

# RAISING THE BAR: A DATA-DRIVEN DISCUSSION ON GRADE INFLATION

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**THE ACCOUNTABILITY** phenomenon so prevalent in many sectors of work, both public and private, has come to include education systems around the world. Although standardized testing has existed seemingly forever in various shapes or forms, the use of test data to evaluate the quality of schools and teaching is on the rise in Canada and elsewhere. Educators have witnessed this trend over the last number of years and generally have learned to cope with the increased focus on student results, which has become a popular proxy for quality education.

While it sufficed for the longest time to accept that teachers and students worked hard and did their best, the accountability movement now puts the spotlight on student performance with little or no attention to effort. In light of this new reality, more and more educators are now looking for ways to increase student performance.

A wealth of research points to the need to increase the expectations we have of students if we want them to succeed. This research is not new. Robert Rosenthal of Harvard University and Lenore Jacobson of South San Francisco Unified School District clearly showed in the 1960's that when a teacher has positive expectations of a student, the student's performance improves.<sup>1</sup> Unfortunately, the opposite seems to be true as well: low student expectations lead to low student performance. Teachers who give students undeserved marks may create the illusion of successful student performance, but their practice is akin to decreasing student expectations with the predictable consequence of lower student performance.

**EN BREF** De nombreuses recherches démontrent la nécessité d'augmenter nos attentes envers les élèves si nous voulons qu'ils réussissent. Les enseignants qui attribuent aux élèves des notes imméritées créent peut-être l'illusion du succès, mais cette pratique peut inciter les élèves à réduire leurs attentes, engendrant la conséquence bien prévisible qu'ils soient moins performants. L'inflation des notes se définit par la différence entre les notes attribuées par l'enseignant et les résultats à un examen provincial. Bien qu'il existe de bonnes raisons de s'attendre à ce que les notes moyennes attribuées par les enseignants soient un peu supérieures aux résultats des examens provinciaux, cette recherche démontre que plus l'écart entre ces deux évaluations est important, plus le rendement des élèves est bas dans les examens normalisés. Les données du Nouveau-Brunswick indiquent également que lorsque les enseignants sont informés de cette corrélation et qu'ils se mettent à réduire l'écart, les résultats aux examens normalisés commencent à augmenter.

The practice of handing out excellent grades to students who don't deserve them (grade inflation) is not a new phenomenon.<sup>2</sup> Indeed grade inflation is among the oldest and most difficult issues to address in higher education. Through the years, it has usually been discussed and criticized at the university level; in 1894 a committee at Harvard University reported that A's and B's were awarded "too readily".<sup>3</sup>

If grade inflation is pervasive in universities, is it also present in our high schools? And if so, what are its effects on student performance?

#### MIND THE GAP: TEACHER-ASSIGNED GRADES VS. STUDENT PERFORMANCE ON STANDARDIZED TESTS

I first studied the impact of grade inflation on student performance on standardized tests at the high school level in Newfoundland and Labrador and in both the French and English sectors in New Brunswick.<sup>4</sup> This research showed a significant negative correlation between grade inflation and student performance in each of the three jurisdictions, as measured on provincial exams in Grade 11 mathematics. Although curricula are different in each jurisdiction, as are provincial exams, this research showed that the greater the difference between the teacher-assigned grades in a school and the school's average grade on the provincial exam, the lower the average score on that provincial exam.

When three consecutive years of average teacher-assigned grades and provincial exam (PE) marks were combined, a clear pattern emerges. Figure 1 shows the average school marks and the average PE marks of the 21 francophone high schools in New Brunswick for school years 2001-

2002 to 2003-2004.<sup>5</sup> It is easy to see that the school marks in all 21 francophone high schools were higher than the provincial exam marks. The provincial average for school marks over the three years is 73.7 percent while the provincial average for PE marks is 60.1 percent.

If provincial exams reflect the provincial curriculum, and teachers are required by law to teach the provincial curriculum, shouldn't the teacher-assigned grades be about the same as those on the provincial exams? Not necessarily.

