

# A Study of Repeated Courses Among Secondary Students in Ontario

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**ABSTRACT** The growth in the number of secondary school applicants to Ontario's publicly funded universities, combined with reduced government funding levels, has created a more competitive environment for students and generated grade-enhancing practices among them. Repeating successfully completed senior-level courses was investigated, using a sample of 16,200 graduates of a large school board over a 4-year period. A profile of the average repeater was constructed, and the resource cost and the subject distribution of repetitions were analyzed. The impact on marks of repeating courses was noted. Repeaters had below-average marks in their first attempt and had caught up with the average student after repeating. Recommendations are proposed in the Conclusion of this article.

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In contrast to U.S. universities that rely in varying degrees on standardized test scores in their admission process, Ontario universities rank and select graduates of the province's secondary schools exclusively on the basis of their school marks. The 17 publicly funded institutions are members of the Ontario Universities' Admission Centre (OUAC), which receives all applications from students enrolled in secondary schools across the province each spring; each applicant is allowed a maximum of three choices (applying to two different programs at one university counts as two choices). The centre then forwards to each university the records of all candidates who designated that institution as one of their choices and each university independently determines which applicants will receive an offer of admission. Students not currently registered in a secondary school, as well as students from out-of-province and foreign schools, apply directly to each university; these *regular* applicants accounted for 33.9% of applicants and 17.6% of 1st-year registrants in 1993-94.

The application material available to universities consists of the marks earned by each applicant in six Ontario academic courses (OACs). These courses were introduced in the mid-1980s when the province formally eliminated Grade 13, which qualified students for the honors graduation

diploma required by universities. Under the 1984 regulations—known as OSIS (Ontario Schools: Intermediate and Senior Division)—students could earn the Ontario Secondary School Diploma (OSSD) by completing 30 credits beginning in Grade 9, including 16 compulsory subjects. These credits are offered in three streams (basic, general, and advanced) and at five levels—the fifth offered only in the advanced stream and carrying the OAC designation. A full course load consists of 8 credits annually.

The introduction of OSIS was intended to bring Ontario into line with virtually every other jurisdiction in North America and elsewhere by eliminating Grade 13, although students who intended to pursue postsecondary education were left with the challenge of completing five successive levels in subjects such as English and mathematics (where a strict prerequisite structure exists) in the span of 4 school years. This anomaly arose because, although the OSSD requirements did not include any OACs, admission to a university required completion of at least six such courses and was based entirely on the best six marks earned in those courses. Nonetheless, there was much hope and expectation that the new curricular regime would result in a dramatic increase in the proportion of students graduating in Grade 12, typically at age 18.

As documented in Casas and Meaghan (1995b), there was an upsurge beginning in 1986 (when the first cohort of students graduated under OSIS) in the proportion of secondary school applicants registering in Ontario universities at age 18 or younger. However, this proportion began to steadily decline after 1988 (from 12.8% that year to 9.8% in 1993), with a concomitant and surprising increase in the proportion of 1st-year university registrants *over* 19 years of age (from 17.9% in 1988 to 22.6% in 1993), a phenomenon that has been described as *Grade 14*. A closer investigation of this

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trend reveals that while the age distribution of secondary school graduates is not changing substantially, a growing number of teenagers are opting to remain in school 1 or more years after they complete the diploma requirements.

Explaining this trend toward an older university student population requires an understanding of the economics and demographics of the provincial postsecondary system. The relatively low tuition fees charged by Ontario universities have made them the choice of most school graduates in the province. However, universities cannot accommodate all qualified applicants: between 1983 and 1993, approximately two thirds of female applicants and a slightly lower proportion of male applicants registered in the 1st year (Council of Ontario Universities [various years]). As the number of spaces offered by the universities failed to keep pace with the growing population of applicants, the predictable and inevitable result was a rise in the cutoff grades required for admission. For example, the 10th percentile average for 1st-year university registrants admitted directly from high school in 1983 was 65; this number rose to 69 by 1993, with similar increases in the median and mean entering averages. This grade *inflation* was more pronounced in some programs (such as physical education, arts, science, and, to a lesser extent, business); average entrance marks in engineering and nursing declined over the same period. Some school critics have accused secondary school teachers of inflating grades; however, the evidence clearly shows that demographic factors are largely responsible for the trend (Casas & Meaghan, 1995a).

As students became cognizant of the increased competition for university spaces, a number of *grade-enhancing strategies* emerged, whose incidence and impact have been the subject of increasing concern but little systematic research (Crawford, 1993; Granger, 1994; King and Peirt, 1994; Lawton, 1994). As noted in Casas and Meaghan (1995a), several such strategies, and various combinations thereof, can be identified:

1. *Subject grazing*—Students complete more than the 30 credits required for graduation, including more than six OACs, because only the highest six marks are used in computing the university application average.

2. *Sampling*—Students drop courses in which they do not expect to earn marks that will improve their average.

3. *School grazing*—Students switch schools to earn credits and better grades in schools perceived as having lax standards, particularly night and summer school.

4. *Repeating OACs*—Only the best mark appears in the student permanent record when a course is repeated, so there is no risk involved in such repeats.

5. *Interiming*—Students take or repeat courses in the spring term of the year in which they apply for university admission. Midterm (or interim) marks are reported by schools for courses in progress and are used by universities in the admission process, leaving students with little incentive to exert themselves after their applications have been

submitted. The resulting *slumping effect* has been documented in Casas and Meaghan (1994).

6. *Upgrading*—Students return to school after graduation to repeat or take additional credits.

7. *Slowtracking*—Students take less than a full course load.

