MOTIVATION: A MATTER OF GENDER AND ALSO OF CALIBRE

AVEC UN GRAND R

This article and the research that prompted it will be the subject of an online discussion taking place on November 29, 2010, from 9:30 to 11:00 a.m. This activity, part of the series entitled "Avec un grand R" is organized jointly by I'Association québécoise de pédagogie collégiale (AQPC), I'Association pour la recherche au collégial (ARC) and le Centre de documentation collégiale (CDC). To register, please contact the ARC by email at arc@cvm.qc.ca or by telephone at 514 843-8491.



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Do male and female students have the same motivation in their college studies? This question is relevant for two reasons. Motivation is considered by many to be an essential factor of success; and furthermore, males and females show that there are differences in their academic achievement and their learning.

DIFFERENCES IN LEARNING BETWEEN MALE AND FEMALE STUDENTS

Over the last few years, scholastic differences between males and females have been the subject of many articles. The Conseil supérieur de l'éducation (2002) mentions a number of studies that examine the phenomenon of differences in the educational and vocational paths of students based on gender and in relation to persistence and behaviour in school, among other factors. A survey on success rates for male students (Ahuntsic College, 2002) reveals a marked difference between males and females when it comes to sources of motivation for college studies, study strategies used and the amount of time devoted to studies. Paradis (2000) for one establishes that the causes of scholastic failure in the first semester of college are different for males and females. Gingras and Terril (2006) for their part put forth the idea that the graduation rate for male students could increase with the implementation of measures designed to improve their success rates starting in the first semester.

OBJECTIVE AND METHODOLOGY

For our study, we decided rather to examine this question from the point of view of students in the Social Science Program at *Cégep Saint-Jean-sur-Richelieu* by dividing them into groups based on gender and scholastic calibre. By doing this, we wanted to compare their motivation in the school setting during the first three semesters of their program of studies, that is, in the fall of 2006, the winter of 2007, and the fall of 2007. Our research¹, which was first and foremost qualitative, was in fact an attempt to understand "motivation" based on the meanings that the students themselves give to it. The data were collected by means of more than fifty group interviews, the responses students provided to a questionnaire and three tests of motivation.

For the group interviews, we selected a group of about sixty students divided into two equal sub-groups of males and females with an equal number of strong and weak students based on the criteria used to determine scholastic calibre². On this last point, the experience acquired from our previous research (Boisvert, 2007 and 2006), in which we considered strong and weak male students separately, concurs especially with the results of Gagnon (1999) and Bouchard (2003): that taking into account the scholastic calibre allows for a more nuanced analysis of student comments by highlighting the differences between strong and weak students of the same gender rather than considering them to be a homogenous group.

MOTIVATIONAL DYNAMICS

By virtue of its level of refinement and the fact that it highlights the dynamics underlying motivation, the model of motivation in a school setting proposed by Viau (1994) seemed to be the most appropriate one for our study. This researcher defines motivation in a school setting as follows:

[...] a dynamic state which originates in the perceptions students have of themselves and of their environments and which leads them to select an activity, to become engaged in it and to persist in completing it in order to reach a goal (Viau, 1994, p. 32).

For a deeper understanding of this model, please refer to Tardif (1992) as well as Barbeau, Montini and Roy (1997).

We should mention that we added an extra component to the model proposed by Viau, namely the students' perceptions of their own motivation, given that students spontaneously refer to their own motivation in their comments.

- ¹ This research, carried out in collaboration with Josée Paradis, was funded by the *Programme d'aide à la recherche sur l'enseignement et l'apprentissage (PAREA)*. The research report, published in 2008 and entitled *La motivation chez les garçons et les filles en Sciences humaines au collégial* is available in all Quebec colleges; and it can also be viewed online on the website of the *Centre de documentation collégiale*: [http://www.cdc.qc.ca/index.php/en.html]
- ² The criterion for determining the level of scholastic performance for the first semester was the General Secondary Average (GSA). For each of the two following semesters we used instead the Cumulative R rating obtained at the end of the previous semester. For each of the three semesters, an average for the male students and an average for the female students was established for each of the three study profiles in Social Science: average and above-average students were considered to be of strong calibre, those who were below average were considered to be of weak calibre.

