

*David Alexander*

## **Canadian Higher Education: A Review of the Graham Royal Commission**

A royal commission is commonly a bellwether of change. A successful commissioner assembles evidence and organises arguments in support of policies to which the government is inclined. John Graham's massive *Royal Commission on Education, Public Service and Provincial-Municipal Relations* includes a volume on Nova Scotia Universities.<sup>1</sup> Unlike most events having an origin in the far eastern fogs, Graham's study should not be ignored by other Canadians. He is a respected economist and by no means the typical barbarian gleefully cutting a way through academic groves. His findings on higher education are likely to be warmly received by the public and governments. His recommendations on financing Nova Scotia universities are contingent upon their concurrent adoption in the other provinces. Graham believes that universities are essential public institutions and that "they should be well supported", although not as generously as in the past. He defines their functions as the traditional triad of teaching, preservation of knowledge, and research. He believes universities should be substantially different from high schools and not simply an extension to secondary education, and that they should not be as vocationally oriented as other post-secondary institutions.<sup>2</sup> For those dismayed by the trends of the 1960s there is comfort in Graham's view that these distinctions should become more pronounced and that "Universities are not intended to be suitable for all high school graduates..."<sup>3</sup> Those who can profit from a true university are "students who are both able to undertake higher intellectual study and are interested in such studies" and those requiring academic preparation for "the intellectually demanding professions".<sup>4</sup> He is concerned that universities use public funds effectively and in accordance with their purposes as

institutions of higher learning. He believes they can best assure public accountability by "maintenance of standards consistent with their function of providing the means for highly demanding intellectual study...."<sup>5</sup> This far in his discussion all academic heads will nod with agreement.

Like many academics, Graham believes standards have fallen under the pressure of the numbers of students entering university. Too many, he feels, come to university to satisfy society's misplaced emphasis on "credentials". Governments, in the past, have willingly provided funds to accommodate the press in obedience to spurious calculations showing that such investments generated high social rates of return, thus making education an acceptable use of public funds, and high private rates of return making access to education an instrument for reducing inequalities.

Graham is hardly original today in attacking both of these motives for stuffing universities with unsuitable and unreceptive scholars. With respect to "credentials" he notes that "for many years, only universities gave out acceptable credentials" and "degrees were required even when the academic study they represented was totally unrelated to the job sought".<sup>6</sup> Disputing what the university credential was supposed to represent to an employer — a bundle of cognitive and affective skills — Graham reports recent studies that indicate university graduates as being no better employees than those lacking the degree. Yet a premium is paid for the labour of the graduate, and he objects "to society's preoccupation with educational certificates as symbols of merit" and "the resulting inequity and discrimination" against those lacking the credential.<sup>7</sup> That is, he concludes that the higher private rate of return to university graduates is attributable to ascriptive characteristics of the graduate. Graham does not, of course, rule out the utility of some university credentials. As a good North American he expresses suitable horror at the prospect of medical treatment from someone lacking an MD. Presumably he would feel similarly about Halifax bridges constructed by non-credentialed engineers. But the common-garden BA/BSc apparently does not possess anything which is economically or technically superior to what can be achieved through learning-by-doing. It should not be obligatory, for example, for a teacher to produce minimum academic credentials.

Graham acknowledges that education has made some contribution to

economic growth. But "economic arguments in favour of education so prevalent and widely accepted a decade ago, are now recognized to have been greatly overstated. The large increases in educational spending in recent years have not produced the expected economic returns to society".<sup>8</sup> The measured returns to investment in post-secondary education are probably in large part "a measure of the quasi-rents accruing to members of professions for which entry has been artificially restricted" and "very high social returns are to be gained by the removal of these restrictions on entry to trades and professions".<sup>9</sup>

A conclusion which follows from this analysis is that we should begin to reverse the system of increasing compulsory education. Graham agrees that free elementary education is justified to ensure that all citizens become literate, "learn to discriminate between what is of value and what is not and develop at least a minimum mathematical ability".<sup>10</sup> It is remarkable that he thinks the mathematical ability derived from elementary education only minimal while the literary and critical abilities sufficient; but, in any case, it paves the road for recommendations on secondary schooling. This should be freely available to those who want it, but it should be optional "as there is no compelling public interest to ensure that all persons receive a senior school education..."<sup>11</sup> One of those compelling interests, one might note, was to protect children from themselves, their parents and employers who were indifferent or ignorant of the benefits (in the widest sense) of education, and resented the foregone earnings and direct costs of delaying their entry into the labour market.

