem	203 Phys	300 IM	300 Geo	320 Hist	330/ Phil	340 CPhi	345 Psy	350 QM	360 Econ	383 PolS	385 Soc	387 Bus	401 Bad	410 Com	420 Fm	601 CFm	602 Engl	603 Spa	609 Ger	912	
81.01	27		6	3	2	2	9	2	2	2	19	4		6	1	7	4	2			8	13	1	1	3	
200.01	53		9	7	5																1				6	
200.02	54		1	5	1	3															1	2				
200.03	21		2	10	9	5					2				2						2	7			5	
300.01	82		6				13	5	8		19	4		13	3	2	1			1	7	11			1	
400.01	26		1	9			3	1			1			2								3				
410.12	28		1	7							6			1	1						6	5				
600.01	39		2								9										4	10	1		4	
TOTALS	330		19	43	19	15	25	8	10	0	56	8	0	22	7	9	9	6	0	1	29	51	2	7	14	
		PERCENTAGES of Fall, 1996 Students Registered Who Failed/Abandoned Courses by Program and Discipline																								
FALL, 1996 Program	#Students Reg'd	101 Biol	109 P.E.	201 Math	202 Chem	203 Phys	300 IM	300 Geo	320 Hist	330/ Phil	340 CPhi	345 Psy	350 QM	360 Econ	383 PolS	385 Soc	387 Bus	401 Bad	410 Com	420 Fm	601 CFm	602 Engl	603 Spa	609 Ger	912	
81.01	27		24	37.5	100	100	69.2	66.7	100	0	86.4	50		100	33.3	100	80	66.7			44.4	48.1	100	33.3	75	
200.01	53		0	18.4	16.3	13.9					0	0	0	0	0	0	0	0			2.5	0	0	0	23.1	
200.02	54		2.5	9.43	2.17	6.52					0	0	0								2.27	3.57	0	0	0	
200.03	21		16.7	62.5	52.9	33.3					0	20		100							28.6	35			50	
300.01	82		7.5	0			19.7	35.7	27.6		24.7	8.89		34.2	25	7.41	100			33.3	10.9	12.6	0	33.3	45.5	
400.01	26		4.76	40.9			21.4	100	0		4.55	0		14.3	0	0	0			0	0	11.5			0	
410.12	28		4.76	43.8			0	0	0	0	24	0		100	100	0	11.5	16		0	24	20			0	
600.01	39		5.56	0							24.3	0		0	0	0	100			0	7.84	18.9	2.7	13.3		
F/Abd rate per disc=			6.88	25.9	17.6	15.2	26.9	38.1	29.4	0	20.8	12.5		36.7	28	22.5	14.1	21.4			11.1	10.7	14.7	4.17	14.9	24.1
		Number of Student/Course spaces F/Abd= 360																								
		Page 4																								

TABLE 30: Enrolment statistics for each cohort of students registered in the Fall, 1995, 1996 and 1997.

Cohort	Year Admitted	Session#	Enrolment	Dropout		Graduated		
				N=	%=	N=	%=	
Fall, 1995	1995	1(F95)	389					
		2(W96)	335	54	13.88%			
		3(F96)	272	63	16.19%			
		4(W97)	261	11	2.82%	105	26.99	(May, 1997)
		5(F97)	142	71	18.25%	14	3.6	(Summer, 1997)
		6(W98)	18		4.63%	53	13.62	(Fall, 1997)
Fall, 1996	1996	1(F96)	329					
		2(W97)	303	26	7.9 %			
		3(F97)	257	46	13.98%			
		4(W98)	253	4	1.22%			
Fall, 1997	1997	1(F97)	361					
		2(W98)	339	22	6.1 %			

About 27% of students will get to graduate on time in their fourth session. Another 17% will eventually graduate over the summer or in the Winter session. Finally, 4.6% of students will return a sixth session. That's close to 48% of students who will graduate (27% plus 17%) or will try to do so in the Winter, 1998 session (4.6%). So, we have 72.67% who persist, 27% who graduate on time which yields 45.67% who will persist beyond their fourth session. From the group of these students persisting beyond their fourth session 46% will graduate or return for the Winter, 1998 session. We lose most of our students at the end of the second or third sessions. Only about 20% leave in good academic standing (passed 4 of 6, or 4 of 7 of their courses each term so far).

It was beyond the mandate of this research project to examine further the patterns of failures and persistence within disciplines. It would be interesting to see how many students decide to leave Saint Lawrence after having failed for a second time the core English, Philosophy or French courses, or a required math course.

H8: Students believe, upon entering Cégep, that their current study skills and learning strategies are sufficient to get them through their Cégep workloads.

This hypothesis is true. Table 31 (see page 42) reveals that, with the exception of the TASKDIFF ("Task difficulty") variable (52.51 highlighted in bold print), there is no subscale score (recall that there are sixteen of these scales!) lower than 60% on the Motivated Learning Questionnaire. Some students were apprehensive about the difficulty of the task before them. None of the students seemed apprehensive (as interpreted by low scores on the other MLQ scales) about their abilities to rise to the occasion to meet this challenge.