While provincial exams assess student performance based on the prescribed curriculum, they cannot – nor do they purport to – assess every student outcome in the curriculum. Clearly, teachers should be in a better position than external exams when it comes to assessing certain types of student outcomes, such as oral presentations, detailed projects, and hands-on activities. So while both ways of assessing students are perfectly acceptable, and necessary for different reasons, teacher-designed assessments and provincial exams probably measure slightly different things. It follows that their results may differ.

Provincial exam marks may be lower because they span the whole course, whereas the teacher-assigned grades are made up of a series of short-term tests and other work, which cover only small parts of a given curriculum. Since it is easier to perform well on a small part of a curriculum than on all of it, it is not surprising that students do better on class tests than on provincial exams. Therefore, a gap between teacher-assigned grades and provincial exam marks should not come as a surprise.

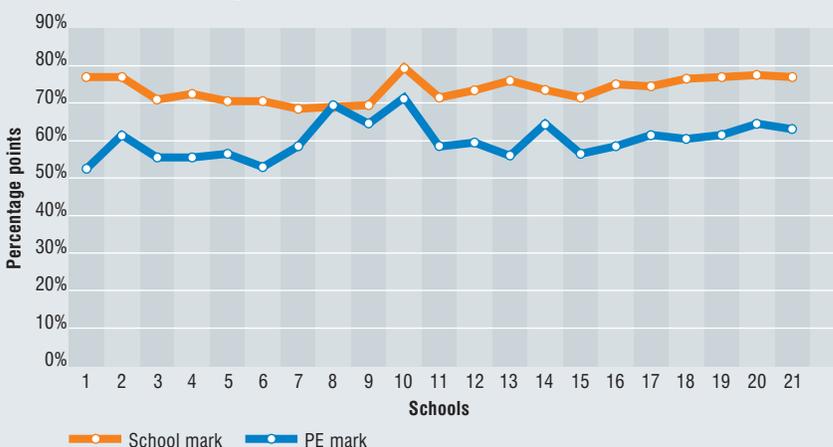
#### GRADE INFLATION IS DEFINED AS THE DIFFERENCE BETWEEN THE TEACHER-ASSIGNED GRADES AND THE RESULTS ON A PROVINCIAL EXAM FOR THAT PARTICULAR COURSE.

##### GRADE INFLATION: DOES IT MATTER?

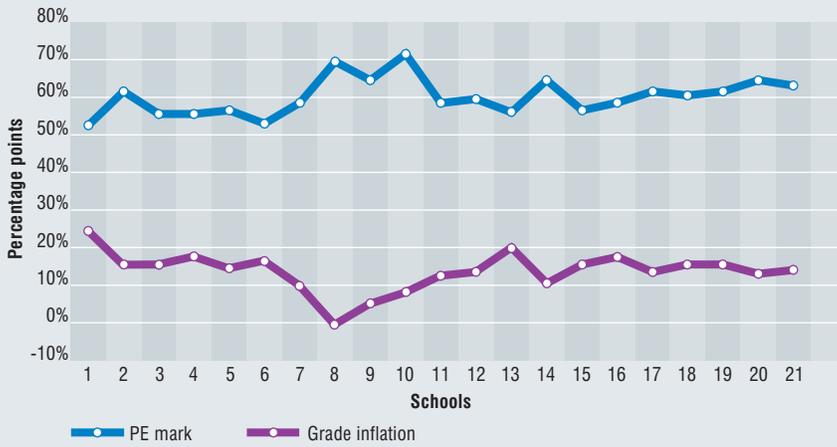
This analysis focuses on cases where the difference between teacher-assigned grades and provincial exam marks lies outside a 'normal' or acceptable gap. (Interestingly, Newfoundland and Labrador considers a gap of 5 percentage points as acceptable, with teacher-assigned grades higher – or lower – than that from the provincial average being adjusted provincially on a school-by-school basis.) This analysis shows that grade inflation is symptomatic of a real problem, and that higher student expectations – not higher teacher-assigned grades – should be the goal.