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In addition, we have broadened the scope of the notion of "activity" such that it may not necessarily refer to something that takes place in a particular course or a specific class. In keeping with our understanding of college life, we have chosen to expand the meaning to cover all their courses and extra-curricular activities.

COMPARISON OF MOTIVATION IN MALE AND FEMALE STUDENTS

For the purposes of this article, we have selected the following five components of the nine which make up the model:

- · the context:
- the perception of one's own competence to complete an activity;
- the perception of one's own motivation;
- the choice to undertake an activity;
- the cognitive commitment to complete an activity.

For each of these components of the motivational model, we draw out some of the points of comparison between males and females in the Social Science Program, grouped according to their scholastic calibre, with regard to their motivation toward their CEGEP studies. For each point, we start by presenting a comparison between strong male students (M+) and strong female students (F+), followed by a comparison between weak males (M-) and weak females (F-), while bringing out the main similarities and differences.

Our research, which is first and foremost qualitative, was in fact an attempt to understand "motivation" based on the meanings that the students themselves give to it.

The results presented in this article are based solely on the data collected during interviews. Identifying the model component in question, we provide the main interview questions and we illustrate the views held using selected excerpts.

THE CONTEXT

Why have you chosen Social Science and what career are you considering?

Strong female and male students

SIMILARITY:

- They gradually clarify their choices of career during the first three semesters of their program of study.

DIFFERENCES:

- The interest manifested for their program and study profile increases over the semesters for strong male students, while female students of similar calibre express a marked interest right from the first semester and this interest remains stable over the first three semesters.
- During their first semester, several strong male students do not anticipate a career in Social Science.

Well, for myself, I had no idea what I wanted to do, but I knew that I did not like science. So I enrolled in Social Science. I would not have gone into pure science. (M+, Semester 1)

Well, for me, I wanted to go into teaching in university. That was the profile that I needed – Individual and Society. That is why I chose it. (F+, Semester 1)

Weak female and male students

SIMILARITY:

- The interest they manifest for their program and their study profile increases over the semesters.

DIFFERENCE:

- The choice of career for weak male students is clarified over the course of the first three semesters, whereas this choice is pretty clear throughout these semesters for weak female students.

Me, I am in Social Science: Individual and Society. And, I was not sure what I wanted to do. I came to play football. And, I wanted to start with basic courses to help me decide. (M-, Semester 1)

Me, I intend to go into management or marketing in university. That is why I am presently in administration, the Administration Profile. It is not bad. I like math. So I liked the Administration Profile. (F-, Semester 1)







THE PERCEPTION OF ONE'S OWN COMPETENCE TO COMPLETE AN ACTIVITY

Did your secondary school studies prepare you for success in college?

Do you have what it takes to succeed in college?

Strong female and male students

SIMILARITIES:

- When they enter CEGEP, they share the view that secondary school provided them with a good preparation for college in terms of the knowledge they have acquired and the courses they have taken.
- Among the important assets for succeeding in college, they feel they have a good understanding of the subject matter and they maintain this opinion over the three semesters.

With regard to French, it was something that, I remember in Secondary V, was highly emphasized. I had never seen that before, a year with so much emphasis on French. And, I had a lot of critical analyses of texts to do. And, I realize that this is what we do in CEGEP. Of course it is even more demanding, but I was prepared. (M+, Semester 1)

Because school is easy for me. No need to study a lot. No problem developing a question and making connections. (M+, Semester 2)

DIFFERENCES:

- Over the three semesters, strong female students emphasize their abilities to succeed and their good organizational skills; they also give themselves credit for a high level of confidence that remains constant over the three semesters.
- Strong male students highlight their difficulties with time management over the course of the three semesters and, during the third semester, they admit to not putting in enough time and effort; the level of confidence they give themselves credit for goes from medium in the first semester to high in the third semester.