H9: Previous high school overall averages are the single best predictors of academic success during the first session of Cégep studies.

The study of the relationship between high school grade averages and final grades at the end of the first session support this hypothesis. Linear regression results show that the "single best predictor" is indeed high school grades. However, these results are ordinal in nature. To simply state that some variable is "best" means it is first. For example, one can be "first" in a class of students with an average of 99% or with an average of 50%. While "first" is more easily associated with the 99%, the phrase "single best predictor" does not have this meaning. Actually, high school grades are poor *predictors* of cégep performances. We can certainly expect that many more of the students who do well in Cégep will come from those with "good" high school averages. But this doesn't mean that some students with "good" grades will not fail or that students with "poor" high school averages will not do well!

High school averages are important. That's why everyone uses them to admit students to Cégep. However, there are other dimensions which no grade report can evaluate. I suspect that this is why Saint Lawrence has had a long reputation of having its own admissions procedures.

Rather than focusing on the numbers of students who do not graduate from Saint Lawrence, we could, based on the proverbial glass of water which is half-full/half-empty, focus on the fact that many students are given their "chance" at college studies. One can only wonder about the results of a formal study on the perceptions, satisfaction and orientations of students who leave Saint Lawrence before graduation. If we take into account the anecdotal evidence of teachers, we find that very few students are bitter about their time spent at Saint Lawrence. Of course, this is mere speculation, but one can wonder about the need to measure "success" only by graduation rates!

TABLE 31: Initial Motivated Learning Questionnaire Descriptives:

Variable	Mean	Std Dev	Minimum	Maximum	N	Label
GOB	46.81	10.51	20.0	77.5	319	Extrinsic Motivation Behaviors
TASKDIF	52.51	15.92	20.0	100.0	317	Task Difficulty Beliefs
GOA	60.81	11.05	30.0	92.5	317	Extrinsic Motivation-Attitudes
LOB	62.13	14.01	30.0	100.0	317	Intrinsic Motivation Behaviors
TIME	66.79	13.12	28.9	95.6	318	Time Management
SUPTECH	67.24	11.93	24.0	100.0	319	Use Support Techniques & Materials
ELAB	67.35	12.67	20.0	100.0	319	Elaboration strategies
CONATT	67.46	11.25	24.0	92.0	316	Concentration/Attention
SELFTST	67.67	11.82	28.0	100.0	315	Self-Testing / Test Preparations
CRTTHINK	68.39	11.34	36.7	100.0	316	Critical Thinking
REHEAR	68.76	13.66	32.0	100.0	317	Rehearsal Strategies
HELPSEEK	69.01	17.63	20.0	100.0	319	Help Seeking
LOA	70.54	9.31	35.0	100.0	317	Intrinsic Motivation Attitudes
ORG	71.06	11.59	36.0	100.0	319	Organization Strategies
INFPROC	71.86	11.55	36.0	100.0	317	Information Processing
SMI	72.03	14.43	25.0	100.0	316	Selecting Main Ideas
IMPCEGE	73.93	14.99	25.0	100.0	319	Importance Cegep Studies
SSLSBEL	75.35	15.53	20.0	100.0	317	Beliefs in Study Skills & Learning Strategies
EFFREG	75.44	11.20	41.5	98.5	315	Effort Regulation

H10: The learning oriented students will make better adjustments (as measured by changes in the MLQ scores at the entry and the end of the session) to their study skills and learning strategies than will the grade oriented students.

Table 32 (page 44) shows that the grade and learning oriented students had several consistent changes in their perceptions about persistence and achievement. We present them in four groupings to accentuate the very important qualitative differences between them. In Grouping 1 we see that "the importance of cégep studies" is the first perception to change. This would seem reasonable given the human nature for handling cognitive dissonance. Right alongside we see that "self testing and test preparations" and "critical thinking" have also changed considerably. In Grouping 2 we see that "motivation" is the next most important variable to suffer. Grouping 3 shows that "personal effort," "help seeking" and "organization" also changed considerably between the Grade Oriented and Learning Oriented students. Grouping 4 results suggest that the perceptions of "task difficulty" are the last to change dramatically.

Collectively, these results suggest that many students who would make these changes, find it easier to make changes to themselves (perceptions, thinking, motivation) rather than to the task. It would appear that students have a faulty causal attribution process at work. When the task is difficult and one needs to consider new strategies, new changes to oneself to handle the demands of the task, some students are apparently, and almost "naturally," inclined to criticize themselves and change (for the worse) their ways of thinking about the themselves as learners.

TABLE 32: Results of Comparisons Between Grade and Learning Oriented Students on the Motivated Learning Questionnaire.