In the context of provincial exams and teacher-assigned grades, *grade inflation is defined as the difference between the teacher-assigned grades and the results on a provincial exam for that particular course* – the gap discussed above. If a class has a teacher-assigned average mark of 85 percent and a 70 percent average on the provincial exam, we would say that there is a grade inflation of 15 percentage points for that

**FIGURE 1: Average school mark and PE mark (2001-2002 to 2003-2004)**



**FIGURE 2: Average school mark and PE mark (2001-2002 to 2003-2004)**

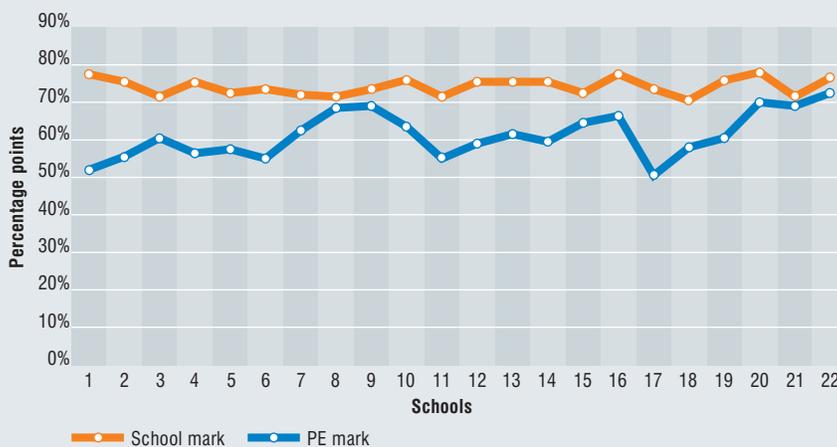


class. And while we have seen reasonable explanations justifying a small gap, a larger-than-normal gap is generally seen to reflect on the teacher's or the school's academic expectations of their students; the higher the grade inflation the lower the expectations and vice-versa.

So what, you ask? Consider the following hypothetical situation. Suppose your child attends School A, which has a grade inflation of 25 percent, and your nephew attends School B, which has a grade inflation of 0 percent. Now, suppose both children bring home report cards with a math mark of 75 percent. You would naturally assume that your child and your nephew are performing at about the same level in math. How would you explain, then, that your child will probably get about 50 percent on the provincial exam while your nephew's mark will probably be about 75 percent? Welcome to the world of grade inflation.

The New Brunswick Department of Education has published grade inflation results for the Grade 11 mathematics assessments annually since the 2003-2004 school year.<sup>6</sup> Because student performance varies slowly through time, it is appropriate to see how grade inflation and student performance have changed since the early part of the decade. If high expectations are supposed to lead to high results and low expectations to low results, we should see

**FIGURE 3: Average school mark and PE mark (2005-2006 to 2007-2008)**



two things: 1) lower teacher-assigned marks should lead to high achievement on the provincial exams, and 2) higher teacher-assigned marks should lead to low achievement on provincial exams. So what do the data tell us?

We calculated the average grade inflation for Grade 11 mathematics for each francophone high school in New Brunswick. The data for the first part of the study included three consecutive school years, 2001-2002 to 2003-2004. Data for the second part of the study were also taken over three consecutive school years: 2005-2006 to 2007-2008. Figure 2 shows average grade inflation and student performance on the Grade 11 provincial mathematics exam (Math 11 régulier) for each New Brunswick francophone high school for the 2001-2002 to 2003-2004 school years.

The first observation is that both sets of points are practically mirror images of each other. This means that, in general, lower grade inflation points to higher provincial exam results. The correlation is strongly negative and significant  $r(19) = -0.81, p < 0.01$ . Note that the four schools with the lowest grade inflation (values ranging from -0.7 percentage points to 9.3 percentage points) are also the four highest performing schools on the provincial exam.

Not surprisingly, higher grade inflation points to lower provincial exam results. This can be seen in the case of School #1 which has the highest grade inflation (24.7 percentage points) and is also the lowest achieving school on the provincial exam (three-year average result of 52.3 percent). These observations are exactly what we should see if the hypothesis of high expectations/high results, low expectations/low results is correct.

