

# Inventory of Research Relevant to Higher Education in Canada

## Inventaire des Recherches sur l'Enseignement Supérieur au Canada

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The Association of Universities and Colleges of Canada gathers information on research work in progress or recently completed regarding higher education in Canada.

This information, including descriptions of unpublished dissertations, is regularly published in STOA under the headings indicated below.

- I — University Government / Administration universitaire
- II — University Finance / Finances universitaires
- III — University and the Economy / L'université et l'économie
- IV — Curriculum and Teaching / Programme d'études et enseignement
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- VIII — Research and Scholarship / Recherche et études

L'Association des Universités et Collèges du Canada a entrepris de recueillir des renseignements sur les recherches en cours ou récemment terminées sur l'enseignement supérieur au Canada.

Nous présenterons les renseignements, y compris des résumés de thèses, par sujets, à l'aide des rubriques suivantes.

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IX — Student and Student Services / L'étudiant et les services aux étudiants

X — The Professor and Conditions of work /

Le professeur et les conditions de travail

XI — Non-Degree Granting Institutions / Établissements qui ne confèrent pas de grades

Pour chaque projet les renseignements  
se lisent d'après le code suivant :

Each project's information is coded as  
follows :

1. Project Title / Titre du projet
2. Objectives / Buts
3. Method / Méthode
4. Principal investigator(s) / Responsable(s)
5. Other research associates / Autres chercheurs
6. Institution where project is located / Institution où le projet est réalisé
7. Supporting body / Subventionné par
8. Date of Commencement / Date du début
9. Date of Completion / Date de la fin
10. Results obtained from... / Les résultats obtenus de...  
to be published in... / publiés dans...
11. Dissertation or report abstract / Résumé de thèse ou rapport

I. — University Government

1. *Structures for University Government to the Beginning of the Twentieth Century.*
4. D. McCormack Smyth.
6. University of Toronto. Unpublished Ph. D. Thesis.
9. 1972.

11. In the summer of 1971 the Ontario Legislature gave final approval to a new Act for the government and administration of the University of Toronto. This new Act provided the University with a unicameral governing structure in place of the bicameral structure instituted seventy years earlier by the 1901 Act and confirmed and refined in the influential 1906 Act. This major change in the governmental arrangements of one of Canada's leading universities gives rise to an obvious question. Where do we find the origins of unicameral and bicameral structures for university government? While the literature on higher education is exceedingly rich no comprehensive report has been published, so far as can be determined, which examines the manner in which structures for university government have evolved in the Western world. The purpose of this thesis

was to examine the origins and evolution, to the beginning of the twentieth century, of unicameral and bicameral structures for university government in Great Britain, the United States and the English language sections of Canada.

The findings outlined in the thesis resulted from an examination of the charters and statutes of a number of universities and colleges, which adopted patterns of organization based on those which emerged at Paris and Oxford, from their origins to the turn of the twentieth century. The governing structures for the older English universities of Oxford and Cambridge, as established and modified during the medieval and post-Reformation period, were assessed as examples of medieval Catholic and later Anglican foundations. To gain information concerning post-Reformation non-Catholic non-Anglican institutions the governmental bases of Calvin's Academy at Geneva, the University of Leiden and the Town's College Edinburgh, later the University of Edinburgh, were investigated. The constitutions and statutes of the American colonial colleges and of representative colleges and universities which developed in the nineteenth century in the United States, Britain and Canada were studied. In addition to Oxford, Cambridge and Edinburgh, the British universities studied were London, Manchester and Birmingham. The American universities included in the study were Harvard, Yale, Michigan and Cornell. The Canadian foundations examined were Toronto, Victoria, Queen's, St. Michael's and Trinity.

While it is true that "the formal constitution of a university is no guide to the way it really runs" <sup>1</sup> it is through university charters and statutes that structures for university government are established. But the portion of a university constitution outlined in a charter often provides only a partial description of the governing structure. Thus it is essential to examine not only the provisions of the charters themselves but also the internal governmental relationships instituted by formal action of the governing bodies established by the charters.