After such short shrift to the private and social benefits of elementary and secondary education, Graham's conclusions on universities are predictable. Universities offer higher education to a minority, and if it is a worthwhile investment those who acquire it "should be expected to pay for it". The function of government, he says, "is not to pay all or most of students' costs, but to ensure that they do not suffer from restrictions in the capital market, which normally prevent borrowing against future earnings".<sup>12</sup> Most people believe that government's responsibilities could be a little bit wider than that.

It is a pivot of western economics that most matters in the world would be better if the price system operated perfectly in labour, capital and other markets. This is not a trivial concern or economists would not labour so lovingly over its analysis; but addicts sometimes become

indecently fanatical on the subject. It is arguable that students "the primary though not the sole beneficiaries of a university education, should be bearing a greater proportion of the costs of their education";<sup>13</sup> but it is breathtaking, in the absence of supporting analysis, to hear that the cost of instruction in Arts and Science faculties is 80% of their total costs.<sup>14</sup> For the average university student Graham recommends an increase in tuition of 150% or, at Dalhousie, an increase in Arts and Science tuition fees from \$700 to \$1,500 a year.

Graham is confident that in the Athens of the East (or, one suspects, that part of it which is Dalhousie) such an increase in fees would have no effect on enrolment, provided other provincial governments adopted the same pricing policy.<sup>15</sup> But even if enrolments fell by a third, Graham doubts if such a collapse would have any effect on productivity, thereby implying that productivity is the only acceptable rationale for subsidizing higher education. But even if productivity did decline as a function of a reduced flow of graduates, this would still be no justification for subsidizing students since their higher incomes would be reward enough for their higher productivity.<sup>16</sup> Nonetheless, two potential imperfections require some sorting out: first, the structure of private capital markets could hinder access to education among worthy but impecunious students; and secondly, society might gain some benefits from the presence of graduates who have paid all the costs of their educations, which would be inequitable. Graham resolves these difficulties by advocating an expanded student loan programme. Poor students should be provided with partial grants to ensure that their total debt for an undergraduate education is not significantly higher than that incurred by the average student. For all students taking out loans, the first five years following study should be interest free, and this public subsidy should tidy up the possibility that some residual and unpaid gain to society accrues from their education. Loans should be forgiven to those students pursuing programmes where there is a manpower shortage, and grants should be provided to the majority of students in their first year to reduce the initial disincentive to higher education.<sup>17</sup> With the price system restored, universities will assume the pure state of a community of scholars; most credential-seekers will fork-up some fraction of their subsidized gains; the offensive transfer of income from the working class to the children of the middle- and

upper-classes will be muted; and the Treasury of Nova Scotia and other provinces will be much relieved. It is entirely characteristic for Ontario to seek "more scholar for the dollar" and in the threadbare East "more dollars from the scholar".

## II

Graham's analysis can be summarized into three points: (1) that more students are acquiring university (and secondary) education than can benefit from it, thereby generating private and social disutilities; (2) that the private returns to graduates exceeds the social returns, generating an unwarranted transfer of incomes among individuals and social classes as well as inefficiencies in private and public investment; and (3) that by reducing the subsidy to students and providing an expanded loan programme to overcome imperfections in capital markets, private and social benefits and costs will be brought closer to equality. Since implementation of the conclusion would have significant effects on individuals, universities and society, each element in the argument requires scrutiny.