MOTIVATED LEARNING QUESTIONNAIRE		
PAIRED RESULTS BETWEEN LEARNING VERSUS GRADE ORIENTED STUDENTS		
Ordinal Position	Scale Name	Critical p Value of the of the Sign Test =
GROUPING 1		
1st	Importance of cégep studies	-0.0046
2nd	Self-testing and test preparations	-0.0053
3rd	Critical thinking	-0.0058
GROUPING 2		
4th	Extrinsinc motivations	-0.0148
5th	Intrinsic motivations	-0.0214
GROUPING 3		
6th	Effort regulation	-0.0303
7th	Help seeking behaviors	-0.0311
8th	Organization strategies	-0.0350
GROUPING 4		
9th	Task difficulty	-0.0446

H11: There are important differences in some students' estimates of daily tactics to be performed to maintain quality work and the overall plan "to learn or pass the course" which are related to persistence /achievement behaviors.

The results of analyses of variance support this hypothesis. The variables "Beliefs about study skills and learning strategies," ($F=13.338$; significant beyond 99.99%) and "Effort regulation" ($F=32.669$, also significant beyond 99.99%) confirm that the two single most important scales are student effort and beliefs about study skills and learning strategy behaviors between daily and general plans related to persistence and achievement. We insist on behaviors rather than attitudes because we wanted to study what student did rather than what they intended to do. We measured what students said they would do (global assessment), compared to what they reported doing (daily assessments). The MLQ questionnaire (see Appendix 3) has a series of 128 questions to measure what students reported doing on a daily basis. At the same time, the student was asked to make a global assessment of his/her skills related to the topics in the question. For example, several questions measured what students reported doing to prepare for tests while one question at the end of the questionnaire asked them, "133. I know how to prepare for a test and how to do my best while taking the test. I use appropriate methods for studying and remembering information during a test."

By comparing what students said they did daily ("daily tactics") to what they said they could do ("overall plan") and then comparing changes between two points in time, one can learn about the nature of changes related to learning strategies.

It may very well be that all students believe in, actively use, and maybe even seek out help with, study skills and learning strategies. Apparently, when the proposed changes to one's study skills and learning strategies don't produce the escompted outcome then beliefs in their use has to decrease. The problem may be that students expect change too quickly. A change in the way of thinking and proceeding is needed. The author has presented this example to explain this way of thinking.

Generally a student begins his work just as s/he has done in other courses or previous learning situations. If s/he has ability and has "gotten by" with cramming, if paraphrasing and plagiarism have worked, if teachers have accepted excuses for sloppy work etc. then the student is likely to repeat these strategies. It's only when the workload gets too demanding that the student realizes that s/he can't rely on her/his old strategies to cope with present academic demands. The student is faced with a choice. On the one side s/he may continue with old skills and strategies. On the other side s/he may acquire some new skills and strategies but at the expense that the time s/he would have had to complete the work will have to be invested in acquiring a new learning behaviour and strategy. A no win situation that leads to failure and despair. (Talbot, 1997a, page 3)

We don't believe that students do not believe in study skills and learning strategies. We interpret these results to mean that students loose heart too quickly because they have worked "hard" to do better and the results are just not coming in. Such students expect that study skills and learning

strategies are a means to a better academic end. They don't seem to realize the importance of themselves as a critical variable. Study skills and learning strategies produce changes in thinking and behavior (especially about learning principles) which input on outcomes.

We have focused on only the study skills and effort variables on the grounds that study skills and learning strategy instruction and helping student remediate effort regulation are the only real variables with which teachers may realistically work. The author has argued (Talbot, 1997b) that teachers can teach self-regulated learning to students.

H12: The learning oriented students will make better use of resources (encadrement, workshop attendance, visits to teachers) than will the grade oriented students.

This hypothesis is dropped. The collection and analysis of data was too unreliable for analyses. Attendance in encadrement activities varied along teachers, disciplines, and departments. Record keeping varied from not at all to sporadic to complete. But none of the data which these people made available to the author was useful for analysis. Any attempts to account for which students show up for which "additional" help will require a normalized record keeping procedure.

H13: The relationship of failures and abandons, controlling for course load and previous high school average, will be inversely proportional to failure and abandon behaviors in the learning oriented students. Also, the relationship of failures and abandons, controlling for course load and previous high school average, will be directly proportional to failure and abandon behaviors in the grade oriented students.

This hypothesis is true. In Table 33 (page 47) part two ---under "percentages",--- we see (highlighted in bold) that high grade oriented students ("Grade/Behavior" and "high") have a 60.76% pass rate for all of their courses, while for high learning oriented students ("Learning/Behavior" and "High") it is 72.09%. The opposite applies for low grade oriented ("Grade/Behavior" and "Low") which is at 71.83% and for low learning oriented ("Learning/Behavior" and "Low") it is at 62.03%. This trend does NOT hold for failures or dropouts. Thus, these results would suggest, when combined with results from tables 27-29 (pages 37-39) that working to help students convert to a learning orientation can move them away from failing and into passing more courses.

