EDUCATIONAL PROMISES AND EFFICIENCY IDEALS
EDUCATIONAL PROMISES AND EFFICIENCY IDEALS:

THE DEVELOPMENT OF MANAGEMENT EDUCATION

IN ONTARIO, 1900 - 1960

By

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Abstract

This study examines the concurrent development of business administration education and management theory and practice in Ontario. Management practice was developed in response to a particular set of needs perceived by those searching to establish stability and efficiency at the historically most explosive and highly vulnerable sphere of contention—the workplace. Behavioural science and management techniques are studied as social processes ultimately reflecting the dynamics and parameters of the social order. The main thesis of this study is that management practice and the training of management practitioners at the business schools worked to reinforce the belief that labour and other social problems are solvable within the parameters of the present social system. This belief was strengthened by the positivism of the engineers, behavioural scientists, and sociologists studying techniques of the managerial discipline. As part of the university curriculum, management theory was eventually afforded the respectability of any academic discipline. As a science, management strengthened the business curriculum and justified the purpose of business education in the academic environment.

This work studies the curricula of four business departments at the Universities of Toronto, McMaster, Queen's, and Western Ontario over a sixty year period from 1900 to 1960.
In particular the work examines published course descriptions and the content of a sample of textbooks in order to trace the introduction of management theories into the curricula of the schools of business administration. Scientific management and its introduction into the curriculum, the alteration of scientific management using the "softer" human relations technique, and the introduction of the theory of organizations to justify the authority structure, hierarchical relations, and the necessity of strong leadership are specifically examined. The work also considers the role played by key participants in the Canadian management movement and the involvement of Canadian businessmen and industrialists in the development of business and management curriculum. In general, a number of questions are posed regarding the emergence of management practice and the contribution of management practice and the business curriculum to the maintenance of stability, harmony, and efficiency within the social order.
Acknowledgements

I would like to express my gratitude to a number of people who helped me in a variety of ways in the preparation of this work. First, I would like to thank the members of my supervisory committee, Carl Cuneo, Peta Tancred-Sheriff, and Marshall Goldstein. As supervisor, Carl Cuneo not only provided me with detailed comments on each chapter but also strongly encouraged me throughout to continue with this endeavour. I would especially like to thank Carl for having confidence in both my ability and stamina to produce this thesis while working at a full-time job. Similarly, I would like to thank Peta Tancred-Sheriff for her continued support and encouragement throughout my years as a graduate student. With her knowledge in the Sociology of Organizations, she helped me to clarify my thinking on the management themes dealt with in the work. Thank you to Marshall Goldstein for the stimulating discussions on management philosophies and the educational process.

Family members and friends have contributed to this work by providing support and encouragement and helping me to maintain my sanity during this lengthy process. Special thanks are due to my spouse, John Barkans, for his emotional support, understanding, and patience. John provided me with all the time and space I needed to write this thesis.
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Chapter One

Solving Social Problems with the Pragmatic Panacea: The Development of Business and Management Education

Education is the process of preparing or fitting or adapting man to his time and his environment. It is concerned with human happiness and human comfort and human welfare. ... It is concerned with man in his entirety. 1

For more than a hundred years North American social scientists have sought solutions to the economic and social problems plaguing American society. During the early decades of the twentieth century, they were particularly disturbed by the growing number of labour problems and began in earnest to search for scientific means to eliminate such difficulties. Rejecting the critical analyses of socialists, social reformers, and labour leaders at the time, they specifically sought solutions that were possible without radical alterations to the socioeconomic framework. For many of these scientists, the promise of education was extraordinary. Many believed that education not only held promise for solving labour and other social problems but that it was, in fact, a panacea.

Although the commitment to education failed to dissolve the turn of the century's most pressing problems, edu-
cators, social reformers, social scientists, and businessmen maintained their faith in the institution and searched methodically for new approaches for academia. While schooling had proven its worth as an agency of socialization, by the turn of the century its practices and curricular materials were reminiscent of the nineteenth century's gentlemanly "ideal" of education but were now inconsistent with the needs of twentieth century capitalism. What was needed for the new "scientific" order was a more pragmatic form of education—an education designed to train practitioners in the use of the latest technological advances and social science research findings. Only this form of education held enough promise to satisfy those questing for an ultimate panacea.

