Why Boys Don't Do as Well at School as Girls

Recent research throws light on the intriguing question of why the average boy student is at a disadvantage compared to the average girl student, as outlined here by the Conseil supérieur de l’éducation, a Québec government advisory body on education.

Over the last 15 years, it has become apparent that girls do better than boys at school, not only in Québec but in most of the developed world. The difference in boys’ and girls’ academic achievement only came to light as mixed schools became the general rule. As new cohorts of girls and boys went through the education system in the same schools and classrooms, it became clear that gender is, in its own right, a significant variable, beyond the central influence of socio-economic background on a student’s progress in school. Given the same social origins, girls do better than boys at all levels of education. This phenomenon is even more obvious among students from a socio-economically disadvantaged background.

At the elementary level, boys’ academic difficulties manifest themselves mainly in three ways. Compared to girls, more boys experience:

- difficulties in learning the language of instruction (reading and writing)
- academic delay
- learning or adjustment difficulties.

However, one should guard against creating rigid dichotomies. Some boys do very well in school and some girls experience difficulties.

Overall, there is no substantial difference between boys’ and girls’ achievement in the various school subjects, with the exception of the language of instruction (reading and writing), in which girls do significantly better than boys. The difference between boys and girls in reading achievement is not exclusive to Québec but has also been found, to varying degrees, in countries included in samples for major international studies.

As for writing achievement, on the 1995 compulsory exam administered in the sixth year in Québec elementary schools, 57% of the girls attained an adequate or higher than adequate score of 70% or more, compared with only 38% of the boys. Conversely, 21% of the girls and 33% of the boys showed inadequate writing skills, having scored 59% or less on the exam. (The remaining students fell into a middle category with a score of 60% to 69%.)

In 1997-98, 25.3% of boys experienced academic delay by the end of elementary school, compared with 17.3% of girls. This difference is not a recent phenomenon, and has, in fact, remained fairly constant over the last 35 years. Grade repeating accounts for most academic delay, but the concept of “academic delay” offers the advantage of taking into account the delay accumulated over a period of time, while data on grade repeating only reflect the number of students who have fallen behind in a single year.

Similarly, among students aged 6 to 11 who were identified as having learning or adjustment difficulties as of September 30, 1997, there were approximately 2 boys for every girl. And the figures for behavioural difficulties show a ratio of 5.5 boys for every girl.

The difficulties observed at the elementary level generally remain the same at the secondary level, except that they follow a cumulative logic. In other words, the gap between boys and girls grows slightly wider.
from one grade level to the next. Moreover, at the secondary level, there is the added phenomenon of early school leaving, which, again, is more prevalent among boys than girls.

As regards the language of instruction, a 1998 Canada-wide study called the School Achievement Indicators Program (SAIP) showed that girls’ advantage over boys tends to increase between the ages of 13 and 16 at the higher achievement levels in writing and even more so in reading. And yet, at these ages, slightly more boys than girls reached the higher achievement levels on the SAIP science and mathematics assessments held in 1996 and 1997.

Looking again at academic delay, the difference between boys and girls is also greater at the end of secondary school than at the end of elementary school. In the 1997-98 school year, 40% of boys at the secondary level in Quebec had fallen behind, compared with 27% of girls. In addition, while almost twice as many students in the 12-16 age group had learning or adjustment difficulties compared to the 6-11 age group, the ratio of boys to girls was still 2 to 1. However, with behavioural difficulties the ratio of boys to girls was 4.2 to 1 as of September 30, 1997.

The data on academic delay, and on learning or adjustment difficulties, are consistent with graduation rates. In 1997-98, 41.3% of boys in the youth sector left secondary school without a diploma as compared to 26% of girls. These figures inevitably have an impact on the post-secondary education levels. In the fall of 1997, women accounted for 55% of students admitted to Quebec college programs and 56% of full-time enrolment in undergraduate programs at Quebec universities.

**Explaining the Gap between Boys and Girls**

The gap between boys and girls with respect to academic achievement is not a matter of intellectual potential. All of the studies conducted over the last 40 years have shown that there is no significant difference between the sexes in this respect.

However, these studies agree unanimously that, overall, boys and girls, particularly at the elementary level, do not have the same attitudes towards academic learning and the general demands of their role as students. That is, girls are proportionally much more interested in and open to school life than boys.