I am a bit of a last-minute person. I am trying to change this bad habit. (M+, Semester 1)

I need more organization skills because sometimes I waste my time. (M+, Semester 1)

Because I am a well-organized person and I study a lot. (F+, Semester 1)

Because I am methodogical, I am motivated, I really want to achieve my goals and now I am also good at managing my time. (F+, Semester 1)

Because I know that I am capable of completing the required tasks. And, if I have a little more difficulty, I just have to keep trying and there are resources available everywhere. (F+, Semester 2)

Weak female and male students

SIMILARITIES:

- When they enter CEGEP, they share the view that secondary school has not prepared them adequately for college in terms of study methods.
- They give themselves a medium level of confidence for successfully completing required tasks in Social Science, and this, throughout the three semesters.
- Among the assets needed to succeed in college, as mentioned in the second semester, they consider themselves to be attentive listeners in class.
- As for their weaknesses, deficiencies in French were mentioned during the second semester.

In CEGEP you need to put in more hours outside class than in secondary school. But I find that for that, we are very poorly prepared in secondary school. (M-, Semester 1)

I have not at all been used to studying and working like that, basically, as I am doing now. You know, I am used to really taking it easy. (F-, Semester 1)

DIFFERENCE:

- During the second semester, weak male students emphasize the fact that they hand in their work at the last minute, while weak female students mention their poor studying.

It is [because of] assignments that always have to be handed in.
Let us say [the teacher] says, "You have two weeks to [complete a certain assignment]". I always tend to leave things to the last minute.
Then, [....] it always ends up that, for me, I find it boring to do an assignment all by myself. So, often, I end up going on the Internet.
And this often results in my handing it in a bit late, which leads to losing marks for being late and, because I do not apply myself, since I am really not interested, this messes up the rest of my grade.
(M-, Semester 2)

I know I am capable of passing my courses, but I am also aware that I must really put more effort into it. (F-, Semester 2)

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THE PERCEPTION OF ONE'S OWN MOTIVATION

Are you a motivated person in your studies? What influences your motivation, positively or negatively?

Strong female and male students

SIMILARITIES:

- They see themselves as having a medium or high level of motivation over the three semesters.
- They also share positive motivational factors that remain constant throughout the three semesters: the courses they take, the knowledge they acquire, their parents and the social aspect of college.
- The negative motivational factor that they have in common is the increase, over the three semesters, in their lack of interest for courses.

The more I feel the subject is relevant, the more motivated I will be, the more I see [that] it will be worth knowing. (M+, Semester 1)

Well, for me, what motivates me is my family who keep telling me, "Keep going, and you will succeed", and my friends who believe in me. (M+, Semester 1)

For me, it is exactly the same, it is a matter of interest. If the subject matter interests me, I will do everything I can to succeed. But, if the subject matter does not interest me, I will still do everything I can to succeed, but I will have to put much more effort into it and I will have to stay focused on my work and on the subject matter. (F+, Semester 1)

DIFFERENCES:

- Strong female students are motivated, during the first semester, by their feeling of belonging to the CEGEP and to their program of studies, as well as, during the third semester, by the good grades they receive.
- The high demands in their courses as well as the schedule of courses remain stable negative factors for strong females, while for strong males these factors increase over the three semesters.

Well, me, I am fairly motivated. Because my goal, it is to always get good grades. It is not like I have an objective to reach because, seeing that I still do not know what I will go into, I am not too sure how useful what I am doing now will be. But I find that I am motivated. My motivation, it is to get good grades. (F+, Semester 3)

On the negative side, where I have difficulty with my motivation, it is that sometimes I feel that there are rush periods in a semester such that in two compressed weeks you hardly have time to breathe. This is not very motivating. (M+, Semester 3)

Weak female and male students

SIMILARITIES:

- They see themselves as having a high level of motivation at the beginning of their studies in the program and, gradually over the three semesters, this moves toward a medium level of motivation.
- They share two positive motivational factors that gradually take on more importance over the three semesters: their parents and their friends.
- They also have negative motivational factors in common: in the first semester, the high demands of the courses, and more and more over the course of the semesters, boring teachers.