The Managerial Promise and Business Education

Business and management education were established as part of the university curriculum at a time when social scientists were actively seeking concrete solutions to the most visible and difficult social problems. While business and management education were not proposed as solutions per se, proponents of the more pragmatic forms of education aligned themselves with the social reform movement, thereby giving the impression of certitude for their cause. By establishing business and administration education as part of the university curriculum, educators and businessmen
were simply bringing the university curriculum up-to-date with respect to the growing field of social science and behavioural studies. Since social science had continued to prove its worth in the laboratories of the larger industrial operations, social reformers, educators, and some enlightened businessmen realized the usefulness of teaching social science techniques on a broader scale through the public higher education system. At the same time as the size of business and industrial enterprises grew, necessitating a greater number of foremen, front line "decision-makers", administrators, and other bureaucrats, a need for training programmes for this strata of "educated labour" was eventually recognized. Thus, management education was developed with a very specific and concrete purpose—the replacement of familiar and unscientific administration with qualified managers knowledgeable in the behavioural sciences and adept in the use of the latest management techniques.

Business and management education were gradually incorporated into the Departments of Political Economy and Economics at a time when a positivistic approach to the "science" of society was popularized in North America by the founding fathers of American sociology—Lester Frank Ward, William G. Sumner, Franklin Giddings, Edward Alsworth Ross, and Albion W. Small. Their purpose was to analyze particular features of society, identify components
requiring reform, and organize a plan for re-establishing order and harmony within the social order. This positivistic tradition was upheld in the post-depression period when Talcott Parsons popularized structural-functional sociology. Structural-functionalism was employed as a key method of inquiry into the social processes of modern society and as such it emphasized the harmonious relationships among social institutions. Parsons' analysis was tailored to study the structure and function of organizations within society by his student, Robert King Merton, and subsequently businessman, Chester Barnard. These authors' works provided an exemplar theoretical approach to studies in organizations which was implicit in the modern business administration curriculum. This framework of positivism justified the teaching and use of the early techniques of scientific management and especially human relations for the establishment of efficiency, harmony, and stability within the organization structure.

Writings in the positivistic tradition sought immediate solutions to identified social disharmonies. There was strong agreement that education, especially pragmatic education, was necessary as a source of national stability and individual strength. Such ideas regarding the role of education dated back to the turn of the century and were apparent in, for example, John Dewey's writings. Proponents
of pragmatic education argued that as the new industrial society emerged, changes in education were as necessary as "changes in modes of industry and commerce." Under this new arrangement, the school would have "a chance to affiliate itself with life." By preparing the student with practical and problem solving skills, it was maintained that the modern curriculum guaranteed stability and harmony. With its inherent ideology of progress and its goals of national and economic development, students were not only taught acceptance of the system but were instilled with both desire and skill to further its goals. Moreover, not only would "modern education" provide students with opportunities to adjust to "common" social goals, but the new education would develop within the student the capacity to broaden, deepen and perhaps reconstruct the "spiritual interests of society." Thus, education was regarded as an agent of social betterment.

Although Dewey had emphasized the school's important role in performing community services and in providing social rather than individual benefits, he was not as outspoken in this matter as the sociologists of the time who were claiming that education had become "over-psychologized." Clearly, it was the intention of the twentieth century social scientists to transform education into an institution which would function to shape the individual
into a socially useful personality with acceptable social goals. Besides social service education became identified with social efficiency and social control.

A key figure in the development of the sociology of education, David Snedden, was concerned with the social usefulness of education. Snedden, a student of Edward A. Ross and later Commissioner of Education in Massachusetts and professor at Leland Stanford University, along with William C. Bagley, Charles A. Ellwood, Ernest R. Groves, Henry Suzzallo, W.R. Smith, and others, argued that for too long education had "suffered from vague aims, such as promoting character, mental discipline, citizenship, and 'self-realization'." The sociologist's job was to "insist that every phase of school work be directed toward the production of the socialized individual who not only vaguely recognizes his duty to society, but who is actually trained into social service." This would necessitate that the school "organize its curriculum in harmony with social demands and adopt a discipline and methods similar in kind to those of social institutions outside the school."  