His feeling that university expansion has debased the currency and deflected institutions from their legitimate purposes is widely shared among academics and the public, although that does not make it true. It is important to realise that Graham's views on this matter are not grounded on an economic argument. He is not saying that the marginal private or social returns from educating a larger number of students is lower than the marginal private and social costs, with the implication that if the society became richer more students could be accommodated. Rather, he is arguing that there is some fixed and small share of the population which is intellectually able and inclined to benefit from university study. He is not helpful, however, in indicating how to measure intellectual suitability. He does not enquire into the origins, social or otherwise, of an inclination to academic study. He does not tell us whether this minority will be the same fraction of the population in Newfoundland as it is in British Columbia, and if not why not. He offers no evidence to demonstrate that the quality of university graduates is now lower than it once was, which has nothing to do with demand for them in the labour market. But even if his impressions are correct on all these points, he does not debate whether the fault lies

with the intrinsic unsuitability of the additional students or the failure of universities to adjust their structures and methods to new circumstances. This question is rather important, for the debasement about which he complains has coincided with a major influx of students from the working class and, if one is concerned about inequalities, it is rather important to be sure that it is the students and not the institution that is at fault. If he had concluded that it was necessary to have an I.Q. of 125 and some bundle of affective and ascriptive characteristics, then at least there would be something concrete to argue. As it is, Graham's grumblings about dull and uninterested students represents no advance over what can be heard (and always will be) in faculty lounges across the country. We still do not know whether 2%, 5%, or 50% of Canadians could benefit from University education, putting aside for the time the cost/benefit analysis which affects how many can be accommodated. Graham's first point is the most weakly documented and argued. His unsupported feeling that we are educating too many students, however, does not directly affect his second point that we are educating more than we can afford and distributing the costs and benefits inequitably. But it does prejudice the selection of indices that he advances to reach this conclusion.

Graham believes and cites studies in his support that the high private rates of return to investment in education reflect the effects of "certification" and not the higher productivity of the formally educated worker. He does not explain why employers continue to be fooled into paying a premium for university graduates when they are simply paying for certificates rather than lower training costs.<sup>18</sup> He seems to believe that an employer's training costs are roughly the same for a formally educated worker and one who is not. He also appears to subscribe to a theory of the labour market where employee selection is based on social and cultural queuing rather than marginal products.<sup>19</sup> All of this is interesting but is irrelevant to a discussion of whether we are educating too many or too few and determining the distribution of its costs. If higher earnings to graduates reflect marginal productivities, then it does open for discussion how the costs of that education are distributed between the individual and the society, but not whether at any time there are too many or too few receiving such education. If the higher earnings reflect imperfections in the labour market arising out of "credentialism", then it suggests action to obliterate such restrictions,

but still does not tell us how to distribute the costs among those who educate or how many to educate.

Whether earnings reflect marginal productivities or credentials is not agreed among those devoted to the subject,<sup>20</sup> but Graham's decision that it reflects the latter and his apparent despair that it cannot be rooted out of society spur him to make the piper pay the tune. But the heart of his argument about the number of university students and how the costs of their education should be distributed lies in his discussion of private and social rates of return.

A precious few lie awake at night worrying about economic cost-benefit analysis, but rather more should, as important public decisions are made in its name.<sup>21</sup> It is a technique for computing the stream of net benefits that accrue through time from an investment (whether in machines or people) and, most commonly, stating this in terms of discounted present value or an internal rate of return. The merits of the existing or intended investment can then be compared with alternative investment opportunities. Practitioners of the art attempt to quantify as many of the costs and benefits as they can but readily admit that many economic and non-economic effects of an investment are omitted. This, of course, is no reason to object to the quantification of any of the benefits and costs; but in the case of education it is like that a large number escape the count. An additional confusion is that while private rates of return to education are usually computed as the after-tax net earnings differentials to various age-education cohorts, confusion arises over the "social" rate of return to which the private rate is compared in arguing for some private and public distribution of costs. The social rate of return is simply derived from the private rate by allowing for the public and private costs incurred and adding in the earnings which are taxed away from the individual receiving the education. The social rate, therefore, is like the private rate, a rather narrow economic calculation. The magnitude of the unquantified costs and benefits remains unknown, as well as its distribution between the individual and the society, including future generations.

Graham cites existing studies on rates of return to education and does not offer any new estimates. He argues that the weight of the studies shows that social rates of return are low (and probably always have been, despite earlier optimistic estimates) and the private rates are falling (Ph.D. cab drivers, etc.) although still higher than the social

returns. This reportage provides the base upon which he encourages less university education and the assumption by students of the full cost of their instruction.