Each of these practices raises a number of questions: in this study we attempted to gain some insights into the practice of repeating courses that were successfully completed. The phenomenon may be unique to Ontario, if only in terms of its incidence; there does not appear to be any literature documenting such a practice in other jurisdictions. Course repeating deserves to be investigated because of its frequent occurrence. In general terms, repeating raises two issues:

1. At a time when all school boards in Ontario confront severe budgetary constraints, are resources used efficiently when they are allocated to instruct students repeating courses they successfully completed? Presently, most school boards have no rules, formal or informal, regulating who can repeat courses or under what circumstances a student is allowed to repeat (only the age limit of 21 for registration in day schools appears to be a constraint). As a first step, it is important to document how prevalent this practice has become and to sketch a profile of the typical repeater. It may be inequitable to restrict students from attempting to improve their chances of furthering their education, particularly if repeaters are students with relatively low grades in their first attempt at a subject. It is legitimate, however, to determine how much additional learning is achieved by repeaters as part of a cost-benefit analysis that compares such gains with the financial burden of offering the services. Furthermore, with a fixed number of spaces in universities, students gaining admission by repeating one or more courses are merely displacing other applicants. We may also raise equity questions by inquiring whether the opportunity to repeat is available equally to all students or whether economic, institutional, or other factors represent an obstacle to some students.

2. For universities, the main issue revolves around the student selection process. Several admission officials have complained that OAC repeating and other grade-enhancing practices have the potential of distorting the ranking of applicants based on their OAC marks. When postsecondary institutions try to choose the best qualified applicants, is there a risk that a student with higher marks achieved by repeating one or more courses may be less prepared than another student who earned lower marks but did not repeat? Some universities have adopted or are considering adopting corrective measures, such as penalizing students who repeat; however, such an approach is potentially unfair, because not all repeated courses can be identified in the absence of reporting requirements. There are no data on how much marks improve when a course is repeated, and, therefore, there is no basis to deal with such cases equitably.

In an attempt to investigate these issues systematically, we used a large sample consisting of all the students who graduated from one school board in Ontario. In the next section, we briefly describe these data and then proceed in the subsequent sections to describe the characteristics of repeaters and the outcome of repeating.

### Description of the Data

The data used in this study consisted of the records of all the students who graduated from the 21 secondary schools in the York Region Board of Education (YRBE) between 1991 and 1994. This rapidly growing public school board, one of the largest in the province, covers a large area north of Metropolitan Toronto and includes a mix of urban and rural districts. Specifically, we obtained demographic information about the students (date of birth, gender, school, and date of graduation) and about the OAC subjects completed (school and date of completion, midterm marks where available, and final marks).

The available records did not allow a systematic investigation of failed or incomplete courses. Students are allowed to withdraw from a course virtually at any time with no academic penalty; many students on the verge of failing merely drop out (at times on the final examination day). This probably explains the negligible number of failing marks observed in the sample. Midterm marks were also found unreliable because different schools record such marks at different points in the school year or term, and a large number of midterm marks were not reported. Although we do not deal directly with these issues here, the incidence of repeating is likely understated because of the unknown number of students who fail to complete a repeated course.

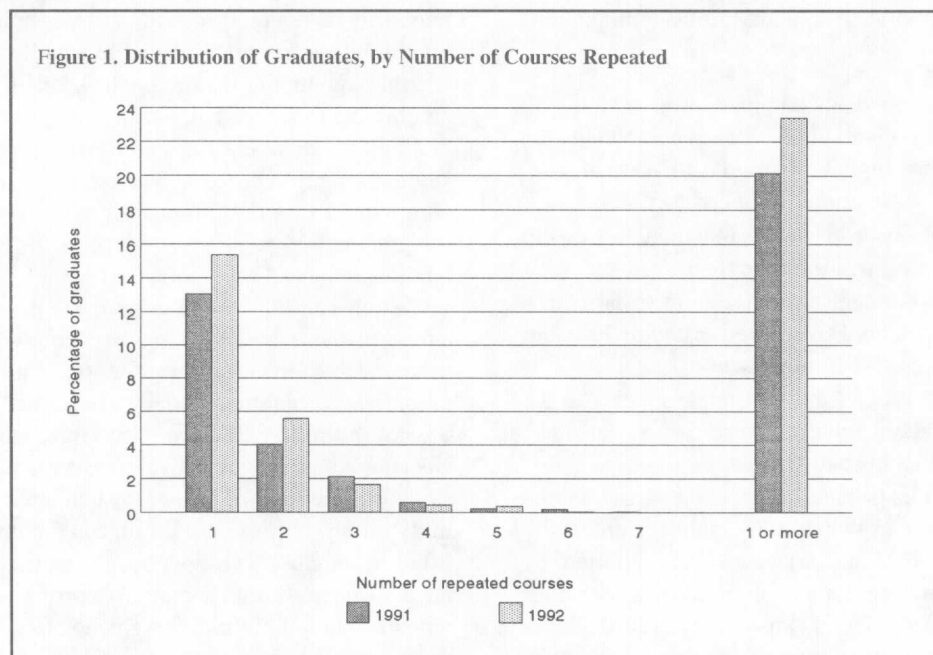
The data in this study included information on approxi-

mately 86,000 OACs in more than 100 subjects taken by 16,200 graduates. The age of the graduates ranged from 14 to 67; females accounted for 51% of the total and completed approximately the same proportion of all OACs. In addition to the 21 day schools involved, some of the OACs had been completed in night school, summer school, correspondence school, and schools in other jurisdictions. Courses taken or repeated by students who did not graduate or have not yet graduated are not included in the sample. Conversely, some of the graduates (particularly among the 1993 and 1994 cohorts) are still in school, and some of these may be repeating courses they previously completed. The latter will be captured as we update the study in the future. A similar omission involves courses that the graduates in our sample complete or repeat in schools outside the board after they graduate.

### Profile of OAC Repeaters

A first indication of the frequency of course repeating can be gleaned from Figure 1, which shows the proportion of graduates who repeat one or more OACs. For the 1991 cohort, 20.2% of the students repeated at least one course; the proportion of males (24.2%) was substantially higher than that of the females (16.4%). The incidence of repeating rose to 23.4% in 1992, with a less pronounced gender differential (24.4% vs. 22.5%). However, most of the students involved (64.7% in 1991 and 65.5% in 1992) repeated a single course, and students repeating three or fewer OACs accounted for approximately 95% of all repeaters.