What motivates me to attend my courses is mostly the fact that I know people in class because two-hour courses are long. (M-, Semester 1)

DIFFERENCES:

- In the first semester, motivation for weak male students is manifested in their participation in class, and for weak female students, it is manifested in the work they do outside class.
- In the third semester, the causes of their motivation that the students identified are social success for weak males and the general ambiance of the CEGEP for weak females.
- Future employment is a positive motivational factor for weak female students that persists throughout the semesters, whereas it is seldom mentioned, and only during the first semester, by weak male students.
- Weak males mention, all through the three semesters, the lack of guidance as a cause of their low motivation; whereas for weak females this factor is mentioned less and less over the course of the semesters.
- Being in a bad mood, in the first semester, and fatigue, in the third semester, are negative motivational factors mentioned exclusively by weak females.
- The schedule of courses is a negative factor for weak males throughout the three semesters, while for weak females, this factor is only mentioned in the third semester.

(See more of the students' comments on the next page.)



THE PERCEPTION OF ONE'S OWN MOTIVATION (NEXT)

Are you a motivated person in your studies?
What influences your motivation, positively or negatively?

Strong female and male students

[What does not motivate me, it is] when courses are at 8 o'clock in the morning [...]. When I have a long time to wait between classes. (M+, Semester 3)

Weak female and male students

What motivates me the most, it is ... Well, I work as a cashier in a pharmacy. And it does not appeal to me to stay there all my life. So that means that having a job that I really enjoy, that I want to be working at, that is what motivates me, I think, to go to school and to go as far as I can. (F-, Semester 1)

When I see that I am not getting anywhere. When I am not sure where I am going. Like at the beginning of the year, I was really not sure. I could see that I was not quite in the right place, but I had no idea where to go, and then, I just kind of lost interest. (M-, Semester 1)

And of course if I am in a bad mood or if something happened recently in my life, then I will be less motivated. (F-, Semester 1)

THE CHOICE TO UNDERAKE AN ACTIVITY

What is your level of activity in and out of class for completing school assignments?

Strong female and male students

SIMILARITIY:

 Over the three semesters, they affirm that they work harder and harder in class and they show that they listen more and more attentively in class.

I force myself to listen in class, even though it often seems pretty long, especially in the third hour. But I tell myself that the harder I pay attention in class, the less attention I will have to devote outside of class while studying or doing homework. (F+, Semester 2)

DIFFERENCE:

- While strong males affirm that they work to a medium or small degree on their school work outside class throughout all three semesters and, that in the third semester they limit themselves to doing only what is necessary in their school work, strong females, for their part, say that they work harder and harder as the semesters progress and equally that they are more and more committed to completing their assignments.

Outside class, when it does not count, I do not work. And, only if it is important and is to be handed in soon, will I put in a major effort to get good results. (M+, Semester 3)

Weak female and male students

SIMILARITIES:

- They affirm that the intensity of their work in class (medium or strong) increases over the three semesters.
- They indicate that they listen more and more attentively in class.

DIFFERENCES:

- Weak male students affirm that gradually they work a little more all through the three semesters, going from a weak to a medium level of work; weak female students, for their part, declare that their level of work is strong or medium, and this, all through the three semesters.
- Weak females say, that for each of the three semesters, they are committed to completing their assignments.
- In each of the three semesters, several weak females admit to frequently not paying attention in class and to daydreaming, this element not being mentioned by weak males.

During classes, I daydream, I am unable to follow the work. However outside class, I would say that I work hard. As soon as I have an assignment to do and I have the time, I do it. I do not wait until the night before the class to rush through it quickly, quickly on the computer. (F-, Semester 3)







THE COGNITIVE COMMITMENT TO COMPLETE AN ACTIVITY

What are the most effective strategies you personally use to learn and understand what is being taught?

Strong female and male students

SIMILARITIY:

 Note-taking and attentive listening, as well as using writing as a way to appropriate subject matter to be applied outside class, these constitute three strategies that they use more and more often as the semesters progress.

When I have time, it is to try to summarize a concept or to do exercises, that is also very helpful. (M+, Semester 3)

DIFFERENCE:

 What characterizes strong female students is that, all through the three semesters, they tend to discuss the subject matter with other people, with a view to better integrating their knowledge.

I also talk about it with other people. It helps me to talk about it with others. With anyone, my mother for example. It stays in my head better when I talk about it with other people. (F+, Semester 2)

Weak female and male students

SIMILARITY:

 Rewriting and reading notes are two means of appropriating the subject matter to be applied outside class all through the course of the three semesters.