These conclusions would warrant careful attention if there was good reason to accept that rate of return calculations measured what they purported to measure — the flow of economic benefits to the individual and society.<sup>22</sup> There is far more doubt about this than Graham indicates. Lester Thurow has pointed out that rate of return analysis requires prior determination of the production function which, currently, has not been established. Existing calculations may be completely meaningless and “there is a need to be much more agnostic about the economic returns to education than current economic analysis would indicate”.<sup>23</sup> In a recent very thorough and objective review of both sides of the argument, several American economists conclude:

...as yet it cannot be claimed with assurance that the truth has been found. Estimates have been made, to be sure, but it is far from certain that rates of return to ‘investment in education’ have been identified. Can anything be done with the ratios calculated? Certainly not even their most ardent advocates would suggest that they can provide a guide to the formulation of social policy for college education. The few attempts at estimating social rates of return suffer from even more drawbacks than the estimates of private rates of return. The latter have so many doubts and so much variance associated with them that we cannot have any substantial degree of assurance that they reflect prices to which individuals respond. So the calculated private rates are not reliable guides to descriptive analysis either.<sup>24</sup>

One realises that royal commissioners are obliged to advocate something; but governments should at least be aware of the fragility of evidence and argumentation upon which conclusions are reached.

It might be argued that even if we do not have certain measures of private and social rates of return to education, and even if there are economic and non-economic costs and benefits of unknown magnitude and distribution, that nonetheless the individual should pay the full costs of his education. This could be advanced on the grounds that the balance of probabilities is that the individual gains more than the society. It could also be said that if there is doubt about the distribution of benefits and costs it is wiser for governments to require the individual to accept the burden of risk. This is an arguable position and is what Graham’s is reduced to, but it should be recognized as no more “scientific” or objective than its very opposite.



Graham's recommendations on university finance are extreme ones. In some countries, such as Britain, the costs of tuition and a large share of student maintenance have been borne by the public; in Canada the student has always paid a much higher share of direct costs and foregone earnings. Graham would like to see this state assistance reduced still further; but since few students could find the \$15,000 or more required to complete a B.A. or B.Sc. (ignoring foregone earnings) he is obliged to recommend expanded student loans. This has an illusion of generosity. Poor students would receive some grant during their years of study in order that their total debt does not exceed the average. All students would have part of their first year costs subsidized. While loan repayments would begin a year following completion of full time studies, interest payments would not begin until after five years. The interest rate charged would only be a quarter of one per cent above the government's borrowing costs (which in some provinces would be substantial). But on closer consideration the programme is not so generous. Graham recommends that the maximum repayment period be no more than twenty years. This would be a serious burden for young families, especially if both husband and wife were graduates, for their combined repayments would be close to the costs of mortgaging a home. It is also striking that he does not recommend that the debt be adjusted to the actual earnings of the graduate — that is, relative to the private benefits that accrue from the education. It is still more strange that he recommends what is virtually a tuition and maintenance grant for those students who enter programmes which the government determines to be social priorities — in other words, free state education for vocational programmes where, one would think, private rates of return and ability to pay would be highest and shortage of student recruits the lowest. This recommendation is presumably based on some argument that market signals to students do not operate satisfactorily, but it will disturb many that an individual who receives high earnings from his education (either as returns to productivity or certification) should also have it paid for him, while one whose education has poor private returns is obliged to pay most of the costs. On balance, Graham's aid programme is conservative, and given the uncertainties of private returns to education arising from the unknown market value of a course of study, the vagaries of one's future, and the uncertain trends of the business cycle,

it will be a bold student who pursues on Graham's terms any study but the most vocational and predictable in its rewards.