In the University of Paris and the Universities of Oxford and Cambridge in the medieval period unicameral government developed through the adoption of the system of monastic organization and the operation of the practices of medieval guilds. The unicameral arrangement became characteristic of universities in the Catholic and later the Anglican tradition. The bicameral structure began to emerge in Northern Europe and Scotland in the post-Reformation period when non-academics were given a direct role in the government of newly established colleges and universities. A bicameral structure was established in 1575 for the University of Leiden, the first of the Dutch universities, consisting of a non-academic board of curators and an academic senate. At Edinburgh a bicameral arrangement, which was instituted in embryo when the college was chartered

1. Eric Ashby, *Any Person Any Study* (Berkeley, Cal.: The Carnegie Commission on Higher Education, 1971), 66.

in 1582 and which developed informally as the University of Edinburgh evolved, was finally established in law in 1858.

Colonial colleges in America were established with non-academic unicameral boards. However, with the emergence of American universities in the latter half of the nineteenth century and the gradual professionalization of the faculty informal bicameral arrangements had become characteristic of American universities by 1900. In legal terms, however, such universities continued to be governed by non-academic corporations. Similarly England's civic universities normally began with non-academic unicameral boards. But by 1903 bicameral government, established in law, replaced earlier unicameral arrangements in the new universities of Birmingham and Manchester. Canadian colleges in the Anglican and Catholic tradition, such as King's, Trinity and St. Michael's at Toronto, began and continued with unicameral systems whereas Canadian non-conformist colleges and universities, such as Victoria and Queen's, had bicameral structures from the outset.

The bicameral arrangement, which gave academics major control of educational policy and non-academics control of financial and administrative policy, had become the dominant form of governing structure for universities in America, Britain and Canada by the turn of the twentieth century. The British practice of including faculty representatives in the financial and administrative policy making body was not followed in Canada and the United States. This exclusion, in Canada and the United States, of academics from the senior financial governing body gave rise to a variety of criticisms and difficulties. Nonetheless the bicameral arrangement whether established formally or informally appeared to be working in a generally satisfactory manner.

By the turn of the twentieth century a number of basic principles of university government had gained widespread acceptance in Britain, America and Canada :

- Universities require systems of government which will provide the freedom scholars needs to contribute to the advancement of knowledge.
- In the overall interest of society universities require independence. Thus the power of the state in university affairs must be exercised with care.
- Universities require recognition and support from external authorities.
- Structures for university government must be acceptable to communities, whether public or private, which provide financial and/or other support.
- Those appointed or elected to senior governing bodies of universities must be representative of their constituencies, they must endeavour to contribute to the realization of the goals of the university, they must not serve partisan political interests or promote personal ends.
- Universities must be so governed that internal agreement is maintained.

- Policy making in universities requires an upward flow of decision making and not a downward flow. Decisions made by central governing bodies must be based on the needs of those at operating levels.
- Academic policies of universities must be developed primarily by academics. Financial policies must be designed to give effect to academic policies and to support and strengthen them.
- Universities benefit from the participation of knowledgeable non-academics in the determination of financial and administrative policies.

Taken together these principles constituted the rationale for structures for university government early in this century.

Demands for fundamental changes in the structure of society and of its institutions have grown during the twentieth century. Efforts to improve university government in recent years have reflected this widespread desire for change. But what are the criteria for determining whether any particular modification in the governmental structure of a university will be advantageous or disadvantageous? This study suggests that some of the problems encountered by present-day universities as they seek to deal with that question stem from lack of knowledge of their own history and lack of agreement concerning the functions of the university in society.

As beneficiaries of the experience of earlier epochs modern universities have a major responsibility to ensure that as far as possible they learn from their own history. Not to do so is perilous. Thus there is urgent need for continuing in-depth study of university government including the manner in which structures for university government can most effectively be modified. Collectively universities have a great fund of historical data on which to draw when fundamental changes in governing structures are being considered. But such data must be organized and synthesized in order that it can be used readily in the restructuring and renewal of the universities as they attempt to meet more adequately the demands they face in the late twentieth century.

#### I. — University Government

1. *Identifying the University's Goals. An Empirical Approach to the Inference and Classification of University Goals : The University of Alberta 1959-60 to 1968-69.*
4. Duncan S. Campbell.
6. University of Toronto. Unpublished Ph. D. Dissertation.
9. 1973.
10. University of Toronto Library.

11. Observation suggests that problems encountered by organizations are often a consequence of differences of opinion within the membership as to the ends to be achieved. How goals are perceived by the membership and, indeed, by the publics they serve, is an organizational ingredient of considerable significance.

Today, to a degree matched at no other time in this century, criticism of the university is voluble and sharp. Moreover, a common thread in that criticism from the public, students, and government alike is the assertion that universities must now re-define their goals.