As soon as the public and high school curricula were re-organized to reflect the prevalent and pragmatic ethos, those interested in higher education began to recognize the need for "modernizing" university curricula as well. It was at this time that business schools were established. Busi-
ness and management studies were developed with the momentum of the positivistic tradition and were firmly entrenched in the scientific ethos of modern capitalist society. Through their own optimism, business educators convinced businessmen, social reformers, and various university personnel that the form of pragmatic education they offered would contribute positively to the development of harmonious relations within organizations and industrial society.

Integrating Science into the Management Process: Changes in Management and the Labour Relationship

The gradual development and growth in popularity of management education programmes can be attributed to the business and industrial sector's interest in solving labour problems. Historical changes in the nature of the relationship between management and the worker necessitated the development of management training programmes to teach appropriate administrative skills and management techniques. Developments in management education were preceded by developments in the behavioural sciences. In fact, historical study of the development of management and managerial techniques is a record of the integration of science into the management process. Changes in the work relationship affected the process of recruitment of managers and administrators. An
increasingly larger percentage of the labour force was employed in a supervisory capacity. Canadian statistics indicate that the concentration of supervisors within the labour force and particularly within the manufacturing sector grew dramatically especially between 1900 and 1940. From Table 1.1 it is evident that the number of employees increased by 29% between 1910 and 1940 and during that same period, the supervisory and office employees as a percentage of all employees grew by 112%. Meanwhile, although statistics are only available from 1965 on, it is clear that working owners or partners constitute a minor percentage of all employees.

The nature of the twentieth century work relationship is best understood with regard to the issue of power and control. An examination of this relationship allows for a more complete understanding of the roles of management, the purpose and function of managerial technique, and the locus of organizational control. It is important first to briefly distinguish between pre-industrial and industrial work relationships. In the pre-industrial period the craft worker was involved in the entire production process and undertook both conception and execution of any particular task. With factory production, machine power gradually replaced hand power, larger numbers of workers were concentrated under one roof and a process began whereby skilled
Table 1.1
Summary Statistics of Manufacturing Industries, Canada, 1910-1975

<table>
<thead>
<tr>
<th>Year</th>
<th>No. of ests.</th>
<th>No. of employees</th>
<th>Mean Employees per est.</th>
<th>Supervisory and office employees as a percent of all employees</th>
<th>Working owners &amp; partners as a percent of all employees</th>
</tr>
</thead>
<tbody>
<tr>
<td>1910</td>
<td>---</td>
<td>509,977</td>
<td>---</td>
<td>8.4</td>
<td></td>
</tr>
<tr>
<td>1917</td>
<td>22,043</td>
<td>571,866</td>
<td>26.6</td>
<td>10.7</td>
<td></td>
</tr>
<tr>
<td>1920</td>
<td>22,376</td>
<td>576,417</td>
<td>25.8</td>
<td>13.4</td>
<td></td>
</tr>
<tr>
<td>1925</td>
<td>20,956</td>
<td>522,661</td>
<td>24.9</td>
<td>13.6</td>
<td></td>
</tr>
<tr>
<td>1930</td>
<td>22,586</td>
<td>614,348</td>
<td>27.2</td>
<td>13.8</td>
<td></td>
</tr>
<tr>
<td>1935</td>
<td>24,000</td>
<td>556,363</td>
<td>23.2</td>
<td>17.6</td>
<td></td>
</tr>
<tr>
<td>1940</td>
<td>25,471</td>
<td>761,639</td>
<td>29.9</td>
<td>17.8</td>
<td></td>
</tr>
<tr>
<td>1945</td>
<td>28,979</td>
<td>1,118,015</td>
<td>38.5</td>
<td>17.0</td>
<td></td>
</tr>
<tr>
<td>1950</td>
<td>35,942</td>
<td>1,183,297</td>
<td>32.9</td>
<td>19.5</td>
<td></td>
</tr>
<tr>
<td>1955</td>
<td>38,182</td>
<td>1,298,461</td>
<td>34.0</td>
<td>22.1</td>
<td></td>
</tr>
<tr>
<td>1957</td>
<td>37,875</td>
<td>1,359,061</td>
<td>35.9</td>
<td>23.1</td>
<td></td>
</tr>
<tr>
<td>*1960</td>
<td>32,852</td>
<td>1,275,476</td>
<td>38.8</td>
<td>23.8</td>
<td></td>
</tr>
<tr>
<td>1965</td>
<td>33,310</td>
<td>1,570,299</td>
<td>47.1</td>
<td>28.9</td>
<td>0.9</td>
</tr>
<tr>
<td>1970</td>
<td>31,928</td>
<td>1,637,001</td>
<td>51.3</td>
<td>28.7</td>
<td>0.7</td>
</tr>
<tr>
<td>1975</td>
<td>30,100</td>
<td>1,741,159</td>
<td>57.8</td>
<td>27.0</td>
<td>0.4</td>
</tr>
</tbody>
</table>