Some researchers do not hesitate to explain this attitude difference exclusively in terms of biology, whereas others speak only of the socialization process. Findings in the field of neurobiology in the last 10 years suggest a more complex interplay of these factors. Contrary to common belief, human beings do not interact with their environment using a fixed set of aptitudes. Rather, what they learn as they interact with their environment in turn affects their ability to understand the world around them and to interact with it. Not only do innate and acquired aptitudes influence each other, but it would appear that the socialization process is the strongest influencing factor on children.

According to this view, if, given equal intellectual potential, boys do not do as well in school as girls, it is because social forces affect children differently depending on their biological sex. These forces are so distinct as to create differences in the way boys and girls understand the world around them and interact with it. The differences can be traced to two main sources of socialization.

First, socialization by the adult world gradually leads children to internalize and conform to the social gender-role expectations that correspond to the representations of men and women prevalent in their socio-economic environment. From 18 months on, children are aware of their biological sex and, because sexual identity is the central element of their burgeoning sense of self, they naturally try to identify the social behaviours and attitudes defined by their environment as appropriate for their biological sex.
Children thus shape their identities based on the messages they receive from adults as to the kind of behaviour expected of their sex. Adults play a very active role in this process by reinforcing or repressing certain forms of behaviour.

In this way, through the models children are given, through the different types of pressure placed on them depending on whether they are male or female, boys and girls develop certain characteristic attitudes which predispose them to conform to the expectations associated with their social gender role.

However, socialization by the adult world does not explain everything. A young child may exhibit stereotypical behaviour without having learned, given his or her age, the concepts tied to these stereotypes. In particular, socialization by the adult world does not explain why boys prefer more physical types of games and girls more social types of games. Because these distinctive forms of interaction appear very early in childhood and involve complex forms of behaviour, it is difficult to understand how infant boys and girls could, even before they are fully aware of gender roles, decipher adults’ social expectations towards them.

Secondly, children also gradually internalize social gender-role expectations through socialization with each other. Between the ages of 4 and 11, whenever children are not subject to the rules of the adult world, peer socialization is governed by the implicit rule of separation of the sexes. During this period, children learn to classify and sort the social characteristics that are associated with their own sex by renouncing and rejecting those associated with the other sex. The impact of children’s socialization by the adult world is manifest in this process, and boys’ and girls’ experience in groups is sufficiently different to support the claim that there are, in fact, two cultures among children. Not only do groups of boys and groups of girls engage in different forms of play, but the styles of interaction and the interests of the groups are different too.

There are two main differences between groups of boys and groups of girls. The first of these differences has to do with the amount of effort each group puts into distinguishing itself from the other: while boys construct their masculinity by rejecting femininity, girls feel no need to prove that they are free of any masculine traits in order to accept their femininity. The second difference lies in boys’ and girls’ attitudes towards adults: while boys give more importance to other boys’ reactions, girls are more open to adults. In a general way, these differences are still evident at adolescence.

These two types of socialization—by the adult world and by peers—continue in school and entail consequences from an educational perspective. Not only do they affect the conditions in which children fulfill their role as students, but they also affect children’s cognitive processes. While there is no difference between men and women in terms of intellectual capacities, they use their intellectual capacities differently. In other words, men and women have different cognitive styles, although this difference cannot be considered absolute. (While differences may be observed in the way men and women in general store and use information to solve problems, there are significant exceptions among individuals; an individual man or woman may have a cognitive style that runs counter to the general tendency of members of their sex.)

Teachers also have an impact on the socialization process. Even if teachers think they are neutral and view all the children in their classrooms simply as students, they contribute, through their comments, attitudes and expectations, to the representations of men and women that are prevalent in society. These projected or perceived differences often lead teachers to adopt a double standard of behaviour, that is, to behave differently depending on whether they are dealing with a boy or a girl.
Moreover, the rate at which boys and girls mature would be similar were it not for major differences in language acquisition and in the development of self-control. Girls, because of their greater self-control—which should not be equated, as it often is, with passivity—generally conform to the type of interaction teachers expect. They also more readily meet the demands of the student’s role, especially because of their greater openness towards adults, and therefore perform better in school than boys.