Such a restatement of goals, one speculates, might be assisted if institutional goals of the immediate past were to be stated and classified. This is the intent of this study. It undertakes to develop an instrument for the classification of goals ; to identify the goals of a major Canadian institution, The University of Alberta, during the decade of the 1960s ; and to examine the congruence of goals elicited from selected evidence to a classification model postulated.

Clearly, a variety of factors, internal and external, will bear on the university institution's choice of goals. The nature of the external environment — ambiguous, complicated, and multi-faceted as it is — will have its impact. The various publics or constituencies served by the institution, among them alumni, government, other universities, and a wide variety of public and semi-public bodies, will affect its choice of goals. Within the institution, the character of the leadership afforded will have a shaping effect on goals. Organizational structure, whether inherited or newly developed, will have its bearing on goal selection as, indeed, will the factors of institutional size and the character of the faculty.

Curiously, while the literature of organization theory documents the extensive examination of the decision-making process, the nature of goals, their characteristics, and linkages among them receive little attention. Etzioni<sup>1</sup> distinguishes between "official" goals, those linked to the rhetoric of institutional purpose, and "real" goals, those substantiated by the application of funds or other resources. Buck<sup>2</sup> makes a similar distinction while characterizing goals as a reflection of various constraints on the organization. Perrow<sup>3</sup> poses five, broad goal categories which delineate society's requirements of the organization ; the "products" of the organization and the characteristics of those products ; "residual" goals which relate to the development of those subtle and submerged powers inherent in the organization ; and, finally, those goals which pertain to the functioning of the system. Bertram Gross<sup>4</sup> analyses these last in considerable detail, setting out two major subgroups of "system" goals, which relate on the one hand to performance and on the other to structure. Parsons,<sup>5</sup> with Selznick,<sup>6</sup> proposes "organizational imperatives" — the need to mobilize resources, to establish internal and external relationships, to achieve stability — which, together, provide a useful approach to goal differentiation. Out of these and like analyses is synthesized a model of organization goals embracing four principal and thirty-six secondary goal categories.

Evidence of goals over the decade of the sixties within The University of Alberta is provided from four principal sources: the public statements of the chief executive officer of the institution and its principal spokesman; those financial and other records of the institution which indicate how the University deployed its resources; the charter of the institution, noting its amendments to the structure of the institution over the period; and the significant decisions taken by the two principal governing bodies of the University, the Board of Governors and the General Faculties Council.

The eighty goals of the University during the decade adduced from this evidence are gathered in the four major categories. There are those which evidence the institution's efforts to shape its work in harmony with society's demands. The output goals of the institution — teaching, research, public service, and social criticism — comprise another category. The University did little to define the meaning of such goals, to describe their characteristics, or to specify the ends which it was intended should be achieved by each; essentially these product goals remained unanalyzed abstractions. But while the University appeared to give little emphasis to the characteristics of its products, it gave considerable attention to its manner of functioning. The evidence is considerable that detailed attention was given to clarifying goals of performance (essentially related to the acquisition and deployment of resources) and to goals of structure — those focussing on personnel, internal-external relationships, and management. The identification of the University's residual goals, those which characterize the University's "influence potential" within society, were found difficult to identify or to substantiate with concrete evidence.

While the theoretical underpinnings of this approach to the identification of university goals appear to be sound, the methodology employed in this study, until now, has remained untried. The penultimate chapter undertakes its evaluation. There are, obviously, hazards involved in the process of inferring goals from the data noted above. A five-point strategy was established with a view to minimizing error. An effort was made to ensure that the various arrays of data presented dealt essentially with a single matter. Care was taken that the goal statements formulated were direct in nature rather than derived and that they said no more than the data might support. Each goal statement was weighed in terms of its compatibility with others. Where this was possible, support for each of the goal statements was sought elsewhere from within the four categories of data examined and from the little external evidence available. And, finally, assurance was sought that the goal stated was, in fact, clearly intended by the institution.

The *raison d'être* for this study was the belief that the development of a clear statement of institutional goals of the immediate past would assist the institution to determine its goals for the immediate future. The concluding chapter sums up the advantages and otherwise of such a manifesto. Acknowledging the difficulties inherent in the process, the study concludes that it is imperative that the university attempt to re-define its goals if it is to be enabled to direct its own future, if it is to provide that

ideology to which its staff can rally, if it is to elicit internal cooperation, and if it is to establish for itself a clear base for subsequent assessment. All of these are directly related to public understanding and support. It is difficult not to accept John W. Gardner's observation that educational policy is shaped, after all, whether or not men give serious thought to it.