H14: Students placed on academic probation in the Winter, 1998 session are more likely to come from the grade oriented than the learning oriented groups.

An insufficient number of students led to the creation of too many empty cells to permit these analyses.

Fall, 1997		Numbers of Grade or Learning Oriented Attitudes or Behaviors and Achievement/Persistence											
Level	N =	PASSED				FAILED				DROPOUT			
		100%	100% 50-99%	1-49%	100% 50-99%	1-49%	100% 50-99%	1-49%	100% 50-99%	1-49%			
Grade/Attitude	75	46	0	21	3	2	3	7					
	174	124	1	38	5	4	0	11					
Grade/Behavior	61	43	0	15	2	1	1	4					
	79	48	0	8	21	1	1	7					
	162	115	1	8	32	2	0	11					
	71	51	0	1	14	4	1	4					
Learning/Attitude	77	53	0	7	17	0	1	6					
	167	116	0	6	39	4	1	9					
	66	44	1	4	13	3	0	6					
Learning/Behavior	86	62	0	3	19	1	2	5					
	147	102	1	12	29	3	0	9					
	79	49	0	3	18	3	0	9					
		Percentages of Grade or Learning Oriented Attitudes or Behaviors and Achievement/Persistence											
Level	N =	PASSED				FAILED				DROPOUT			
		100%	100% 50-99%	1-49%	100% 50-99%	1-49%	100% 50-99%	1-49%	100% 50-99%	1-49%			
Grade/Attitude	75	61.33	0.00	28.00	4.00	2.67	4.00	9.33					
	174	71.26	0.57	21.84	2.87	2.30	0.00	6.32					
Grade/Behavior	61	70.49		24.59	3.28	1.64	1.64	6.56					
	79	60.76		10.13	26.58	1.27	1.27	8.86					
	162	70.99	0.62	4.94	19.75	1.23	0.00	6.79					
Learning/Attitude	71	71.83		1.41	19.72	5.63	1.41	5.63					
	77	68.83		9.09	22.08	0.00	1.30	7.79					
Learning/Behavior	66	66.67	1.52	6.06	19.70	2.40	0.60	5.39					
	86	72.09		3.49	22.09	4.55	0.00	9.09					
	147	69.39	0.68	8.16	19.73	2.04	0.00	6.12					
	79	62.03		3.80	22.78	3.80	0.00	11.39					



Discussion

Persons need training in being students. The regular, routine and methodological study and practice of the principles learned cannot be compensated for by intensive, and sometimes sporadic, study sessions. Students need help understanding that a tactic is a daily strategy of the behaviors one will engage in to meet the global plan (passing courses, programs and getting to graduation.) All of the outcomes are relatively long. The shortest one is passing the course. And that's still fifteen to sixteen weeks of work. We can only speculate at this time that perhaps students don't have an adequate temporal perspective. After all, the first session students are fresh out of high school where they had plenty of time to adjust. They could fail and still recuperate --especially with the almighty Provincial Exams hanging over their heads. While college studies require daily and routine work, the whole system that prepares students for college studies seems to be rewarding do-or-die tactics for learning outcomes.

An important conclusion of this report is that students are motivated. Their motivation doesn't need "fixing." It is not enough to plan how to achieve a goal, which students seem to be willing to do. It is necessary, according to the results to assist students to think through specific behaviors and sequences of behaviors to realize those plans. We don't expect there is a motivational approach suitable to all students, or even to most students across all situations. Students must learn what strategies to use and when to use them ---to know how to work smarter and not harder!

Students are initially able and willing to do the work needed to achieve in college studies. However, many students tend not to see that self-testing and test preparation is about nine times more important than the actual task difficulty. When outcomes don't match effort levels motivation decreases. Then a vicious circle is set in motion in which, apparently from these results, student effort, help seeking behaviors, and organizational strategies are reduced. The consequence is perceptions of increased task difficulty. The vicious circle is too often broken by simply accepting that "cégep studies are not as important as I thought they were!"

We can draw from the study of course loads and session of study in conjunction with significant changes that take place in students' study skills and learning strategies this conclusion: Some students are able to develop "good" strategies (as indicated by a strong and **positive** correlation) while other students have "poor" strategies (as indicated by a strong and **negative** correlation). Good strategy users have a very good fit between their global plans to achieve and their daily tactics. Not only are the good strategy users able to report on what they have to do, when and where to do it, they report almost daily routine checks on the procedures to make sure they stay on target.

The problem of college student motivation to achieve appears to be a common problem with all human achievement motivation. We need to give ourselves the time to change. We need the time to change the way we think about things, and the time it takes to build, link up and then practice new daily routines.

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Appendices:

Appendix 1: Directions given to colleagues who acted as teacher/volunteers to collect data from the Fall, 1997 cohort of students.

Appendix 2: Student Written Consent Form

Appendix 3: The Motivated Learning Questionnaire-"MLQ" (entry level version)

Appendix 4: Scantron Form 2052-N optical mark recording answer sheet

Appendix 5: Personal Learning Profile returned to all students who completed the entry level MLQ on August 18, 1997.

