education; but he does provide the criteria for developing a desirable and probably necessary symbiosis.

A range of additional issues of topical concern is examined: the fostering of morality in the graduate enterprise, and the need "to go beyond competence to integrity"; the too frequent ignoring, especially in the social sciences and humanities, of the primacy of the research role for graduate faculty; the need to find and accept alternatives to the traditional academic career for the Ph.D. recipient — "and the faculty of the graduate school must welcome such alternatives for their students less grudgingly than they have tended to do." (p. 76). And of course there is the obligatory assessment of the relationships among elitism, equalitarianism and equality.

Although he invests the graduate school with a heady mandate ("custodian of scholarly quality and guardian of specialized excellence"), he does leave some major areas of practicality unexamined. The study does not indicate, for example, how the limited authority of a graduate school — a seemingly endemic result of the balkanization of the university and the heterogeneity of scholarship — can effect the fundamental changes in attitude and organization for which the author calls. Nonetheless, the work remains a fundamentally important piece and obligatory reading for anyone seriously sharing Pelikan's concern with the survival of scholarship. "...the profound crisis in which the universities and graduate schools are caught demonstrates the need to overhaul graduate education before it is too late. For mindless retrenchment is even more dangerous than mindless growth" (p. 77).

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REFERENCE


This OISE study examines the impact and implications of financial restraint for Canadian Universities in the 1980's. The breadth of its approach and the perception of its analysis and discussion make it an important work for academics, bureaucrats and amici curiae of higher education in Canada. To produce a significant contribution on this theme is not an easy task for, as the authors correctly point out:

Advances in this field have been retarded by a dearth of relevant theories and conceptual frameworks, weaknesses of data, absence of useful methodological tools, and, perhaps, above all, insignificant research effort relative to the magnitude of complexity of the task at hand.
In such circumstances Skolnik and Rowen incorporate five approaches in their examination.

**One:** a survey and analysis of the literature on financial restraint in higher education and particularly a discussion of its possible causes and impact upon academic quality. Two principal findings emerge:

- There has been no substantive piece of work which attempts to present a causal analysis of the problems of decline in higher education except insofar as one is willing to accept declines in enrolment or in government grants as a satisfactory causal explanation.

- We know of no studies which have demonstrated a positive relationship between financial conditions of universities and their academic conditions, i.e., that as financial conditions deteriorate, so too do academic conditions.

**Two:** an examination of trends in the income and expenditure patterns of Canadian universities by province, for the period 1974 to 1982. Several generalizations are produced about such factors as the relation between changes in grant income and gross provincial product or gross government expenditures, the variation in university expenditure patterns among major categories, etc. Incomplete data, however, precluded any analysis of any change in the balance among teaching, research and service in relation to variation in resources. In addition, because no data exist on the outcomes or measures of the quality of these university activities, no findings could be made on how such measures might relate to variation in finances.

**Three:** a survey of Canadian university presidents’ and deans’ perceptions of the impact of financial restraint upon the institutions. Curiously, the respondents appear to perceive quality in general to have improved over the past decade, and, where quality has declined, a majority apparently do not believe this to have been primarily the result of financial restraint.

The authors note that this interesting paradox, i.e., perceived improvement of quality in association with decreasing financial resources, echoes similar findings in U.S. studies.

**Four:** a case study of university funding in Ontario (a province having experienced up to 1982 the greatest financial restraint). In this approach based on the well-documented Ontario situation the authors clearly analyze alternative methods in current use for assessing the financial requirements of university education. Moreover their contribution to an understanding of this elusive quest—the bane of every provincial government and higher education intermediary—is enhanced by their postulating certain key questions to guide such inquiries including:

- Is it possible to determine within a reasonable range the total funding which the universities need in order to carry out their responsibility?