It is disappointing that Graham has not argued through more of the implications of shifting additional education costs onto students.<sup>25</sup> An obvious problem is establishing the actual costs of instruction students should pay. He thinks this can be done reasonably well, but that is not good enough. Even the dullest undergraduate would demand a careful accounting of the suggestion that 80%, rather than 78.4%, of total costs in Arts and Science are attributable to instruction. Anyone familiar with universities must be aware of the ultimately arbitrary assignment of costs among different functions, rather like the arbitrary assignment of prices to the various petroleum products derived from the process of refining crude oil. Students will reasonably demand that any doubts are decided in their favour, and there will be a never-ending quarrel between students and faculty with respect to the proper allocation of a professor's time. It is likely that research effort and the collegial atmosphere which Graham values will be a casualty of such an environment.

Despite the prediction that enrolments in Nova Scotia universities would not decline with a 150% increase in fees, a more reasonable prediction is that, outside the Athens of the East, there would be a substantial decline in enrolment and a decrease in the number of students who complete degree programmes. In a province such as Newfoundland, where it is more difficult to shelter behind middle-class blinkers, it is abundantly apparent that enrolment is highly elastic with respect to direct costs to the student, foregone earnings and future employment prospects. Graham might argue that the true university student who should be encouraged is one whose demand for education is inelastic with respect to such variables, and hence there is no net private or social loss from discouraging the others. But this, too, is only a subjective opinion.

Graham is sensitive to the charge that his recommendations would discriminate against children from the working class. Accordingly he recommends that they receive grants to equalize their total costs with that of the average student. It is obvious, nonetheless, that there would be a strong bias against students from poor families. The student from a middle and upper class family, or a student from an urban centre where a university is located, bears fewer direct costs of education than his

working class or rural fellow by virtue of the subsidies that his family can provide. The real and *perceived* costs of higher education will be enormous to a student from a poor or a rural family, and for many of these students mortgaging their future to the sum of \$15,000 would be a staggering act of foolishness.

A further area of discrimination will be against women. Under present circumstances, earnings for women are lower than for men with equal qualifications. Marriage, child bearing and rearing all limit employment prospects during those years when the loan must be repaid. For women of any class a university education will be a more burdensome act of investment or consumption than for a male counterpart, and under a Graham financial regime the working class female student will be an even rarer bird than she is today.

By reducing the subsidy which governments provide to universities and their students, Graham's proposals might modify some of the irritations which currently exist among universities, the government and the public. But the cure of this perennial ailment will be at the expense of greater inter- and intra-university conflict and a lower average level of service to the individual and the community. If a larger share of costs is borne by students, and if the student demand curve is elastic with respect to price, there will inevitably be greater competition for students among universities and within faculties and departments of a university.<sup>26</sup> The logical conclusion of such competition would be disguised subsidies to students out of research budgets and declining average quality of education among all universities. That is, even more marked class divisions would develop among universities than exist now as each specialized into a market: elite universities (such as Dalhousie) would cater to an upper class where price was a matter of relative indifference; others would aim at a lower cost instruction for the middle and working classes; the most marginal would become near degree mills offering certificates of poor quality at a very low cost.

Within universities, faculties and departments will be in competition for students even more than they are now. The costs of various degree programmes would have to be adjusted much more to reflect the expected private rate of return to the student rather than the costs required adequately to present the subject. A classics department, to take the usual unfortunante victim of such arguments, would be required to assign very cheap textbooks, eschew expensive audio-visual tech-

niques and subsidized student visits to Greece and Rome. But mainly it would have to reduce the wages of its professors. However rational such a world might appear to a fanatical neoclassical economist, it would stand in marked contrast to the understanding in universities today that the costs of instruction, vocational or not, are priced on average rather than marginal terms, and that a professorial master of classical literature should be paid much the same as a professor of economics or business advertising. If the example seems extreme, so is the reasoning that logically ends up in this example.

### III

John Graham is concerned that universities have expanded past the point where they are useful to society and many of their students.<sup>27</sup> He may be right, but he has not proven his case. There is no objective way of determining how many can profit from academic education or exactly how to distribute costs among students and the public. Like Goering, who reached for a gun whenever he heard the word "culture", the economist reaches for the price whenever he suspects resources are misallocated. Application of the price system in the way Graham suggests would solve few if any of the problems he perceives and would create the additional ones indicated. His concern that those who have not received the direct benefits of education are nonetheless obliged to share its direct costs is not even guaranteed a solution by forcing students to pay more. If employers continue to perceive a value in graduates, or some of them, they may pay part of the education loan as a fringe benefit, thereby shifting the costs back onto other members of the labour force.