The rising trend in the proportion of repeaters appears to have been reversed in 1993 when it fell to 21.4% and dramatically declined among the 1994 graduates (11.7%). However, we must interpret these data cautiously: Although the members of the 1991 and 1992 graduating cohorts are, by



and large, out of the school system, the same cannot be said of the more recent graduates. Of the 1991 graduates, 31.5% took or repeated at least one OAC in the year following their graduation, and a total of 38% of that cohort took or repeated courses between 1992 and 1994; this group completed 22.9% of their courses during this 3-year period. For the 1992 cohort, 26.7% of the graduates were enrolled in school the year following their graduation and 32.7% took or repeated courses between 1993 and 1994; 18.7% of their courses were taken after graduation. Even more surprising is the fact that 37.8% of the 1993 cohort returned to school in 1994, leading us to conclude that the small decline in the proportion of students in the 1993 cohort who repeated at least one OAC and the steeper decline in the corresponding proportion for the

1994 cohort do not portend a trend, but merely indicate that those two groups have not completed their studies despite having met the diploma requirements. On this basis, one may anticipate a continuation in the trend toward a gradual rise in the proportion of repeaters, possibly reaching or exceeding one fourth of secondary school graduates.

We also investigated whether repeaters are typically students who complete a large number of distinct OACs or whether they are found in equal proportions among students taking various numbers of OAC subjects. Figure 2 shows that students who completed six or more distinct subjects accounted for slightly over 67% of all graduates (this figure is higher for females) in each of 1991 and 1992, but nearly 90% of all repeaters. Furthermore, as shown in Figure 3, the

Figure 2. Proportion of Graduates Who Complete Six or More Subjects

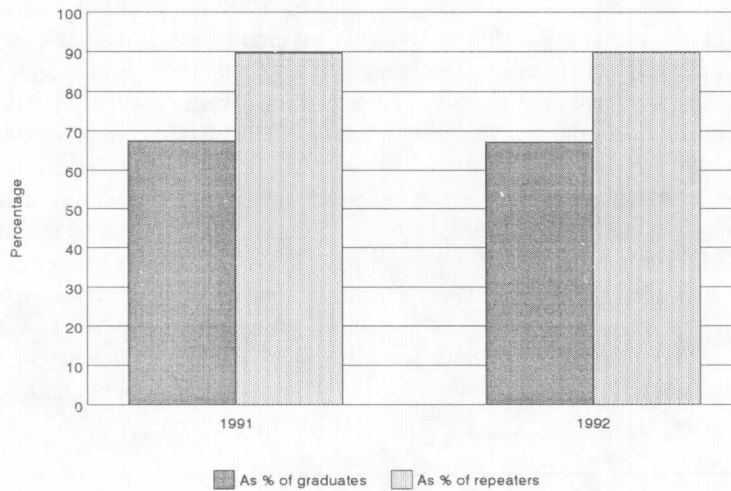
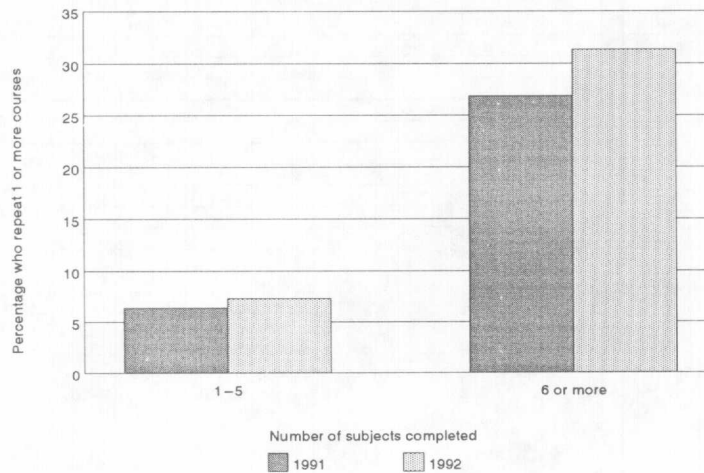


Figure 3. Proportion of Repeaters, by Number of Subjects Completed



proportion of repeaters among graduates who completed five or fewer distinct subjects was a mere 6.4% in 1991 and 7.3% in 1992 (lower for females in both years), whereas the corresponding figures among graduates completing six or more distinct subjects were considerably higher at 26.9% in 1991, increasing to 31.3% the following year. It is the latter subgroup, which we label *university bound* (i.e., those completing at least six distinct OACs to qualify for university admission), that mostly populates the ranks of repeaters. It is also likely that most of the students who completed five distinct OACs had intended to complete one or more additional subjects (or may do so in the future), hence the relatively high incidence of repeaters among this group as well (17.8% in 1991 and 21.5% in 1992).

Finally, we looked at whether repeaters typically had high or low marks in their first attempt in repeated courses. In discussing this question with school guidance counselors, university admission officers, and a senior education ministry policy adviser, we received much anecdotal evidence relating to students with high marks (75 or more) who repeated courses to improve their chances of admission. However, as revealed in Figure 4, the data sharply contradict this perception. It may not be entirely surprising to find that the proportion of students with marks in the 50s and 60s repeat courses more frequently than those in higher grade ranges, but it is noteworthy that nearly 79% of repeaters in 1991 and 76% in 1992 had a mark of 69 or less. The mean mark for first attempts was a modest 61.9 in 1991 (62.9 in 1992), compared with 73.5 for nonrepeaters (73.9, respectively); the median first attempt mark for repeaters was 61 in 1991 and 62 in 1992.

The last observation is important because it demonstrates that there has not been widespread abuse of the opportunity