The university institution, in short, must chart a course for itself or anticipate a buffeting by shifting pressures or a future prescribed by external authority. It has, as Robert K. Merton advises, to avoid "the quest for a continually improved means to carelessly examined ends."

#### Notes

1. Amitai Etzioni, *Modern Organizations* (Englewood Cliffs, N.J. : Prentice-Hall Inc., 1964), p. 6.
2. Vernon E. Buck, "A Model for Viewing an Organization as a System of Constraints," *Approaches to Organizational Design*, ed. by James E. Thompson (Pittsburgh : University of Pittsburgh Press, 1966), pp. 107-108.
3. Charles Perrow, "The Analysis of Goals in Complex Organizations." *Readings in Organization Theory: A Behavioral Approach*, ed. by Walter A. Hill and Douglas Egan (Boston : Allyn and Bacon, Inc., 1967), p. 130.
4. Bertram M. Gross, *The Managing of Organizations*, Vols. 1 & 2 (New York : The Free Press of Glencoe, 1964).
5. Talcott Parsons, "Suggestions for a Sociological Approach to the Theory of Organizations—I," *Administrative Science Quarterly*, Vol. I (1956-57), pp. 69, 80.
6. Philip Selznick, "Foundations of the Theory of Organization," *A Sociological Reader on Complex Organizations*, ed. by Amitai Etzioni, p. 20.

#### IV — Curriculum and Teaching

1. *The Origins and Development of the PhD. Degree at the University of Toronto, 1871-1932.*
4. Peter N. Ross.
6. University of Toronto. Unpublished Ph. D. Thesis.
9. May 1972.
10. University of Toronto Library.
11. Little has been written about the development of graduate studies in Canada. No study comparable to Storr's *Graduate Beginnings in the United States* or Ryan's *Studies in Early Graduate Education* nor any book like Hawkins' *Pioneer: A History of Johns Hopkins University, 1874-79* has been undertaken in Canada. The chief exception is Thompson's *Graduate Education in the Sciences in Canadian Universities*, but even it is concerned mainly with the post-World War II period. Most histories of higher education in this country, whether general like McNab's *Development of Higher Education In*



*Ontario* or institutional like Wallace's *History of the University of Toronto*, refer only in the most general terms to graduate studies.

The present study is a detailed one of the development of the Ph.D. degree, and incidentally of the School of Graduate Studies, at the University of Toronto, which, with McGill University, bore the main burden of Canada's graduate work until the 1950's. What has been attempted is an examination of the origins of the degree at Toronto, with relevant comparisons to foreign universities. Furthermore, the study examines the introduction of the Ph.D. degree to the Toronto Arts and Science program in 1897, the degree's extension to include Medicine and Education by 1916 and Engineering by 1931, and the organization, parallel to the development of the doctorate, of an administrative structure which culminated into the formation of a School of Graduate Studies in 1922. The study is organized into three parts: "Early Attempts to Introduce the Doctorate at the University of Toronto," "Introduction of the Ph.D. Degree at the University of Toronto," and "Extension of the Ph.D. Degree and Establishment of a School of Graduate Studies at the University of Toronto."

In 1874 a Committee on Degrees which was considering the feasibility of adding degrees in Science and Letters discussed the introduction of a Doctor of Science degree. The degree was not adopted. However, from this date on, increasing attention was turned to the support of advanced work at the University. In the late 1870's the science departments organized laboratories for demonstration and experimental purposes; in the late 1880's other departments, for example Political Economy, offered seminars for Honours students. In 1882, in a move that clearly recognized a need for graduate studies, the University established nine fellowships for graduates who wished to pursue an academic career. It also, in 1883, approved the introduction of a Ph.D. degree, but never formulated the regulations necessary to activate it. In 1887 a Federation Act laid the foundations for Toronto's future growth and assured promoters of graduate studies of a larger pool of talent from which to draw students and staff.