To rewrite all my notes. If not, when I do not understand, I go to see the teacher before the exam, that helps me. (M-, Semester 3)

First of all, the course notes, I retype them all on my computer.
(F-, Semester 2)

DIFFERENCE:

- Weak females resort more and more to taking notes in class throughout the semesters.

I do not really have [...] tricks, but for sure when there is a PowerPoint presentation in front of me, I write down everything that is written on it. And [I] add notes so I can understand it [after] hearing further comments from the teacher. (F-, Semester 2)

A FEW COURSES OF ACTION BY WAY OF CONCLUSION

Our research brings to light the fact that motivation varies not only as a function of gender but also according to scholastic calibre. Consequently, when it comes to measures designed to boost motivation, it is worthwhile to take into account the intersection of these two factors. Inspired by the results of our study, we propose a few courses of action related to pedagogy, supervision, preparation of secondary-school students for studies, support for study and career plans, as well as the representation that secondary-school students have of CEGEP.

ACTIVE AND VARIED PEDAGOGY

A number of students in our study, regardless of gender or calibre, said they were disappointed by some of the courses in the Social Science Program and by the pedagogical methods used to transmit knowledge and to develop competencies. Based on what students told us, courses such as the practical introduction to Social Science methodology or the course dealing with quantitative methods in Social Science seldom

manage to stimulate their interest and several students fail to see their usefulness. Our data indicate that we have work to do in order to capture student interest and to demonstrate the relevance of these courses; perhaps it is necessary to radically transform the approach used in these two courses. Putting students in contact with practice in the field, meetings with Social Science researchers, regular presentation of examples of concrete spin-off effects of research as well as valuing the research work done by students all seem to be pedagogical courses of action that are likely to bear fruit.

Abuse of the lecture format and excessive use of PowerPoint presentations were denounced often by the students in our study. To encourage their motivation, the use of varied pedagogical methods is consistent with a proven educational principle. As an example, the project approach is one type of active pedagogical method that some college students will have already experienced in elementary and secondary school within the current framework of The Reform.





SYSTEMATIC PAIRING OF STRONG AND WEAK STUDENTS

Since some strong students enjoy explaining course material and seem ready to assist others who are experiencing difficulty learning, there are grounds for fostering school motivation by means of the systematic pairing of strong and weak students. In terms of human interaction, this helper-helped type of relationship seems to be a win-win strategy. On the one hand, those providing the assistance deepen their learning while having the satisfaction of helping; and on the other hand, those receiving the help learn to overcome their difficulties and to increase their chances of success. A relationship between peers is often perceived to be more acceptable and less threatening than a relationship with a teacher. From the perspective of scholastic success, this systematic pairing could be done in all courses and all the way through college studies, right up to graduation. Considering the additional fact that males of weak calibre, when compared to females of the same calibre, say they are less likely to use available resources such as support centres for French or for methodology, there would be grounds for finding ways to increase their use of these resources.

PREPARING SECONDARY SCHOOL STUDENTS WELL FOR STUDYING

Weak male students and weak female students deplore the poor preparation they received in secondary school with regard to study methods.

A clear study plan has a decisive impact on motivation in school, according to what students told us in our interviews.

In the context of a clear contract whereby students accept to commit themselves, various options could enrich the existing range of possibilities: we have only to think of certain measures which establish compulsory study periods or a systematic support system or also, which deal with improving French. Creative use of information and communication technologies as well as the design of pedagogical material that is conducive to effective studying would square well with the enterprise of better preparing secondary school students for active and regular studying — and of giving them a taste for it — in order that they be better prepared for college studies.

BETTER SUPPORT FOR STUDY AND CAREER PLANS

A number of students enter college with a poorly-developed career plan. Based on what they tell us, it seems that little guidance in this matter is provided in secondary school.

A clear study plan has a decisive impact on motivation in school, according to what students told us in our interviews.

It seems essential therefore to make the necessary resources available in secondary school in order to support this process of reflection on future careers and the studies which lead to them so that, in the best case scenario, an enlightened decision can be made.

Since a good number of students clarify their career plans during their first semester at college, resources must remain available, such as by a wide distribution of academic and professional information. A guidance-oriented approach on the ground, such as the one tried with students in the Social Science Program at Cégep de Baie-Comeau (Marsolais, Morin and Gagnon 2006), offers ideas on one way of doing things.