During the last century, western societies have increased the availability of academic education and muted some of the inequalities to its access that arise from the distribution of income and wealth. But until recent years, this extension of subsidized education was based not on some calculation of economic costs and benefits, but a woolly and humanistic belief that society would be better if as many people as possible had some disciplined exposure to science and the arts. The "sources of economic growth" arguments of the 1950s and '60s polluted this humanistic vision and cultivated cynicism among professors, students, governments and the public. If it encouraged an expansion of enrolments more rapid than we can afford, and distorted

the motives for choice among some students, that is no reason now, in the name of intellectual exclusivity and public equity, to seize the price system as the instrument for correcting the faults. Wondrous as it may seem, Canada has not been as generous to students as many countries: at best we have occupied a conservative middle way in assigning the costs of education. There is a myriad of public expenditures for which the taxpayer does not receive proportionate benefits, including medical care, defence expenditures in Halifax, public support of the arts, the National Museum of Man — the list is endless. If it is necessary, universities have fairer means of rationing access to resources than those proposed by Graham, and hopefully in a social and political context which restores something of the vision of education as precious in itself and worthy of collective support. John Graham seems to share this goal, but his recommendations are the kind that end in making children pay admission to museums.

## FOOTNOTES

1. Halifax, Queen's Printer, 1974, Vol. III, Chs. 61-65.
2. *Ibid.*, p. 61-2.
3. *Ibid.*, p. 61-3.
4. *Ibid.*, p. 62-21.
5. *loc. cit.*
6. *Ibid.*, p. 62-221.
7. *Ibid.*, pp. 62-26/27.
8. *Ibid.*, p. 62-23.
9. *Ibid.*, p. 62-48.
10. *Ibid.*, p. 64-44.
11. *loc. cit.*
12. *Ibid.*, pp. 64-44/45.
13. *Ibid.*, p. 64-42.
14. *Ibid.*, p. 64-51.
15. *loc. cit.*
16. *Ibid.*, p. 64-52. As we shall see there are some contradictions here, for elsewhere Graham recommends subsidies for students entering certain useful programmes, where, presumably, private and social rates of return are high.
17. *Ibid.*, p. 64-60.
18. For discussion of this issue, see Herbert Gintis, "Education, Technology and the Characteristics of Worker Productivity", *American Economic Review*, LXL, 2, 1971, pp. 266-279.
19. Lester C. Thurow, "Measuring the Economic Benefits of Education", *Higher Education and the Labor Market*, Margaret S. Gordon, ed. (New York, 1974).
20. See Thurow, *Ibid.*
21. For an introduction to the subject see D.W. Pearce, *Cost-Benefit Analysis* (London, 1971), and for the clearest exposition of its use in education, Mark Blaug, "The Rate of Return on Investment in Education in Great Britain", *The Manchester School*, Vol. XXXIII, 3, 1965. Fanatics might read Gary S. Becker, *Human Capital* (New York, 1964).

22. The conclusions would warrant attention but not necessarily acceptance since any policy decision should also consider the economic and non-economic costs and benefits which are not included in the rate of return calculations.
23. Thurow, *op. cit.*, p. 415.
24. Richard S. Eckaus et. al., "An Appraisal of the Calculations of Rates of Return to Higher Education", in Gordon, *op. cit.*, pp. 368-369.
25. A review of some of the consequences that flow from alternative methods of financing are suggested in Robert W. Hartman, "Financing the Opportunity to Enter the 'Educated Labour Market'", in Gordon, *op. cit.*
26. Graham seems to recognise that the demand curve is elastic since he notes that Nova Scotia could not introduce such a scheme without the other provinces doing so. Curiously, however, his fear is that universities will overcharge students rather than the greater likelihood that vigorous price competition and product differentiation will emerge.
27. Lurking throughout this and similar discussions is the fear that educational coinage is debased when it has entered too many pockets -- which is the academics own version of credentialism. Exponents of this fear will gain support from Mark Blaug et. al., *The Causes of Graduate Unemployment in India* (London, 1969).