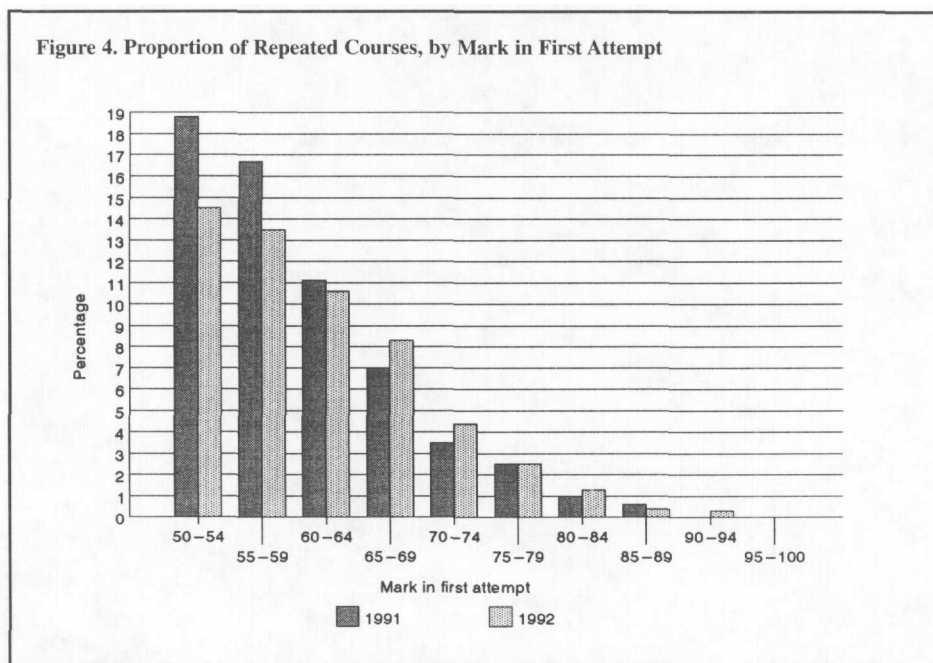
to repeat. If repeaters averaged high marks initially, the benefit of repeats would be more questionable. Furthermore, with the minimum entrance requirements at most universities ranging between 70 and 80, depending on the program, one may argue that banning the opportunity to repeat courses may amount to denying those students who did not perform above average in their first attempt any chance at post-secondary education.

### The Most Commonly Repeated Subjects

The students in this sample completed more than 125 different courses, but the 25 most commonly taken courses accounted for over 90% of all completions. Furthermore, only 48 courses were repeated, and the top 20 most commonly repeated subjects accounted for an overwhelming 95% of the total.

Figure 5(a) displays these top 20 repeated OACs in descending order of incidence; Figure 5(b) shows the percentage of students taking each subject. We used only the data for 1991 and 1992 because, as previously argued, more recent graduates are likely to complete a high proportion of their OACs in 1995 and beyond. The top panel reveals that repetitions were especially concentrated in eight subjects: three mathematics courses and three science courses, as well as English and accounting. Together these courses accounted for 76% of all repeated courses.

Figures 5(a) and (b) also reveal that the most commonly repeated subjects are not necessarily the most popular ones; there appears to be a weak correlation between the incidence of takes and of repetitions. English (ENG) was by far the most commonly taken course (76.5% in 1991 and 77.4% in 1992); the popularity of this course is directly



attributable to the fact that most universities require it as a condition of admission. However, only 9% of the students who completed it in 1991 and in 1992 also repeated it. In contrast, 6.6% of the 1991 graduates (7.9% for the 1992 cohort) who completed accounting (BAC) repeated that course, even though it was taken by a much smaller proportion of students (15.9% in 1991, 17.7% in 1992) than the proportion repeating English. Clearly, the incidence of repetitions across subjects is not a fixed parameter but varies with the perceived importance of the subject and the intensity of the competition for admission to specific university programs. For example, calculus is required for science, engineering, and some business programs and is taken by

those who aspire to enter those fields. These are also highly competitive programs, as evidenced by the higher-than-average cutoff admission grade point averages, hence the high incidence of repeating the calculus OAC.

Finally, significant gender differences exist both in course completion and in course repeat patterns. Males display a higher incidence of completion in all mathematics and science subjects with the exception of biology, as well as in business courses (accounting, economics, and administrative studies), whereas females tend to concentrate in the humanities (English, literature, visual arts) and social sciences (geography, history, and family studies)—a clear indication of the genderization of courses, reflecting the

Figure 5(a). Proportion of Graduates Repeating Individual Subjects

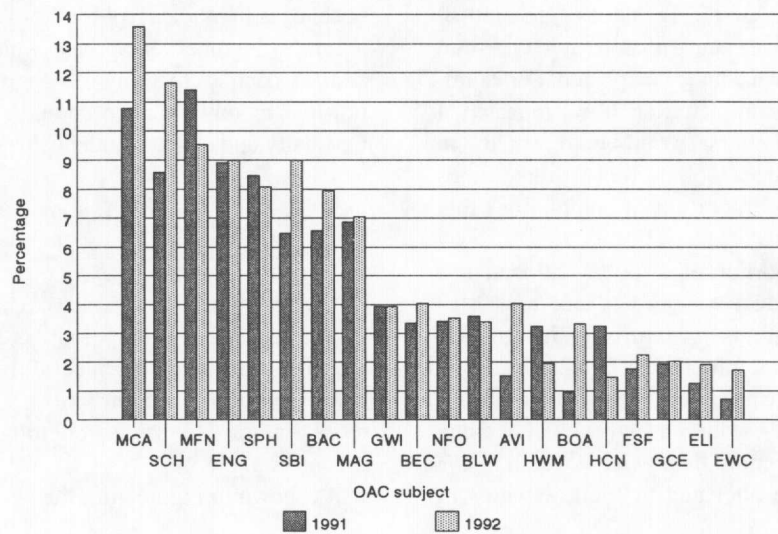
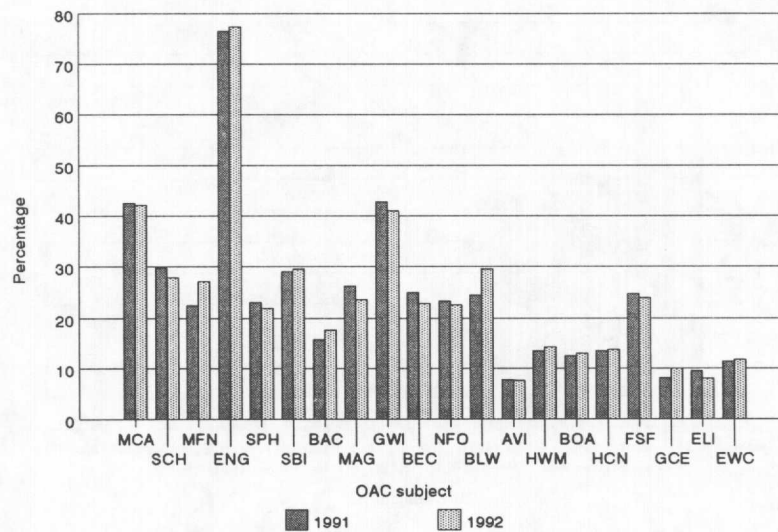


Figure 5(b). Proportion of Graduates Taking Individual Subjects



pressures exerted by societal gender roles and traditional career paths. For example, in 1993, females accounted for 62.4% of all applications (and 64.3% of 1st-year registrants) in arts programs at Ontario's universities, but only 17.2% of applications (19.8% of registrants) in engineering.

