



Teaching practices, classroom climate and usefulness of classes as perceived by students

Comparative data from secondary IV students exposed to Education Reform and those not exposed to it

Based on the first set of comparative data from the ERES Project, students exposed to Education Reform (ER) perceived their French or English classes (language of instruction) as more useful than students who were not exposed to the ER. However, students studying in the post-reform system held a less positive view of certain teaching practices and classroom climate when compared to their pre-reform counterparts. These were the findings from surveys administered to 2,073 secondary IV students before and after the implementation of ER.

Preferred teaching practices in the new Education Program

The Education Program in place since the implementation of ER calls on teachers to respect certain principles, including the concept of *guidance*. However, “the Education Program for Quebec schools does not define these practices, per se.”¹ “[...] it is up to school staff to define ways of achieving the aims of the education system.”²

The concept of *guidance* refers to teachers’ ability to take into account differences among their students when it comes to their learning pace, learning style and need for feedback and encouragement. In this context, teachers can build more personalized relationships with their students and also have the opportunity to get to know them better.

The ER also suggests using contextualized, real-world learning situations that are relevant and meaningful to students. Teachers are to draw on their students’ areas of interest when developing varied learning situations that represent unique challenges for each of them. Taking into account student interests means recognizing “[...] the importance of the emotional dimension of the learning process”³; Teachers are asked to get youth involved in their learning, get them to question their learning process and gain greater independence. In addition, it is important to graduate the complexity of the learning situations “in order to ensure the progressive development of the competencies and allow students to meet ever-increasing challenges [...]”⁴

Methodology

In order to test the hypothesis on the evolution of teaching practices and classroom climate, the views of 1,190 secondary IV students not exposed to the ER were compared to those of 883 secondary IV students exposed to it.⁵ For this comparison, several factors, including parent education and income and paid employment of the student, were controlled to ensure that any differences between the two groups were not due to these factors. We also verified whether or not the differences, when present, varied based on gender, student risk status⁶, school system (Anglophone vs. Francophone) and socioeconomic background (SEI ranking⁷). All of the verifications were carried out using inferential statistical analysis, in keeping with quantitative research standards.

Students were asked to give their views on teaching practices, classroom climate and usefulness of three targeted subject areas: French or English (language of instruction), Math and History / Citizenship Education. **Table 1** presents the indicators selected and a sample item from the questionnaire completed by students for each of the indicators.

Table 1
SELECTED INDICATORS

Dimensions measured	Sample items
Teaching practices	
Personalized relationships	The teacher talks with each student.
Student engagement support	Students give their opinion during class discussions.
Autonomy support	The teacher is the one who decides which students can work together. <i>(This item indicates a lack of autonomy support.)</i>
Opportunities for research	Students do research to validate their ideas.
Differentiated teaching	All the students in the class do the same work at the same time. <i>(This item indicates a lack of differentiated teaching.)</i>
Classroom climate	
Successful learning climate	The teacher helps students understand how they can improve by learning from their errors.
Discipline in Math, French or English (language of instruction) and History / Citizenship education classes	The teacher must wait a long time before the students calm down.
Usefulness of classes	
Perceived usefulness of Math, French or English (language of instruction) and History / Citizenship Education classes	I will need this class later on in life.

¹ Conseil supérieur de l'éducation (2010). *New Perspectives on the Transition From secondary School to College*. Abridged Version. Sainte-Foy: Le Conseil, p. 14.

² Ministère de l'Éducation, du Loisir et du Sport (2007). *Québec Education Program, secondary Cycle Two*. Québec: Gouvernement du Québec, chapitre 1, p. 16.

³ Ibid., p. 20.

⁴ Ibid., p. 19.

⁵ The sample of students was selected using a random draw from the total number of students who started secondary school in September 2004 for those not exposed to the ER, and in September 2006 for those exposed to it.

⁶ Student risk status is determined using a scale composed of items answered by parents, measuring their child's level of aggressiveness, attention deficit and prosociality.

⁷ The SEI (socio-economic environment indicator) is based on the proportion of households whose mother has no diplomas or certificates, (two-thirds of the weight), and the proportion of parents who did not work during the reference week of the Canadian Census (one-third of the weight): <http://www.mels.gouv.qc.ca/sections/publications/index.asp?page=fiche&id=956>.



Findings

Teaching practices

To start, no significant differences in perceptions were found between both groups in terms of teaching practices, such as student engagement support and differentiated teaching. This was the case for all subject areas.

As can be seen in **Graph 1**, students of the ER held a less positive view of the teaching-student relationships in Math and History/Citizenship Education, when compared to students not exposed to the ER. However, no differences were identified in this respect for French and English (language of instruction).