Sources:


*The basis of this series changes to eliminate some small employers.
Table 1.2

Summary Statistics of Manufacturing Industries, Canada, 1880-1910

<table>
<thead>
<tr>
<th>Year</th>
<th>No. of ests.</th>
<th>No. of employees</th>
<th>Mean Employees per est.</th>
<th>Supervisory and office employees as a percent of all employees</th>
</tr>
</thead>
<tbody>
<tr>
<td>1880</td>
<td>47,079</td>
<td>284,042</td>
<td>5.3</td>
<td>---</td>
</tr>
<tr>
<td>1895</td>
<td>69,716</td>
<td>351,139</td>
<td>5.0</td>
<td>---</td>
</tr>
<tr>
<td>1900</td>
<td>------</td>
<td>422,824</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>1905</td>
<td>15,197</td>
<td>382,702</td>
<td>25.2</td>
<td>9.2</td>
</tr>
<tr>
<td>1910</td>
<td>------</td>
<td>509,977</td>
<td>---</td>
<td>8.4</td>
</tr>
</tbody>
</table>

Source:


labour was gradually replaced by semi-skilled and unskilled labour as the tasks of conception and execution were separated into distinct job categories. The essence of the factory system was not its widespread use of machinery nor its amassing of workers under one roof. Rather, its essence was its entailment of a new discipline and a new work relationship. It was under this new work relationship that the management process was born.

In the early work relationship between the master and apprentice, inequality was based on the skill differen-
tial between the parties and purpose of the relationship was the transfer of knowledge to the apprentice. Although a power element was also inherent in the relationship, this power differential was primarily related to the inequality in knowledge and skill level and secondarily to the pattern of ownership and difference in status. As the task of conception was separated from that of execution, and foremen, supervisors and other levels of management were employed, the work relationship was based on power differences and the element of control. Table 1.2 indicates a decrease in the number of manufacturing establishments between 1880 and 1910 and therefore, the growing concentration of workers under one roof. This, in turn, necessitated the development of offices of supervision and control.

Management control over the work process evolved through several stages. For purposes of analysis, two distinct phases in the development of the management process may be distinguished. A summary of the characteristics of each phase is presented in Charts 1.1 and 1.2. The first phase shall be called Simple Management and generally refers to the period between 1880 and 1910. During this phase neither the parameters of the occupation of management nor managerial techniques were clearly defined. Managers were simply assigned to provide direction and maintain control through the use of rudimentary discipli-
# Chart 1.1

## Phase 1: Simple Management

<table>
<thead>
<tr>
<th>Period</th>
<th>Source of Direction</th>
<th>Division of Labour</th>
<th>Purpose of Management</th>
<th>Basis for Power Relationship</th>
</tr>
</thead>
<tbody>
<tr>
<td>Before 1870</td>
<td>Master Craftsman</td>
<td>Simple</td>
<td>Simple direction, Teaching, Guidance</td>
<td>Knowledge, Skill, Ownership</td>
</tr>
<tr>
<td>1870-1890</td>
<td>Working Owners &amp; Partners</td>
<td>Growing division of labour; separation of conception &amp; execution</td>
<td>Direction, Efficiency, Clarity of orders</td>
<td>Ownership</td>
</tr>
<tr>
<td>1880-1910</td>
<td>Shop Supervisor</td>
<td>Developed division of labour; Separate managerial category; Separation of skilled and unskilled labour</td>
<td>Discipline, Issue of orders</td>
<td>Ownership or Assignment by owner</td>
</tr>
</tbody>
</table>
### Chart 1.2