However, the pattern of repeating does not completely conform with this traditional pattern of completions. A higher percentage of females than males repeated calculus in 1992, and finite mathematics and accounting in both years, whereas a smaller percentage of females repeated English, biology, and world geography. The possibility that gender differentials in this area might be linked to gender differences in marks is explored below.

**The Resource Cost of Repeating OACs**

The proportion of students who repeat one or more courses is not an accurate measure of the resources allocated to instruction for such repeats because it does not take into account the number of times a course is repeated. For example, if every student who completed an OAC repeated it once, 50% of all completed courses would be repeated. On the other hand, if every student took each OAC three times (i.e., repeated it twice), the proportion of completions that are repeated would be 66.6%.

Figure 6 shows the proportion of resources allocated to repeated courses by individual course. Because most students who repeat do so once, it is not surprising that this figure reveals virtually the same ranking of OAC subjects as the percentage of students who repeat these subjects, with the exception of law (BLW), which a higher-than-average proportion of repeaters take more than twice. Overall, 5.4% of teaching resources were allocated to such activities in

1991; this proportion rose to 5.9% the following year. Females absorbed fewer resources than males did in both years (4.2% vs. 6.7% in 1991, 5.5% vs. 6.4% in 1992).

The jury is still out with regard to the last two cohorts. But with the 1993 figure already matching that of the preceding year, it is likely that a mildly rising trend can be detected, although there is no basis for anticipating a steep acceleration in terms of resource costs. Whether a figure in the neighborhood of 6% is problematic can be debated, keeping in mind that an unknown number of students do not complete courses that they repeat if, at some point during the course, they suspect that they will not improve on their initial performance. The benefits of repeats are more difficult to assess than their costs. Repeating students may benefit in the form of additional learning as well as higher marks that improve their chances of gaining admission to postsecondary institutions. Even if we could measure these gains (the next section looks at changes in marks resulting from repeats), universities have a limited number of spaces, which implies that repeated courses cannot create more opportunities for higher education but merely alter the composition of the population of university and college students.

**The Gain From Repeated Courses:  
How Much Do Marks Rise?**

To investigate how much marks are affected through course repeats, we compared the change in marks between the first and second successful completion of courses, because the instances in which a course is taken three or more times are too infrequent to generate a statistically significant sample.