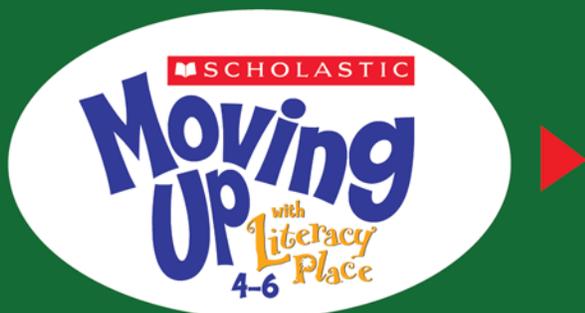
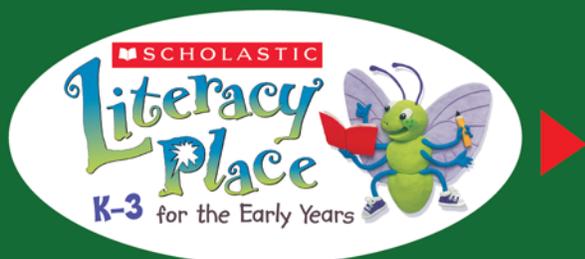
**RISING EXPECTATIONS?**

The availability of these data since 2004, in addition to numerous presentations to New Brunswick teachers, school principals and school district officials, has increased the awareness of the impact low expectations have on student performance and vice-versa. So, has anything changed? Let's now look at the same measures for the second set of data, school years 2005-2006 to 2007-2008.

As shown in Figure 3, the average school marks (teacher-assigned grades) are once again consistently higher than the average results on the provincial exams in each of the 22 high schools.<sup>7</sup> The continuing presence of the gap between the school mark and the provincial exam mark is hardly surprising, for the reasons discussed above.

The relationship between the provincial exam mark and grade inflation is also unchanged from the earlier data and becomes even more obvious when these values are graphed (see Figure 4). Both curves are almost perfect mirror images of each other. In fact, the correlation between the provincial exam mark and the school mark for the 2005-2006 to 2007-2008 school years is even stronger than previously and is again significant  $r(20) = -0.93, p < 0.01$ . If increased awareness of the relationship between grade inflation and provincial exam results is indeed leading to higher expectations, we would expect to see less grade inflation in the later data; we would also expect the average provincial exam results to increase.

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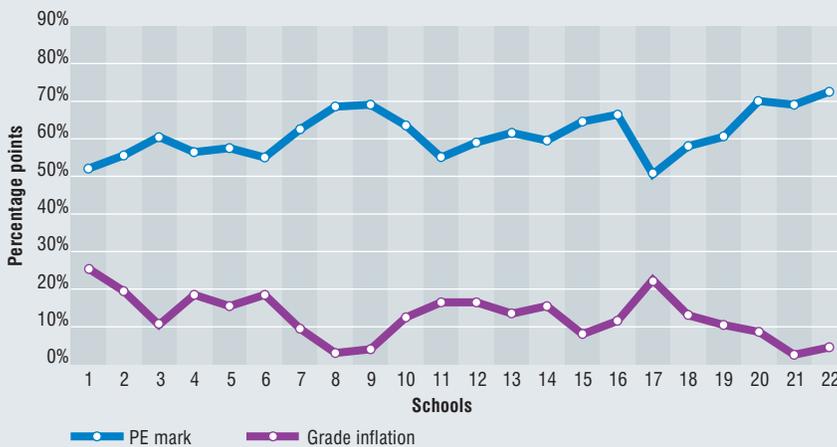
Anne has been an educator for more than 30 years. She designed and implemented a highly successful balanced literacy program for elementary schools in Edmonton. Anne is the co-author of *Balanced Literacy in Action* and *Book Talk*. She is currently working as a Language Arts Consultant on Vancouver Island and is a Senior Consultant on Scholastic's *Literacy Place* resources.

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**FIGURE 4: Average PE mark and grade inflation (2005-2006 to 2007-2008)**



Interestingly, the average grade inflation has indeed decreased through the years from 13.6 percentage points to 12.7 percentage points, while the average provincial exam results have increased from 60.1 percent to 61.2 percent. Although the changes are small, they are in the right direction. Time will tell if the expectations we have of students will increase.