**Phase II: Systematic Management**
(Development of Managerial Techniques)

<table>
<thead>
<tr>
<th>Starting from</th>
<th>Source of Direction</th>
<th>Division of Labour</th>
<th>Purpose of Management</th>
<th>Justification of Relationship</th>
</tr>
</thead>
<tbody>
<tr>
<td>1910</td>
<td>Shop Supervisor, Engineer, Technologist</td>
<td>Detailed</td>
<td>Efficiency Control</td>
<td>Managerial Prerogative</td>
</tr>
<tr>
<td>1930</td>
<td>Personnel Director, Dept. manager</td>
<td>Detailed</td>
<td>Efficiency, Elimination of sources of contention, Control</td>
<td>Defined by occupation of management, scientifically determined</td>
</tr>
<tr>
<td>1950</td>
<td>Dept. of Personnel &amp; Staff &amp; line Managers</td>
<td>Detailed</td>
<td>Coordination Efficiency Control</td>
<td>Proven necessity of management &amp; leadership</td>
</tr>
</tbody>
</table>
nary techniques. The mere existence of the foreman or manager on the shop floor as representative of the authority of the employer was expected to ensure obedience and adequate production levels while teaching workers about the social context of work relationships and the inherent power structure involved.

During the second phase which shall be referred to as Systematic Management, specific managerial techniques were developed in order to guarantee productive efficiency and harmonious relations within the organization. Beginning with scientific management, a more precise definition of the role and function of management was presented. Using scientifically determined methodologies, it was expected that efficiency levels would be increased and disciplinary problems would be eliminated. Various spheres and functions of management were defined as the complexity of organizations grew. Moreover, the sphere of middle management and sub-categories of administration were defined as models of organizations were developed using staff and line criteria. Under Systematic Management, the key function of management is coordination for efficiency. Hence, elaborate reporting and communications systems are featured in the complex organization and the definition of organization becomes infused with the idea of cooperation.

The practice of simple or systematic management is
concerned with obedience and conformity to a code of rules and discipline. During the early phase this concern was overt. During the latter phase, behavioural scientists and human relations experts worked to "soften" management's approach by substituting subtle techniques and the use of "anonymous" authority for earlier overt methods. This process required scientific precision and the assurance of management practitioners, businessmen, industrialists, and behaviourists of its efficacy. Training in the use of such methodology was elaborate and eventually justified its place within the university curriculum. The professionalization of the occupation of management is representative of the gradual integration of science into the management process.

The study of business and management education is the study of the development of systematic management. Management education served to justify the process of management and lent the process credibility through affiliation with the university. Training programmes for modern managers were designed to teach the inevitability and necessity of management and the acceptability of techniques of control. Guided by the efficiency ideal of the modern management movement, schools of business present a positive approach to business and industrial problems, possible solutions to social disharmonies, and a guaranteed promise of cooperation and efficiency.
Methodological Questions and Considerations

Until recently studies in the sociology of higher education have mainly been concerned with questions of accessibility, equality of opportunity, and post-graduate occupational and status attainment. This work examines the development of a specific field of study—business and management curricula—within the university over a sixty year period from 1900 to 1960. The purpose here is two-fold. First, an attempt is made to understand the growth and development of university business and management programmes through a thorough and concrete analysis of changes in the business curricula at four universities—McMaster, Queen's, Toronto, and Western Ontario. Secondly, this study analyzes the development of the management function, management practice, and the Canadian management movement and interrelationships to the development of business curriculum. The study examines three phases of business management education in which specific managerial theories and techniques—scientific management, human relations, and structural-functional organization analysis—were integrated into the business curriculum. These are the "Scientific Management Phase" from 1900 to 1930, the "Human Relations Phase" from 1930 to 1950, and the "Structural Functionalist Phase" from 1950 to 1960. From this analysis general conclusions regarding management education and the nature and char-
acter of the Canadian management process during these phases are drawn.

Upon examination of the literature on organization development and management over the historical period under study, various themes were identified. These are:

1. The question of power and control.
2. The bureaucratic hierarchy and its dimensions; the authority structure.
3. Stability, maintenance and/or survival.
4. Productivity and achievement of goals; efficiency.
5. Task or goal orientation; participants' attitudes.