As shown in Figure 7(a), the outcome of repeated courses

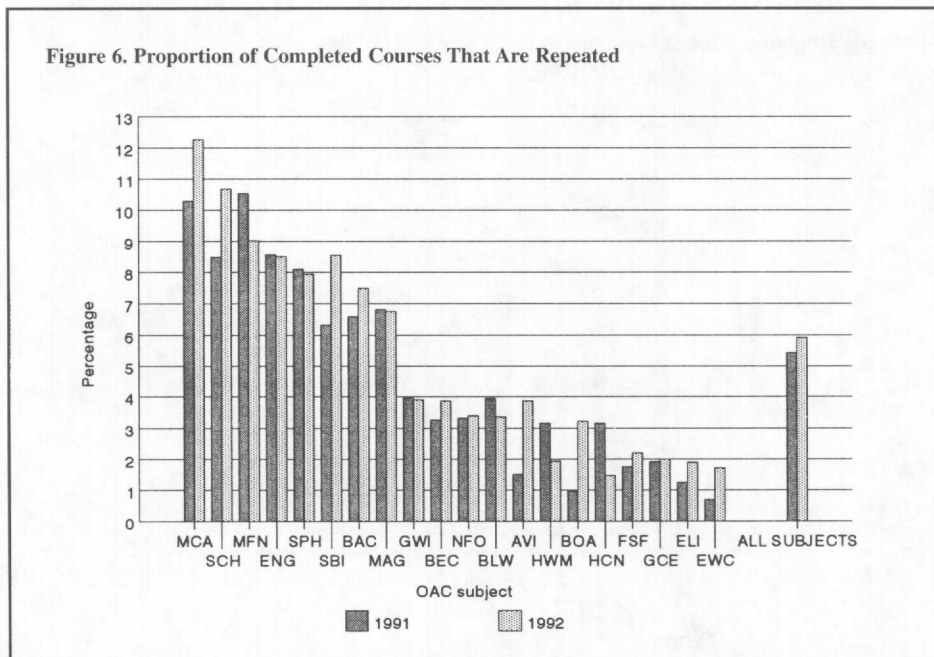


Figure 7(a). Average Mark Improvement in Repeated Courses, by Subject

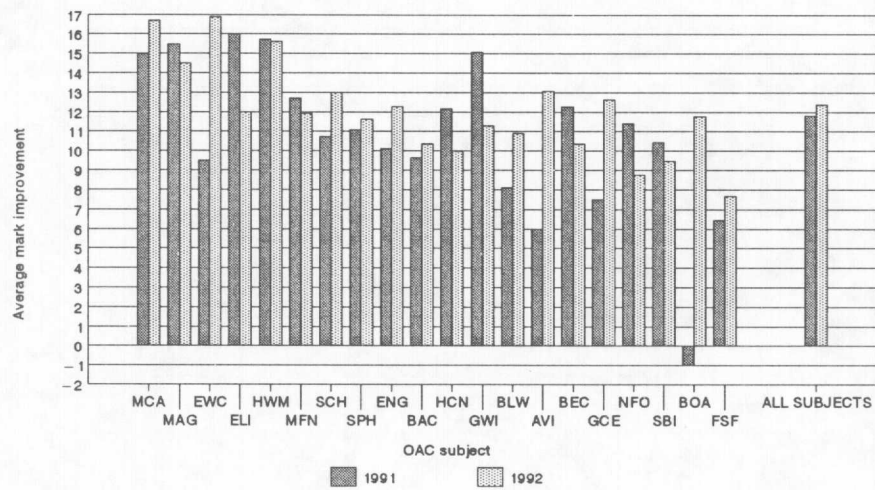


Figure 7(b). Average Mark in First Attempt in Repeated Courses

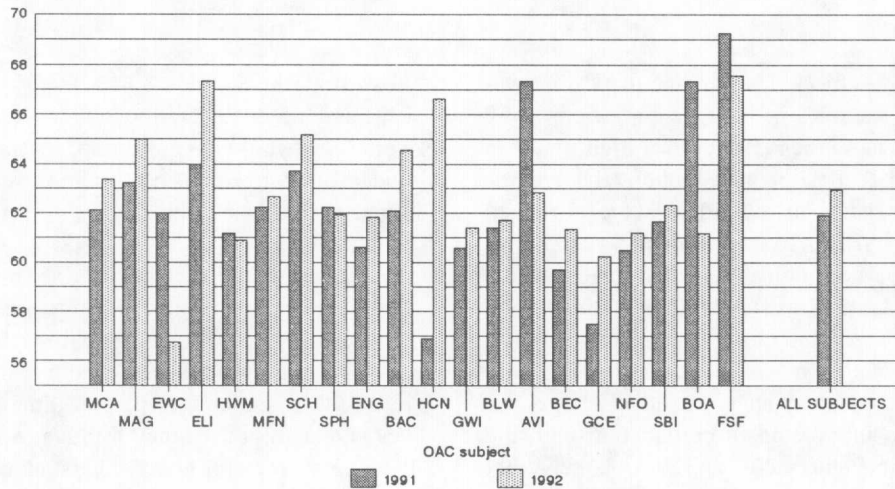
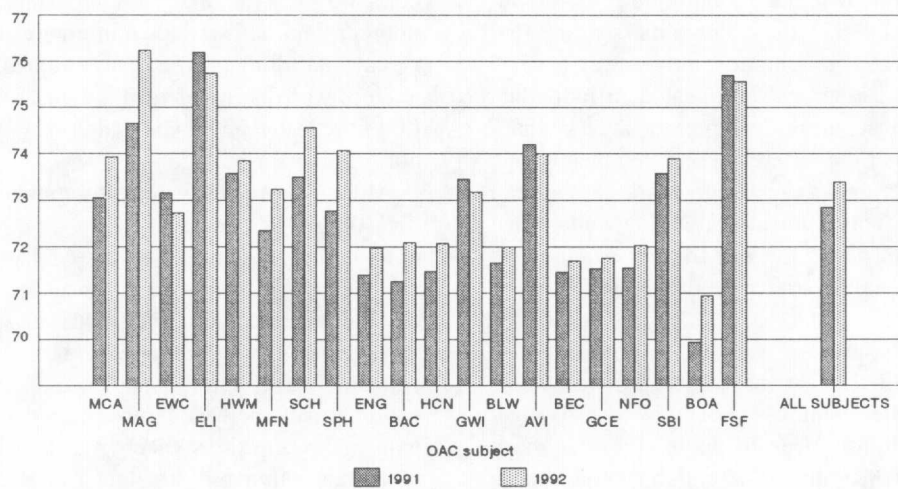
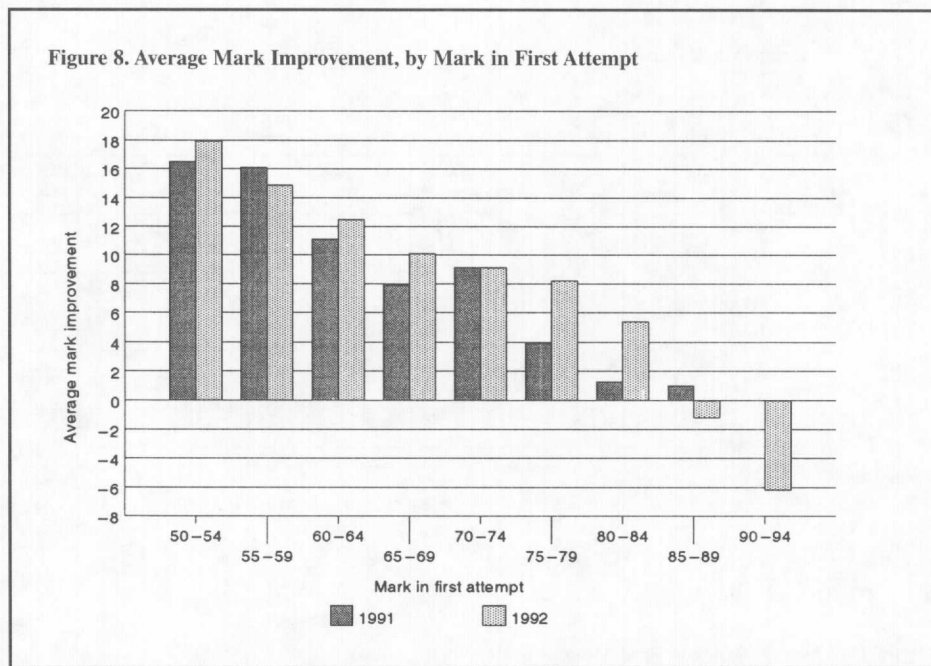


Figure 7(c). Average Mark, by Subject







varies considerably by subject. The average mark improvement for all subjects was 11.8 in 1991, ranging from a low of -1 in administrative studies (BOA) to a high of 16 in English literature (ELI). For the 1992 cohort, the average mark gain was 12.4; gains in individual subjects ranged from 7.7 in French (FSF) to 16.9 in English writers' craft (EWC). In the most commonly repeated courses, the improvement in marks was consistently higher than average in all mathematics courses and close to the average in science, English, and accounting.

Although these changes may appear relatively large, our observations must be interpreted in conjunction with the evidence uncovered in Figures 7(b) and 7(c), namely, that the average marks for repeaters in their first attempt are consistently lower than the average marks for students who complete each subject. For example, although the average mark for all students in all subjects among the 1991 graduates was 72.8 (73.4 in 1992), the average mark in the first attempt for all repeaters was significantly lower at 61.9 (62.9 in 1992). This pattern was duplicated in individual subjects: With a few exceptions, the larger the average mark improvement, the larger the difference between the average mark for all students and the average mark in the first attempt for repeaters. This confirms our earlier finding that most repeaters do not abuse the opportunity available to them; rather, they attempt to overcome their below-average initial performance.