Appendix 6: New Student Information Survey -"NSIS"

Appendix 7: Open letter from Mr. Jean Robert, Academic Dean of Saint Lawrence;

Memo addressed to students by the researcher to ask students to complete the exit level MLQ; and, a copy of the exit level version of the MLQ.

PLEASE NOTE: THE MOTIVATED LEARNING QUESTIONNAIRE IS NOT INCLUDED IN THIS DOCUMENT SINCE IT CONTAINS COPYRIGHT MATERIALS. See p.5 under "Materials" for their description and the Reference section to locate them.

Appendix 1: Directions given to colleagues who acted as teacher/volunteers to collect data from the Fall, 1997 cohort of students.

Dear Colleagues,

Thank you for volunteering to help collect data from the cohort of first semester students for the Fall, 1997 session. A final report will be presented in a seminar format sometime next term.

On August 18th there will be several concurrent data collection periods between 10 a.m. and noon, as well as from 2 p.m. to 4 p.m. We plan on having several teachers in each room to make the operation efficient and easy for all.

One teacher should read directions, make comments, and otherwise orchestrate the general activities. The other teachers will assist by answering student questions, and distributing/collecting materials. A summary of the behaviors expected of teachers is presented below.

It is very important that,

- 1) students participate. Remind them that each will receive a Personal Learning Profile within the next week.
- 2) students have PRINTed their names on the answer sheet!
- 3) we courteously repeat directions so that students clearly comprehend and follow directions, and complete all questions.

Directions to Teacher-Volunteers

Specific directions to be read to students appear in bold and capital letters "**(READ)**". The text itself is preceded by the pointing hand symbol "**(☞)**". All other actions to be performed appear in capital and underlined letters "**(COLLECT, REMIND, DISTRIBUTE** etc.).

Step 1. Make sure all students have entered and are seated. Call the room to attention by **IDENTIFYING** yourself and the other teachers in the room.

Step 2. **READ** at a slow, clear pace the "Consent Sheet" to all students. (A photocopy is attached.)

☞ (See the text on the attached photocopy.)

Step 3. **DISTRIBUTE** the "Consent Sheet."


Step 4. **COLLECT** the consent form **ROW BY ROW**. Make sure that students have **printed** in their names at the top. **REASSURE** students that **printing** in their names in no way obligates them to participate, **ONLY** the signature at the bottom is used as an agreement to participate in **workshops**.


Step 5.

- 5.1 **SHOW** students the special optical mark recording sheet.

5.2 **DISTRIBUTE** two optical mark recording sheets to each student.

5.3 **READ** to students the following statement,

 All materials will be collected and checked. If you have any questions please ask. When you are done, or if you choose not to complete the questionnaire, sit quietly so as not to disturb other students.

 **USE ONLY A dark LEAD PENCIL** to record answers. **TAKE ONE OUT NOW** or borrow one from another student or ask me for one.

5.4 **POINT OUT** where to **PRINT** their names.

5.5 **POINT OUT** how to record an answer.

5.6 **EXPLAIN** to students that incorrect answers must be completely erased.

5.7 **REMIND** students that when they are done they should sit quietly waiting and not disturb other students who are working.

Step 6. **DISTRIBUTE** copies of the questionnaire. As you distribute the questionnaires **REMIND STUDENTS** that if they have any questions to raise their hand. One of the resource teachers, when available, will come over to help.

Step 7. Teachers should **WALK AROUND** to

7.1 answer questions.

7.2 check that students are moving along at a reasonable pace. If some students appear to be straggling, offer some help (perhaps the students have a problem with a word or phrase). **WHEN IN SERIOUS DOUBT** have the student darken the number "3" on the answer sheet. **UNDER NO CONDITION SHOULD THE ANSWER BE LEFT BLANK!**

7.3 deal with those who do not wish to participate. If the student prefers not to complete the materials, then ask him or her to **SIT and WAIT** quietly so as not to disturb others. If the student insists on leaving, or makes a fuss about staying, then allow him/her to leave. **BE CERTAIN** to collect all materials before the student leaves.

Step 8. Ask students to leave questionnaires, answer sheets and borrowed pencils with you on their way out. **CHECK** that **both** answer sheets have a legible **NAME**, answers are properly recorded, and all questions answered. Pile both answer sheets in sequence (1-100 on top followed by 1-44).

Champlain Saint-Lawrence College

PRINT YOUR NAME HERE: _____

Welcome to Saint Lawrence! You have been asked here today to participate in a project designed to help students develop more effective learning strategies. The activities you are invited to participate in, as well as a consent form, are presented below.

In a moment, you will be asked to complete a questionnaire. The analysis of your answers will lead to the preparation of your Personal Learning Profile. You will get your copy within a week. Confidentiality is guaranteed.