TOWARD A BETTER REPRESENTATION OF CEGEP STARTING IN SECONDARY SCHOOL

Based on the principle that the social representations that students have can have an impact on their predisposition for action, it would be advisable to influence the type of representation that secondary school students have of CEGEP. Having them know more about the educational objectives, the academic requirements as well as the pedagogical ways and means in college would foster the emergence of a fairer representation of pre-university CEGEP as a stage leading to university. When they enter CEGEP in the Social Science Program, students would then be better prepared for college studies because they would previously have developed, upstream, a more realistic image of the scholastic behaviour to be adopted in college; and some, who might not have done so otherwise, would raise their academic aspirations by setting their sights more clearly on university.

Some ways to do this are already known such as visits to secondary schools to give presentations on what is offered at CEGEP or, also, the "open house" evenings that take place annually in various college establishments in order to present the various programs of study to students who are finishing secondary school. However there is still a lot to invent in this respect, given the extent to which fruitful relationships between the two orders of teaching in question — secondary school and college — appear to us to be below what they could be for the greater success of the students.

To sum it all up, motivation is an essential element for student success at the college level and its many interacting components involve a combination of courses of action which aim to improve success rates for male and female students, taking into account their scholastic calibre.







BIBLIOGRAPHY

BARBEAU, D., A. MONTINI and C. ROY. (1997). *Tracer les chemins de la connaissance. La motivation scolaire*. Montréal: Association québécoise de pédagogie collégiale, 535 p.

BOISVERT, J. (2008). La motivation chez les garçons et les filles en Sciences humaines au collégial. In collaboration with Josée Paradis. PAREA Research Report, Fonds de rayonnement pédagogique. Cégep Saint-Jean-sur-Richelieu. XIX and 286 p.

BOISVERT, J. (2007). «Les représentations sociales du collège et de la réussite chez les garçons en Sciences humaines au collégial». *Pédagogie collégiale*, 20(3), pp. 15-22.

BOISVERT, J. (2006). Les représentations sociales du collège et de la réussite chez les garçons en Sciences humaines au collégial. In collaboration with Carole Martin. PAREA Research Report, Fonds de rayonnement pédagogique. Cégep Saint-Jean-sur-Richelieu, XV and 145 p.

BOUCHARD, P. (2003). «Captiver, susciter le plaisir d'apprendre et donner le goût de l'effort: des avenues pour rejoindre les garçons en difficulté scolaire». *Vie pédagogique*, (127), pp. 36-39.

COLLÈGE AHUNTSIC. (2002). Enquête sur la réussite scolaire des garçons. Service d'orientation, psychologie et information scolaire et professionnelle du Collège Ahuntsic, June 10, 24 p. and Appendix.

CONSEIL SUPÉRIEUR DE L'ÉDUCATION. (2002). Au collégial: l'orientation au cœur de la réussite. Avis au ministre de l'Éducation. Sainte-Foy: Conseil supérieur de l'éducation, April, 124 p.

GAGNON, C. (1999). Pour réussir dès le primaire: filles et garçons face à l'école. Montréal: Les Éditions du remue-ménage, 173 p.

GINGRAS, M. and R. TERRILL. (2006). Passage secondaire-collégial: caractéristiques étudiantes et rendement scolaire. Dix ans plus tard. Montréal: Service régional d'admission du Montréal métropolitain, 133 p.

MARSOLAIS, M., R. MORIN and G. GAGNON. (2006). «Soutenir la construction de l'identité professionnelle». *Pédagogie collégiale*, 19(4), pp. 15-19.

PARADIS, J. (2000). Étude portant sur les élèves en échec après une première session de collégial: les facteurs associés à la réussite, leur expérience scolaire et les interventions souhaitables. Service des programmes et réussite scolaire. Cégep Saint-Jean-sur-Richelieu, October, 80 p. and Appendix.

TARDIF, J. (1992). Pour un enseignement stratégique. L'apport de la psychologie cognitive. Montréal: Les Éditions Logiques, 474 p.

VIAU, R. (1994). La motivation en contexte scolaire. Saint-Laurent: Éditions du Renouveau Pédagogique Inc., 221 p.

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