The main developments in graduate studies occurred during the presidency of James Loudon (1892-1905), a physicist, who quite naturally promoted research and graduate work. He had been the major proponent of the earlier attempts to introduce the D.Sc. and Ph.D. degrees. In 1896 the University inaugurated a series of research publications, the *University of Toronto Studies*, for the dissemination of research findings by staff and graduate students. In the same year, A.B. Macallum (Physiology) and W.J. Alexander (English), both graduates of John Hopkins and supporters of the President's policies, proposed the adoption of regulations for the Ph.D. In 1897 Toronto accepted a doctoral program, thus affirming its intention to provide preparation for specialists. But resistance to the degree by the government and by a substantial body of undergraduate and professorial opinion prevented the establishment of a graduate school; therefore the Senate simply created an Advisory Board to process applications for Ph.D. studies. In 1903 it replaced this committee by a Board of Post-graduate Studies, which was to

consider and report on all matters relating to graduate degrees in Arts and Science. Thus, in the beginning the doctorate possessed no distinct status, but was merely on appendage to the Arts and Science program.

In 1906 a Royal Commission on the University of Toronto favoured the encouragement of graduate studies, but made no reference to this phase of university teaching in its specific recommendations. The new President, Robert Falconer (1907-1932), who continued many of Loudon's policies for expanding the University, expected to organize a graduate school soon after he assumed office but in the first years of his presidency was no more successful than his predecessor. However, in 1915 he was instrumental in having the University set up a Board of Graduate Studies — a graduate school in all but the name. The Board, responsible for the M.A., Ph.D., M.D., and any other graduate degrees assigned to it by the Senate, comprised all professors engaged in graduate instruction. After World War I a mingling of external pressures, including proddings from both the National Research Council and the Conference of Canadian Universities, and internal plans to expand the University led to the establishment of a School of Graduate Studies in 1922. This event signalled the start of a period of solid achievement in graduate education. In 1926, by which time Toronto was annually enrolling seventy Ph.D. candidates and more than three hundred graduate students, the Association of American Universities invited the University of Toronto, and also McGill, to its exclusive membership. When Falconer retired the University had an international reputation for graduate studies; moreover, it enrolled doctoral candidates from all fields: humanities, social sciences, biological, physical, and applied sciences.

The numbers enrolled for the Ph.D. increased slowly but steadily between 1897 and 1922, but, after the organization of the School, there was a sharp rise in numbers that continued unabated throughout the remainder of Falconer's presidency. In the early years of the degree the University attracted only its own graduates to the program. After World War I, and even more noticeably after 1922, candidates came from universities in other parts of Canada, the United States, and the Commonwealth. The provision of awards by the National Research Council after 1917 stimulated enrolment in the science departments whose students were eligible for N.R.C. grants. While these departments produced the majority of Toronto Ph.D.'s, several non-science departments — Philosophy, Near Eastern Studies, History, Political Economy, and Psychology — also produced substantial numbers.

The reasons for the early interest in the doctorate, its adoption at Toronto, and the eventual development of the University as an important centre for graduate studies are a combination of general and local factors. The general factors that led to the introduction of the Ph.D. and the graduate school in the United States, for example the scientific movement and industrialization, operated just as powerfully at the University of Toronto, which was located in a fast-industrializing urban centre. The need to provide a doctorate and to maintain its quality was stimulated by the University's proximity to a

number of large and innovative American universities. These attracted many graduate students from Toronto with the result that the latter, like the larger state universities, felt compelled to compete by providing its own doctorate and school. In the case of Toronto, the intensity of the competition was heightened by appeals to Canadian nationalism. Furthermore, in treating the growth of the University, both Loudon and Falconer pursued an expansionist policy : they consciously attempted to fashion a multi-functional university of the American type, in which graduate studies and research were the highest functions.

The study of the Ph.D. degree at the University of Toronto turns up several fruitful lines for further inquiry. The emergence of this degree had a significant impact on existing degrees, especially the M.A. and the D.Paed. (Doctor of Paedagogy) ; it would prove useful to assess the consequences of its introduction on these degrees at Toronto. An examination of the Ph.D. degree and graduate studies at McGill would throw light on the reasons for developments there and would ascertain the validity of this writer's interpretation that American influence in an urban environment was a determining factor in the growth of the Canadian doctorate. A comparative study of the influence of McGill and Toronto on graduate education in other Canadian universities would advance considerably our understanding of Canadian higher education. Interest in the above topics is not confined to students of history. It is, or ought to be, shared by all committed to understanding our universities, whether in faculties of graduate studies or government departments, since reform of present policies is most likely to be effective if based on a clear understanding of how the existing policies came into being.