Is the gap between boys and girls with respect to achievement in the language of instruction due to a difference in the rates at which they mature, or is it the outcome of different processes of socialization? Although current research does not provide conclusive proof of the first hypothesis, it is nonetheless true that reading and writing are presented in the symbolic world as feminine realities. Girls’ greater proficiency in reading and writing is a reality perceived by both students and teachers. Therefore, both tend to see reading and writing as “feminine.” Not only does this perception influence teachers’ behaviour, but it also influences boys who, under peer pressure, try to avoid being associated with “feminine” areas of learning.

This explanation, based on the process of construction of sexual identity, seems all the more plausible given that, curiously and against all common sense, boys’ difficulties in learning the language of instruction appear to have no impact on their learning in other school subjects, since no significant differences have been found between boys’ and girls’ achievement in other subjects at either the elementary or the secondary level.

Difficulties in learning the language of instruction nonetheless have short- and long-term consequences. In the short term, the combination of problems in both the language of instruction and mathematics is a major factor in identifying students with learning difficulties and in justifying the decision to make a student repeat a grade. In the long term, being labelled as having learning difficulties or repeating a grade has an impact on the student’s academic progress. While no study has provided evidence of a direct correlation between language achievement and grade repeating or the identification of learning difficulties, the difference in girls’ and boys’ achievement in the language of instruction appears to be a key factor explaining why more boys are held back and/or labelled as having learning difficulties, since no significant difference has been found between the sexes’ math achievements.

Graduation to secondary school is the outcome of a process dictated by a cumulative logic that favours girls over boys. At this point, boys and girls must determine the meaning their studies have for them—and that meaning will have consequences for their future. The gap between their achievement levels, which has increased over time, will often translate into divergent strategies, as evidenced by their respective secondary-school graduation rates. In short, students are not just reacting mechanically to role expectations. Their behaviours, which may then be considered strategies, are governed by a broader interpretation of their situation.

Although students are not aware of all of the consequences of their choices, they have reasons for behaving one way rather than another. These strategies, in spite of their diversity, can be explained in terms of two main factors that influence each other: namely, sex and social background. Generally, the more advantaged a student’s background, the higher the student’s academic achievement. While the gap between boys’ and girls’ academic achievement is evident in all social strata, the humbler the origins, the wider the gap.

The academic strategies developed by students depend on the meaning their studies have for them, but it appears that boys and girls, especially those from a working-class background, do not see school the same way. On the one hand, there is no doubt that academic success is a stepping stone to a better life for both girls and boys from working-class homes. On the other hand, although the rebalancing of social gender
roles and of the associated social expectations over the last 40 years has encouraged girls to seize the new opportunities afforded them, for boys, these changes have not opened up new opportunities, especially in light of the fact that the working class generally does not equate post-secondary education with entry into the labour force.

Given that sexual stereotypes are based on the premise of an unequal relationship in which males are viewed as the dominant sex, working-class boys experiencing academic difficulties are likely to strongly support masculine stereotypes. The negative perception of their social class is compounded by their academic difficulties, so they try to compensate by according more importance to their gender—a behaviour which can only lead them to place even more distance between themselves and the classroom.

While girls from a working-class background more naturally perceive academic achievement as the key to a rewarding career and to a family life over which they hope to exercise greater control than did their mothers, boys from the same background more spontaneously fall back on their prerogative as males. Consequently, education is more readily perceived by girls as an investment in their future, while boys do not always see the benefit of spending more years in school given that working-class men have traditionally been able to find employment with minimal education.

If there is a common denominator or a common thread that explains what most differentiates boys from girls in terms of their academic achievement, it would undoubtedly be the difference in their attitudes towards education and academic achievement. This should not be considered an absolute dichotomy, however, studies and field observations converge towards the disarmingly simple conclusion that girls generally like school more than boys do.

As early as elementary school, girls take to their role as students more readily and therefore do better than boys. Girls’ greater ease in adjusting to school life is perceived and then integrated into gender representations by teachers and students alike, at a peak time in the construction of the students’ sexual identity. Once this process has started, it feeds on itself so that, with every grade level, the gap between boys’ and girls’ academic achievement grows wider. The more modest the students’ socio-economic background, the greater the impact of the process.