**ALTHOUGH THERE WILL PROBABLY ALWAYS BE A GAP BETWEEN TEACHER-ASSIGNED GRADES AND PROVINCIAL EXAM RESULTS, THESE DATA SUGGEST THAT TEACHERS SHOULD STRIVE TO BE BELOW THE AVERAGE PROVINCIAL GAP BY INCREASING THEIR EXPECTATIONS.**

**CONCLUSION**

It is clear that grade inflation is alive and well in many New Brunswick francophone high schools. It is also clear that it is much more prevalent in some high schools than others. Based on data from the New Brunswick francophone, New Brunswick anglophone, and Newfoundland and Labrador education systems from the previous study, and the fact that Quebec, Nova Scotia, and Newfoundland and Labrador moderate teacher-assigned grades using various statistical methods, it can safely be assumed that grade inflation is present in schools across Canada. It is certainly not unique to New Brunswick.

Why don't all high schools have high expectations of student performance? Could it be that assessment policies are either not clearly understood or are being ignored? Might some schools reward students with marks for things that are not on the curriculum like attendance, class participation, doing homework, and the like? Could it be that classroom assessment practices are used for disciplinary purposes instead of reporting student performance?

Although there will probably always be a gap between teacher-assigned grades and provincial exam results, these data suggest that teachers should strive to be below the average provincial gap by increasing their expectations. We know that students will rise to the challenge as long as the challenge is fair. Teachers who don't expect much from their students can expect to get exactly that. So if we really want to improve student performance, why not start by ensuring that we report what students have actually learned rather than inflating their grades, which is really another way of telling students that all is well when the opposite is true?

Inflating grades is a set-up for significant disappointment. Sooner or later reality will catch up to the students and 'success' will be difficult to attain. The cost of failure may be as high as forced withdrawal from post-secondary institutions, loss of confidence as a learner, loss of job opportunities, and even loss of jobs themselves. Such individual failures reflect education systems that fail students and society. Without a serious and concerted effort to change the practice of grade inflation, everyone loses. Instead of lowering the bar and asking "How low can you go?", teachers should raise the bar and work with students to see how high they can jump. |

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Notes

- 1 Rosenthal and L. Jacobson, "Teachers' Expectancies: Determinants of Pupils' IQ Gains," *Psychological Reports* 19 (1966): 115-118.
- 2 E. Agnew, "Departmental Grade Quotas: The Silent Saboteur (paper presented at the 44<sup>th</sup> Annual Meeting of the Conference on College Composition and Communication, San Diego, California, 1993); C. F. Eisler, "College Students' Evaluations of Teaching and Grade Inflation," *Research in Higher Education* 43, no. 4 (2002): 483-501; D. E. Kapel, D.E. (1980). "A Case History of Differential Grading: Do Teacher Education Majors Really Receive Higher Grades?" *Journal of Teacher Education* 31, no. 4 (1980): 43-47; R. Oliphant, "Stalking the Soft Option: Some Notes on Overinflated Grading Standards," *Liberal Education* 66, no. 4 (1980): 431-439.
- 3 T. Bartlett and P. Wasley, "Just Say 'A': Grade Inflation Undergoes Reality Check," *Chronicle of Higher Education* 55, no. 2 (2008): A1.
- 4 R. E. Laurie, *Setting Them Up to Fail? Excellent School Marks Don't Necessarily Lead to Excellent Exam Marks* (Halifax: Atlantic Institute for Market Studies, 2007).
- 5 Ibid., for a complete list of the New Brunswick francophone high schools and their corresponding data.
- 6 Ministère de l'Éducation du Nouveau-Brunswick. Résultats des examens provinciaux: Districts scolaires francophones. Fredericton, Nouveau-Brunswick, 2004; 2005; 2006; 2007; 2008.
- 7 École Odyssee became the 22<sup>nd</sup> francophone high school in New Brunswick in September 2005.