The primary beneficiaries of repeated courses are students with low marks in the first attempt (see Figure 8). Students who repeated after earning marks in the 50-59 range, on average, gained slightly over 16 points, whereas those whose initial marks fell in the 70-79 range gained a more modest 7.2 in 1991 and 8.8 in 1992. For those who repeat-

ed with marks between 80 and 94, the net gain was 1.2 in 1991 and 3.5 in 1992, although the largest negative changes were found in this small group, revealing that when those students no longer expected to improve on their strong first-round performance, they easily gave up in the absence of penalties.

An interesting corollary of these results is that improvements in marks from repeating tend to close the gap between the average mark for repeaters and the average mark for nonrepeaters. For example, by adding an average 11.8 to their initial average mark, the repeaters among the 1991 graduates raised their average to 73.7—comparable to the 73.5 average for nonrepeaters. However, such an analysis overlooks the fact that when the mark in a repeated course is lower than the initial one, the latter is retained on the student transcript. It is consequently more appropriate to compare the *best* marks for repeaters with the marks for nonrepeaters. This is shown in Figures 9(a) and 9(b), which reveal that although the distribution of grades in the first attempt was dissimilar for the two groups, the distribution of best repeated and nonrepeated course marks was remarkably similar for both cohorts.

Although females benefit from repeating less than males do (10.6 vs. 12.7 in 1991, 12.2 vs. 12.6 in 1992), they start out with higher marks (63.2 vs. 61.1 in 1991, 63.6 vs. 62.3 in 1992). This seems to confirm that repeating tends to erode differences between groups. It is also significant that there appears to be a correlation between the gender differentials in marks and the incidence of repeating: Subjects in which females achieved lower marks on average, compared with males, are the subjects that females tended to repeat with greater frequency than males did. For example, among the members of the 1991 cohort, males earned lower marks

Figure 9(a). Distribution of Marks for Repeaters and Nonrepeaters (1991)

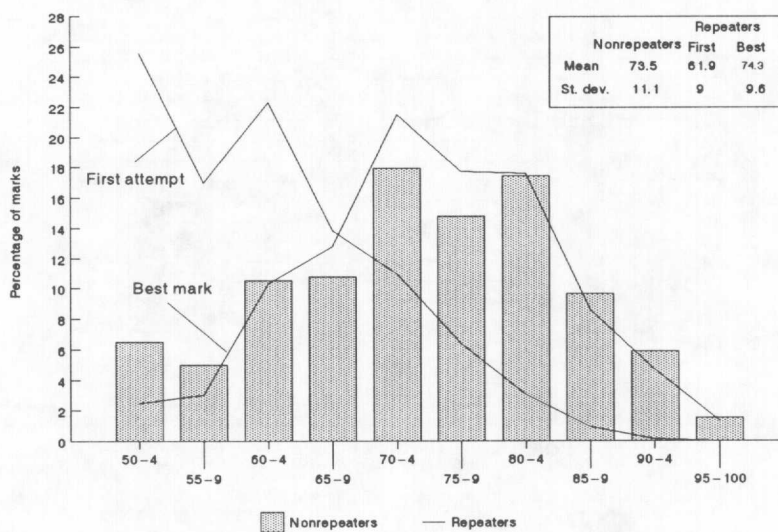
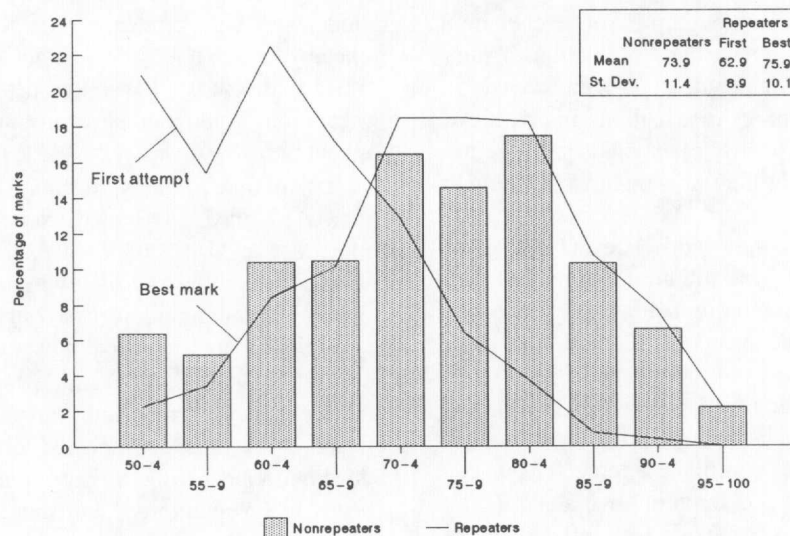


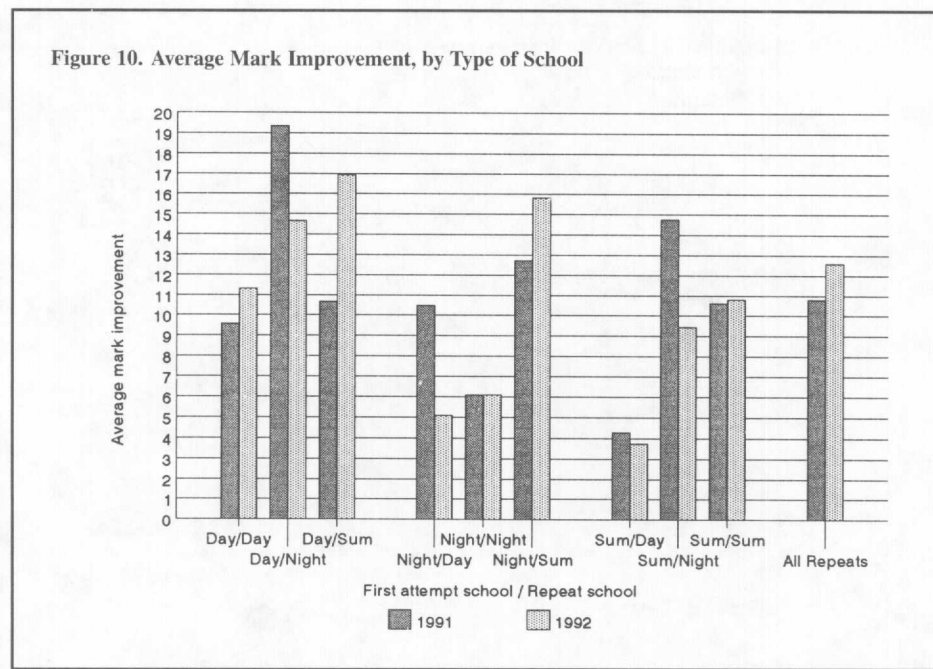
Figure 9(b). Distribution of Marks for Repeaters and Nonrepeaters (1992)