**Policy Guidelines for Supporting Boys and Girls Throughout Their Schooling**

1. **Recognize the Impact of Gender Roles and Socialization**
   
   Understanding the mechanisms involved in socialization and the construction of sexual identity in children provides educators with additional means for interpreting and better responding to students’ behaviours and attitudes. The aspects of teaching most likely to be affected are the student-teacher relationship and classroom management.

2. **Take into Account Students’ Language Difficulties**

   The language of instruction must be a primary focus of attention. To narrow the gap between boys and girls in reading and writing achievement, teachers must be able to recognize the impact of social gender roles on their representations of students and, consequently, on their different expectations, attitudes and behaviours regarding students, depending on their sex. Above all, representations with respect to learning of the language of instruction must be desexualized by the integration of reading and writing into a wider variety of activities, which would, by the same token, better accommodate all students’ diverse cognitive styles. Efforts must be made to appeal to students’ interests by offering activities that not only target specific learning objectives but also
nurture the love of reading and writing. As well, including reading and writing in all subjects emphasizes their usefulness in everyday life.

Fathers could contribute to the desexualization of reading and writing by more often setting an example for their sons, as mothers do for daughters when they spend time reading or writing.

3. **Take into Account Students’ Different Rates of Development**

A teacher’s assessment of a student allows the teacher to make predictions about that student’s behaviour. Research on self-fulfilling prophesies shows that teachers will put in place the conditions for their predictions to come true. When their predictions do come true, they in turn confirm their original assessment.

When a teacher’s predictions are positive, they contribute to building a positive self-image in the student. Problems arise when a teacher’s predictions about a student are negative, because the student as a result develops a negative self-image that’s likely to undermine his or her learning and motivation.

Slightly more girls than boys have the appropriate skills for meeting the demands of their role as students, which may be interpreted as proof of a lack of maturity on the part of boys. In kindergarten and throughout elementary school, boys and girls show differences that are of key importance as regards their ability to adapt to school life. These facts should lead to the questioning of the assumption that age peers are equal in terms of personal development. They should likewise prompt schools to exercise great caution in making students repeat a grade on the grounds of lack of maturity. Moreover, the organization of instruction in multi-year cycles will make it easier for teachers to plan learning activities that are better adapted to students’ needs.

4. **Take into Account Students’ Cognitive Styles**

Cognitive style is a bipolar concept, with each individual standing somewhere along a continuum between two poles. Research has shown that, although there are many differences among subjects of the same sex, there are also similarities. In other words, as regards cognitive styles, boys are on average closer to one pole and girls, closer to the other. In spite of this, cognitive style differences are not absolute and should not be reduced to a simple boy/girl dichotomy.

Cognitive style is an aspect of personality shaped by factors that extend far beyond school walls. It is therefore wiser to take students’ diverse cognitive styles into account in teaching and learning activities rather than try to change them.

Teaching that does not accommodate students’ different cognitive styles is not neutral. It favours certain students and discourages others. Given the broad spectrum of cognitive styles, there is a danger in adopting one teaching approach for boys and another for girls, since these approaches will not be suited to a certain number of boys and girls. Accommodating cognitive style in all its diversity promotes academic success for all students.

5. **Take into Account Adolescents’ Need to Give Meaning to Their Studies**

Adolescents in secondary school need to give an explicit meaning to their studies. This need, which grows stronger as students progress to the higher grades, is part of the broader quest for meaning experienced at adolescence. This is all the more important in that it is during their
secondary studies that students reach the end of compulsory schooling. Students must decide whether or not they wish to continue their studies beyond secondary school, if so, in what field, and even whether they intend to stay in school long enough to earn a secondary-school diploma. These decisions are contingent on the student’s progress in school. Given that the decision to stay in school is the outcome of a process that follows a cumulative logic, girls are generally in a better position than boys in this respect.

Some secondary school students, especially boys, do not always have a clear understanding of why they should attend school. Similarly, some girls may get good grades without necessarily liking school. There is often a gap between adolescents’ need to give a concrete meaning to their studies and schools’ ability to meet this need. The concept of “guidance-oriented” schools was developed specifically to bridge this gap. Schools should use all appropriate means to truly provide guidance by helping students to give a concrete and positive meaning to their studies and to fulfill their need for challenge.