A certain number of you will be chosen, based on the chance of picking your name from a list, and offered the opportunity to participate in specially designed workshops aimed at helping students to work smarter and not harder. The workshop activities are practical and personalized. No work outside of the workshop will be requested of the participants. The workshops will be held during the first four weeks of the semester between 12:15 and 1:45 on Tuesdays and Thursdays. The students selected are in no way obliged to attend. If you prefer not to attend, are unable to attend for some reason, or decide not to come to the workshops anymore, then simply inform Jean Robert, Gilles Talbot or Normand Bourgeois of your decision. The students who have not been selected but who would like to take advantage of the workshops need only tell Mr. Talbot of their decision to attend.

Read the following consent form carefully. Your signature at the bottom of the form indicates that you agree to participate in the workshops. Please note that you can decide to cancel this consent until mid-term, in which case the information concerning your participation will be destroyed. Simply contact Mr. Robert, Mr. Talbot or Mr. Bourgeois if you wish to cancel your participation.

I consent to participate in this project under the following conditions:

- 1) My participation in this project is voluntary. I can withdraw from the project without any penalties at any time before mid-term.
- 2) I will do my best to answer the questionnaire accurately and completely.
- 3) I authorize the collection of information about my high school and Cégep grades;
- 4) All information is to be treated as confidential.
- 5) I will receive a detailed Personal Learning Profile

SIGN NAME HERE (if you consent to participate) _____

DATE: _____



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1	2	3	4	5	0
1	2	3	4	5	0
1	2	3	4	5	0
1	2	3	4	5	0
1	2	3	4	5	0
1	2	3	4	5	0
1	2	3	4	5	0
1	2	3	4	5	0
1	2	3	4	5	0

CODE I.D. NUMBER AT LEFT BY FILLING IN THE APPROPRIATE BOXES. IF A NUMBER IS LARGER THAN 5, FILL IN 5 PLUS THE DIGIT NEEDED TO ADD UP TO THE DESIRED NUMBER.

WRITE I.D. NUMBER HERE
EXAMPLE

1	2	3	4	5	0	7
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1	2	3	4	5	0	4
1	2	3	4	5	0	0
1	2	3	4	5	0	6
1	2	3	4	5	0	8
1	2	3	4	5	0	5
1	2	3	4	5	0	3
1	2	3	4	5	0	2
1	2	3	4	5	0	1

1	2	3	4	5	0
1	2	3	4	5	0
1	2	3	4	5	0
1	2	3	4	5	0
1	2	3	4	5	0
1	2	3	4	5	0
1	2	3	4	5	0
1	2	3	4	5	0
1	2	3	4	5	0
1	2	3	4	5	0

(T)	(F)	KEY
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IMPORTANT

USE NO. 2 PENCIL ONLY

- MAKE DARK MARKS
- EXAMPLE: 1 2 3 4 5
- ERASE COMPLETELY TO CHANGE

NAME _____

SUBJECT _____

DATE _____ HOUR _____

SCANTRON FORM 2052-N

TEST RECORD
PART
PART
TOTAL

FEED THIS DIRECTION

FEED THIS DIRECTION

Appendix 5: Personal Learning Profile returned to students who completed the entry level MLQ on August 18, 1997.

NAME : _____

PERSONAL LEARNING PROFILE¹

Your PERSONAL LEARNING PROFILE has been identified through an analysis of the answers to the questionnaire you completed on August 18, 1997. It will give you an opportunity to identify your strengths and certain areas in which you experience difficulties. The identification of problem areas is a first step towards correcting counter-productive behaviors or attitudes. Indeed, anyone can learn and adopt appropriate strategies for learning. This can be done alone or with the help of a teacher, a counselor, or a knowledgeable friend.

The questionnaire that you answered was made up of questions related to a variety of issues, like educational goals and confidence in doing well in school. In order to make interpretations easier we have converted all scores into percentages. Except for the case of anxiety, a high score means that you handle this dimension of learning strategies well. Remember that these scores must not be interpreted as meaning that you have passed or failed on an issue. The scores simply indicate that you need to deal with certain issues in order to facilitate your academic success. What you should do is take note of the strong areas and single out a few weak ones that you want to work on first. **To get more information or help:** To talk about these scores, to get help to set your priorities with these issues, or to learn of other teachers who can help, contact either Gilles Talbot or Normand Bourgeois.

Personal Learning Profile

Motivation:

1. Motivation: Types of Interest. The reasons why you engage in a learning task are reported by this score. High "IM" scores reflect the degree to which you perceive yourself to be participating in a learning task for reasons such as challenge, curiosity, satisfaction from a job well done, pride and mastery. High "EM" scores reflect participating in learning tasks for reasons such as grades, rewards, performance, evaluation by others (or to impress parents and future employers), and competition (outdoing others).