In addition, students of the ER believed that their teachers of French or English (language of instruction) and Math suggested fewer opportunities for research compared to students in the control group. No significant differences were found between the groups in terms of research opportunities in History/Citizenship Education.

Lastly, students of the ER deemed at risk by their parents,⁸ perceived a lower level of autonomy support by their teachers in all three subject areas under study. **Graph 2** presents the finding for mathematics.

Classroom climate

As for classroom climate, students exposed to ER perceived fewer practices aimed at encouraging and supporting students in their learning when compared to the control group. This was true for all three subject areas. Students of the ER also reported having experienced more problems with classroom discipline in Math class (mostly boys), vs. students of the control group. However, in French or English (language of instruction) and History/Citizenship, the perceived issues related to discipline was the same for both groups.

Usefulness of classes

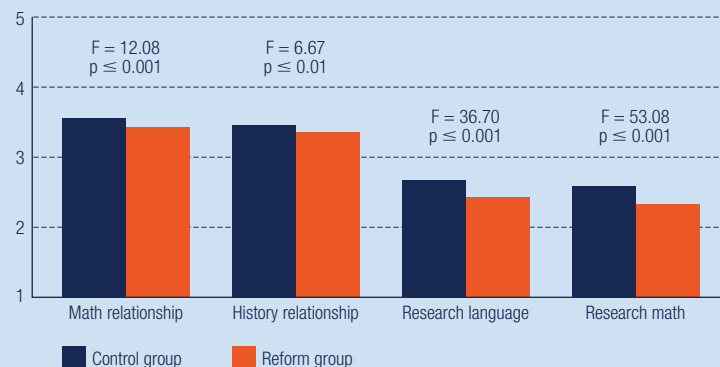
The research revealed that students of the ER saw their French or English classes (language of instruction) as more useful than students who entered the education system prior to the ER. The perceived usefulness of Math and History/Citizenship Education was found to be the same across both groups.

Conclusion

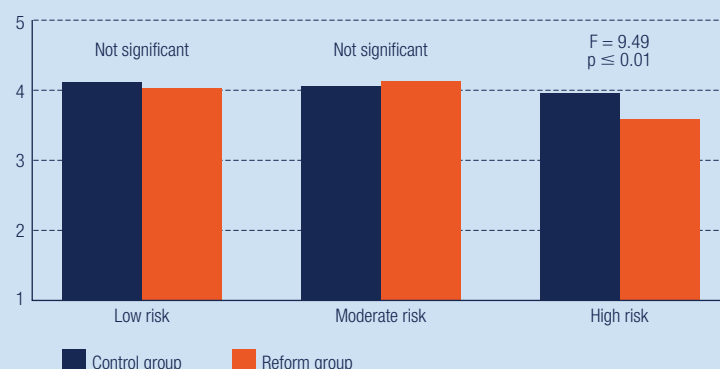
These preliminary findings from the ERES Project suggest that students of the ER perceive, in a slightly less positive light, certain teaching practices and the climate in some of their classes compared to students who have not studied under the ER. The results also indicated that students exposed to the ER saw their French or English classes (language of instruction) as more useful than students not exposed to the changes in the education system.

It should be noted that the data on students of the ER were collected among youth who started high school in 2006-2007, which corresponds to the second group of students to be exposed to the ER. Given that the ER had just been implemented at that time, educators were still in the midst of managing the transition. Student perceptions may reflect this state of flux.

Graph 1
STATISTICALLY SIGNIFICANT DIFFERENCES BETWEEN AVERAGE SCORES⁹ OF STUDENTS OF THE CONTROL GROUPS VS. STUDENTS OF THE REFORM IN FOR CERTAIN TEACHING PRACTICES



Graph 2
STATISTICALLY SIGNIFICANT DIFFERENCES BETWEEN AVERAGE SCORES⁹ OF STUDENTS OF THE CONTROL GROUPS VS. STUDENTS OF THE REFORM IN TERMS FOR PERCEIVED AUTONOMY SUPPORT IN MATH



The data presented here are the first results of a series of analyses aimed at comparing students exposed to the ER and those who were not. The next phases of the ERES Project will allow us to test whether the differences reported in this bulletin still exist in a third group of students exposed to ER, namely youth who started high school in September 2007. These analyses will help us better understand if these different perceptions are leading to differences in terms of academic motivation, performance and success. For example, the results of a standardized math test and the standardized French exam will be compared. Finally, further follow-up with students of the ERES Project during their transition to college or vocational training will enable us to examine the longer term impact of ER on the future of our young people.

⁸ A high risk status is determined by a greater level of aggressive behaviour and attention deficit and lower prosociality behaviours.

⁹ Using a 5-point scale, where 5 means *almost always*, and 1 means *almost never*.