in 18 OAC subjects and displayed a higher frequency of repetitions in 14 of these subjects. However, although males tended to repeat subjects in which they received lower marks more often than females did, the average first-attempt marks for male repeaters in those subjects are not necessarily lower than the corresponding average marks for female repeaters.

We used the data to determine whether the perception that marks awarded in night and summer school are generally higher than in day schools by comparing the average improvement in marks according to the type of school in which a course is first attempted and the school in which

that course is repeated. The results, reported in Figure 10, reveal that there does appear to be some evidence that day students who repeat in night or summer school tend to achieve better-than-average results. However, the same may be the case when a course initially completed in a night school is repeated in summer and vice versa. Furthermore, these observations are not equivalent to stating that marks in night school and summer school are, in general, higher than those awarded in day schools. For example, the average mark for all courses completed in day schools by the members of the 1991 cohort was 72.5, whereas the averages for courses they completed in night school and summer school



were 72.6 and 72.7, respectively. King and Peirt (1994, pp. 28–29) have also noted that although 60% of teachers in a survey agreed with the statement that “evaluation in summer school courses is more lenient than the same courses in regular day school,” the marks distributions in five OAC subjects (English, chemistry, physics, calculus and algebra) were remarkably consistent for day, night, and summer schools.

Finally, the data in this study did not reveal any grade inflation, let alone the galloping inflation that many members of the education community believe has occurred. Between 1991 and 1994, the average OAC mark rose modestly from 72.8 to 73.5; marks in individual subjects (such as calculus) rose by as much as 2 percentage points, and marks in other subjects (such as geography) declined. Furthermore, repeating did not contribute appreciably to this modest escalation in grades, contradicting King and Peirt’s (1994) assertion that “the combination of inflated marks and the repetition of courses contributes to a steady increase in the average secondary school marks of students entering university,” an allegation all the more unfounded when one considers that repeaters are, by and large, in the marginal group of university applicants given their below-average marks.

## Conclusion

The main findings of this article can be summarized as follows:

1. Between 20% and 25% of secondary school graduates repeat one or more subjects, the majority repeat a single OAC, and most repeaters limit their efforts to no more than three subjects. Males consistently repeat more fre-

quently than females do, and the overwhelming majority of students of both genders who repeat a given subject do so once. Although it may be desirable to restrict the number of times a student is allowed to repeat any one subject, such a regulation would not have any significant impact unless repeating is banned.

2. Not unexpectedly, repeating OACs is undertaken primarily by university-bound students who complete six or more distinct OAC subjects and attempt to raise their marks through a combination of two strategies: (a) taking more than the minimum number of courses required for university eligibility and (b) repeating some subjects.

3. Taking into account the proportion of repeaters and the frequency of repeated courses, approximately 6% of teaching resources are devoted to instruct repeaters. There does not appear to be a rising trend in this statistic, but it needs to be monitored, and more analysis is required to determine whether such a figure is within acceptable norms.

4. OAC repeat courses are highly concentrated in eight subjects, including three mathematics and three science courses, together with English and accounting. Between 7% and 13% of students who complete these subjects successfully repeat them; other subjects are repeated by fewer than 4% of those who take them. The ranking of OAC subjects in terms of the incidence of repeated courses does not reflect in their popularity, but is more closely related to the average marks in the courses. Gender differentials in frequency of repeats also appear to be linked to gender differences in marks.

5. Repeaters start out with lower marks than the larger student population. Through repeating, students raise their marks to the average level in the population.

6. Finally, there is no evidence of grade inflation or a

basis for concluding that repeating has a perceptible impact on average marks. These findings are in sharp contrast to a conviction widely held within the educational community, but one not supported by any evidence.

Despite these findings, the policy of allowing students to repeat subjects they have successfully completed needs to be monitored. It may be appropriate to regulate the conditions under which repeating is allowed, for example, to discourage students who achieve higher-than-average marks in their first attempt at repeating. However, such regulations should be based on pedagogical and equity considerations rather than strictly financial ones: Restricting repeated courses within public schools to achieve savings may benefit those who can afford to repeat in private college prep institutions. As previously noted, virtually no students take any subject three or more times, so such cases need not raise much concern.

#### NOTES

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1. These consisted of five English, one French, two mathematics, one geography, one history, one senior social science, one arts, one physical education, and one business or technology courses.

2. The challenge is less problematic for students enrolled in schools where two successive levels in a subject can be completed in the same school year.

3. Most university programs require the English OAC, and several programs have additional prerequisites that must be included among the six. For example, the commerce program at the University of Toronto requires applicants to have completed the calculus OAC.

4. Universities offer conditional admission in the spring, and the condition until recently has been a final grade average of at least 60% in six OACs—well below the minimum needed to secure an offer of admission, thereby acting as a virtually nonbinding constraint.

5. In Figure 5 and elsewhere in this article, we have used the Ministry of Education *common course codes*. For the 20 OACs included in this study, the codes include the following:

AVI	= Visual Arts
BAC	= Accounting
BEC	= Economics
BLW	= Law
BOA	= Administrative Studies
ELI	= English Literature
ENG	= English
EWC	= Writers' Craft
FSF	= French
GCE	= Canada: Environment & Economy
GWJ	= Geography: World Issues
HCN	= Canada: North Am. Perspectives
HWM	= Modern Western Civilization
MAG	= Algebra & Geometry
MCA	= Calculus
MFN	= Finite Mathematics
NFO	= Families in Canadian Society
SBI	= Biology
SCH	= Chemistry
SPH	= Physics

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