"IM" score: _____

"EM" score: _____

Reactions to Cégep:

2. Task Difficulty Beliefs. Sometimes you may think that too much is expected of you to do school work or to pass all your courses. Some courses, you may think, are just "tougher" than others. A high *task difficulty belief* score suggests you often think information in many of your courses is rather difficult for you to study.

Task Difficulty Belief score: _____

1

This personalized report was based on materials originally developed by Pintrich et al. (1991) A Manual for the Use of the Motivated Strategies for Learning Questionnaire, and Weinstein (1987) LASSI User's Manual. A special thanks to Normand Bourgeois for proof-reading and editing an earlier version of this profile.

3. Importance of Studies. A high *importance of studies* score means that earning a Cégep diploma is very important to you.

Importance of Studies score: _____

4. Beliefs in Study Skills and Learning Strategies. The *beliefs in study skills and learning strategies* score reflects that you believe that developing better study skills and learning strategies will help you be more efficient and successful as a student. A high score suggests that you are alert to learning new ways of studying and doing your school related work.

Beliefs in Study Skills/Learning Strategies score: _____

Effort Regulation:

5. Self-effort refers to your willingness to try hard on your school related work, even when the work is difficult. A high score means that you often try hard and exert effort in your school related work.

Effort Regulation score: _____

Overall Cognitive Processes:

6. Critical Thinking. A high score on *critical thinking* means that you often examine and evaluate the way you go about planning, checking on, and regulating the way you do your school related work.

Critical Thinking score: _____

7. Attention/Concentration. A high score on *attention/concentration* suggests you often focus yourself very well on school work. You often study and listen in class. You do not let other thoughts, feelings, or what other people are doing, distract you from your goal of doing school related work.

Attention/Concentration score: _____

8. Information Processing. A high score on *information processing* suggests that overall you often successfully coordinate how to organize, elaborate, rehearse, select the main idea, and use support techniques and materials to do your school related work. Each of these issues is explained separately in the following descriptions.

Information Processing score: _____

9. Selecting the Main Idea. A high score on *selecting the main idea* reveals that you often identify the important material in a text or a lecture for you to examine later in more detail or depth.

Selecting the Main Information score: _____

Specific Cognitive Strategies:

10. Organization. A high score on *organization* means that you often select appropriate study methods, such as underlining, re-reading, making tables or charts, copying into your own words etc., to help you understand how best to "fit" information together.

Organization score: _____

11. Elaboration. A high score on *elaboration* means that you often put into your own words, and otherwise summarize, what you are reading or listening to in class.

Elaboration score: _____

12. Rehearsal. A high score on *rehearsal* suggests that you often re-read and revise your class notes, that you can write out or repeat your own lists of key words, people, or events etc. to help you remember the essential details of what you are reading, or of what you have heard in class.

Rehearsal score: _____

Inventory of General Study Skills and Learning Strategies:

13. Time Management Principles. A high score on *time management principles* means that you often plan and manage your study time (schedule your time) and environment (the place for doing school related work).

Time Management Principles score: _____

14. Use of Support Techniques and Materials. A high score on *use of support techniques and materials* reflects that you often use study skills and learning strategies you get from other sources, such as books or teachers, or that you make up for yourself. Briefly, you know that you don't know, and you often go about finding effective and efficient study skills and learning strategies to help you learn what you do not know.

Use of Support Techniques and Materials score: _____

15. Self-Testing, Reviewing, and Class Preparation. A high score on *self testing, reviewing and class preparation* reflects that you are often well prepared for classes and tests.

Self-Testing, Reviewing, and Class Preparation score: _____

16. Test Preparation and Test-Taking. A high score on *test preparation and test taking* means you know how to prepare for a test and how to do your best while taking the test. Your score suggest that you often use appropriate methods for studying and remembering information during a test.

Test Preparation and Test-Taking score: _____

17. Peer learning/Help Seeking. A high score on *peer learning/help seeking* means that you often work with other students, or seek help from teachers, counselors, or other successful classmates/friends.

Peer Learning/Help Seeking score: _____

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Appendix 6: New Student Information Survey - "NSIS"

NAME: (Please PRINT) _____

New Student Information Survey

The survey is designed to provide us with a more complete profile of our new student population. It focuses on several general concerns that may have an impact on academic performance. All information will be treated in strict confidence. We thank you in advance for your cooperation.

1.0 AGE: I am _____ years old.

2.0 SEX: 1. _____ female 2. _____ male

3.0 Mother Tongue: _____ English _____ French _____ Other

4.0 This program of studies was my 1. First choice. 2. Second choice 3. Third or more choice

5.0 Why have you decided to continue your studies in a Cégep? (If you check more than one box please number your choices from 1 to "x", where 1-your most important reason and "x" [a number from 2 to 17] is your last reason for attending a cégep.)