- Can a stable and predictable relationship be estimated between real expenditure per FTE and indicators of outcomes of university education?
As governments annually contemplate resource allocations, these questions are good ones to work with in arriving at some budgetary decisions in higher education, although not necessarily all, as will be discussed in the concluding comments.

Five: a discussion of a series of suggestions for future action based upon the study data and the authors’ experience. This section sets out possible further steps in terms of realistic expectations for their various prospects of success in understanding financial restraint in Canadian universities. Mission diversification, faculty morale and development, private funding and review of role and purpose of the university are discussed.

In summary, the plain facts of the issue of the public funding of universities are clearly delineated by the authors:

1) the university community has not been very effective in providing evidence on quality or outcomes, and particularly upon the extent to which reduction in resources impairs the ability of universities to maintain quality and to achieve valued societal and individual outcomes.

and

2) universities have not been able to mobilize sufficient public support for their cause to influence government to change their funding priorities.

It appears that the universities have failed in providing evidence on quality or outcomes because they do not possess enough of it to be marshalled in any convincing way. The absence of a better understanding of the processes by which quality educational outcomes are achieved by universities does not reflect well on the universities. It also exposes them to criticism and polemics externally from government and internally from faculty (e.g. The Great Brain Robbery).

Equally problematical, however, is the fact that there is no commonly accepted ground to establish the “costs” of university programs as opposed to the “expenditures” on such programs. Harold Bowen’s work (referred to by Skolnick & Rowen) has demonstrated this point and tried to account for it with a revenue theory of cost which essentially hypothesizes that universities raise all the money they can and spend all they raise. Accordingly, the amount of revenue available drives the “costs” or more accurately the expenditures of any given program.

When this circumstance is combined with the notion that there is virtually no end to the legitimate academic pursuits which universities could undertake if they had the money to support them, one has, in the modern university, a theoretically unrestrained consumer of public funds. As it is unlikely that many universities will voluntarily circumscribe their activities, nor would one legitimately expect them to do so if they are true to their mission to pursue knowledge in all fields of intellectual endeavour, it appears that only some externally imposed constraints will set the limits of the scope of any particular higher education system. The critical question, however, is at what level is the constraint to be set? In the absence of an acceptable definitive set of criteria either regarding the reasonable limits for
intellectual endeavour or for making public choices, and with no clear evidence of the relation between expenditure and quality of university programs, there appears to be no "right" answer.

There is, however, no question that it is the prerogative and responsibility of the Government to determine answers on all such matters of public choice. The question of the appropriate level of financial support for universities ultimately is a political issue. Graham Allison’s *Essence of Decision* which proposes an analysis of decision-making utilizing a synthesis of bureaucratic and political approaches comes to mind as an example of a possibly useful way of understanding these related processes of government’s resource allocation decision-making and the financial behaviour of universities.

The Skolnick and Rowen study provides, in the Canadian context, a comprehensive foundation upon which to advance our knowledge of higher education financial behaviour. Indeed, the authors’ own wide ranging literature survey and discussion of further work thoughtfully provoke philosophical questions about higher education’s orientation to society which, as noted in the beginning of this review, could be of value to all those who maintain an interest in the development of higher education.

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This is a book pieced together from numerous data sources in an attempt to indicate to the reader an accurate relative wage for a large number of occupations. If you ever wanted to be able to quote what a public health inspector in Grand’Mere makes or what Gary Maddox of the Phillies makes, this is the book to get such useless information.

On the other hand, this book does have some very important information about what is expected in different occupations, training required and some useful information regarding salary levels.

For instance, there are data on median salaries for clerical and support positions in trust companies, banks, mean salaries for advertising executives by location and size of operation. Coupled with as useful information on incomes of professionals and tradespeople which are also found in this book, the book becomes a reference for student counselling offices in the nation’s elementary, secondary, and postsecondary schools.

For a student looking at this book to try to decide on a career there are a number of cautionary notes. Although the tables indicate whether data are median, mean, or starting salaries, the reader must be careful not to compare unlike data.