 01. To obtain a diploma 02. To obtain a better job 03. To prepare for my future 04. To be able to earn more money in the future 05. To obtain government financial aid 06. To prepare for university studies 07. To satisfy the wishes of my parents 08. To move out of the house 09. To keep myself occupied 10. To improve my general education 11. To improve my abilities in a particular subject or field 12. To be with my friends 13. For my personal satisfaction 14. Because I was unable to find a job 15. Because I enjoy studying 16. Other (Specify) _____ 17. I do not know

6.0 Why did you select Saint Lawrence CEGEP to undertake your collegial studies? (If you check more than one box please number your choices from 1 to "x", where 1-your most important reason and "x" [a number from 2 to 20] is your last reason for studying at Saint Lawrence.)

 01. My parents wanted me to attend this college 02. The college has a very good academic reputation 03. The college's social, cultural and/or athletic activities have a very good reputation 04. The college offers the program that I am interested in 05. Because of the poor reputation of other colleges that offer the program that I am interested in 06. Due to the reputation of the various services made available to students 07. Because of the type and quality of the college facilities 08. It is easier to get admitted to this college 09. My high school teacher(s) or guidance counsellor recommended Saint Lawrence 10. I wanted to continue living at home 11. The college was the closest to my home 12. It was recommended by a friend 13. I read the college's information brochure 14. It is easier to get accepted at university after studying at this college 15. It is easy to find a job after studying at this college 16. Because of the work stages or co-op programs that are available 17. I wanted to leave home 18. To learn more English or to become more fluent in English as a second language 19. To impress employers or universities with the fact that I was able to do my studies in English 20. Other (Specify) _____

Three More Questions on the Backside of This Sheet

7.0 In **high school** (in particular in secondary Iv and V) **on an average**, how much time did you devote to your homework and out of class studies **each day**?

- 01. Less than 1/4 hour
- 02. Approximately 1/4 hour
- 03. Approximately 1/2 hour
- 04. Approximately 3/4 hour
- 05. Approximately 1 hour
- 06. Approximately 1 and 1/2 hours
- 07. Approximately 2 hours
- 08. More than 2 hours but less than three hours
- 09. More than three hours

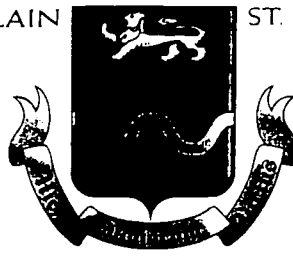
8.0 In **your current college** studies, **on an average**, how much time did you devote to your homework and out of class studies **each day**?

- 01. Less than 1/4 hour
- 02. Approximately 1/4 hour
- 03. Approximately 1/2 hour
- 04. Approximately 3/4 hour
- 05. Approximately 1 hour
- 06. Approximately 1 and 1/2 hours
- 07. Approximately 2 hours
- 08. More than 2 hours but less than three hours
- 09. More than three hours

9.0 What are the main reasons that explain why you do not spend more time, right now during this session, on your studies? (If you check more than one box please number your choices from 1 to "x", where 1-your most important reason and "x" [a number from 2 to 15] is your last reason for not spending more time on your studies.)

- 01. Lack of space
- 02. Lack of materials
- 03. Lack of tranquility
- 04. Lack of time
- 05. Lack of support or encouragement (from parents, peers, teachers or other (specify))
- 06. Lack of motivation or interest
- 07. Lack of concentration
- 08. Lack of discipline
- 09. Lack of organization
- 10. Disorder around me
- 11. Personal problems
- 12. My friends
- 13. My grades as such are good enough
- 14. I did the work that was expected of me by the teachers
- 15. Other (Specify) _____

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November 21, 1997

Dear Student:

I have had the opportunity to work closely with Mr. Talbot on his research project entitled The Study of First Semester Experience of St. Lawrence Students. I would like you to know that I strongly support this project. I am confident that you and future students will benefit from Mr. Talbot's research findings.

I strongly encourage you to take a few minutes to complete the enclosed questionnaire. Rest assured that Mr. Talbot will answer whatever questions you might have about the questionnaire. He is available to meet with you at your convenience, should you wish to do so. (Please contact Mr. Talbot at office 355 or leave a message at the front desk).

Thank you for your cooperation.

Sincerely,

Jean Robert, Ph.D.
Assistant Director and Dean
Academic and Student Affairs

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jacr

MEMO

TO:
DATE: November 21, 1997
FROM: Gilles Talbot (Psychology teacher) and Jean Robert (Academic Dean)
SUBJECT: Request for your cooperation to complete a questionnaire.

Dear Student,

Earlier this semester you completed a questionnaire to share with us your thinking and behaviors about your study skills and learning strategies. Your name has been randomly selected from a list of students to report to us exactly where you are at currently in your learning procedures.

Your responses, treated confidentially of course, will help us to plan better ways of helping students to adapt to the demands of studying during the first semester at Saint Lawrence. This means that your candid and frank participation is most important to us. So, if we may ask once more for you to take about 30 minutes to complete the attached questionnaire you would be helping us to eventually help all first year students.

Thank you for caring about the quality of education and for helping us to help future generations of students.

Cordially,

Gilles Talbot



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