Social scientists and management theorists pursued these themes, seeking means by which to achieve improvement in both organizational efficiency and social harmony. The period from 1900 to 1960 may be considered to be an experimental one in which each aspect of the labour/management process was at some time examined for clues to the improvement of work and social relations. Writings on work and the managerial process during this period therefore were presented within the broad context of social improvement. While the general themes listed above underlie major writings on the management process and managerial technique, particular aspects of the general themes were emphasized during various historical periods. In this analysis, three historical
phases were identified. The phases correspond roughly to the periods in which particular theories—scientific management, human relations, and structural-functionalist organization analysis—dominated the field of management and the work process.

In this writing it is argued that theories of management in general were presented within the broad context of social betterment and the tradition of positivism. This assumption is based on an analysis of the historical development of management in its North American context during the reform movement and the transition to industrial capitalism. Management theory and practice developed concurrently with practical sociology, social work, applied psychology, school reform, and vocational guidance. Along with these disciplines, it was guided by the assumption of the social reform movement that solutions to various social problems, including labour problems, are attainable. Under this general assumption, then, during each phase, dominant theories were developed within a particular context relevant to specific needs and interests within the historical process. Management techniques were designed to address specific problems in each period and were suited to the requirements of the period. Chart 1.3 presents the context of the period in which the particular managerial concerns were emphasized. Note the overriding emphasis throughout on social improve-
### Chart 1.3

General and Particular Themes of Management Theory, 1900-1960

<table>
<thead>
<tr>
<th>Context</th>
<th>Themes</th>
</tr>
</thead>
</table>
2. Hierarchy & authority structure.  
4. Productivity.  
5. Task/goal orientation. |

<table>
<thead>
<tr>
<th>Phase</th>
<th>Specific Context</th>
<th>Particular Concerns</th>
</tr>
</thead>
</table>
| Scientific Management, 1900-1930 | Scientific reform; Efficiency | - control as managerial prerogative  
- specific direction  
- accuracy, precision  
- obedience |
| Human Relations, 1930-1950 | Psychology of Happiness; Paternalism | - behavioural & attitudinal change  
- social psychology of workers  
- scientific selection  
- workplace reform; work environment  
- obedience, cooperation |
| Structural Functionalist, 1950-1960 | Leadership; Social Stability | - decision-making  
- leadership qualities  
- achievement of organization's goals  
- task orientation--motivation, loyalty  
- social harmony |
ment and the ideology of reform.

The Scientific Management Phase corresponds to the beginning of Systematic Management. (See Chart 1.2.) During this time the first systematic attempts were made to direct workers' actions on the shop floor and to attribute increased productivity and efficiency to that systematized process. Drawing on lessons from the scientific management experiments, the Human Relations Phase was dominated by the efforts of applied behavioural scientists who examined various aspects of the work environment in order to eliminate possible sources of dissatisfaction and discomfort. Moving from the concrete and experimental approaches characteristic of both Scientific Management and Human Relations Phases, backed by a strong Weberian tradition, the Structural-Functionalists in North America explored the nature of bureaucratic authority and leadership and its contribution to a stable organizational and social environment.

Management theory and practice were developed within the framework of capitalist economics, providing justification for that framework. They were therefore complementary to the ideology and context of capitalism. This study specifically examines how the general and particular themes, the techniques, and "truths" of management were presented in the university business curriculum and to some extent supported in the Canadian management movement.
The core of this work examines changes in the curricula of four Ontario universities—McMaster, Queen's, Toronto, and Western Ontario. These universities were chosen because they are historically significant in the development of higher education in Canada. Queen's, Toronto, and Western Ontario house the first three degree granting business departments in the province and, in addition, Western Ontario's Business School with its international reputation has been referred to as the "Harvard" of Canada. McMaster was chosen as representative of the remaining Ontario universities offering business programmes due to the accessibility of data. Nonetheless, McMaster's contributions to the development of business education are well recognized.\textsuperscript{13}

If changes in management theory and practice in turn effected changes in management education, then these changes would be reflected in the curricula of these four representative universities.

Data sources include course descriptions in university calendars published annually, course textbooks, other available university documents, such as official statements, President's Reports, and official addresses, Proceedings of the National Conference of Canadian Universities, 1911–1958, and other relevant publications, reports, and statements. The business press also constituted an important data source. The following are major sources: Financial

The strengths and weaknesses of historical and documentary research have been examined in contemporary sociology. Apart from the most obvious disadvantage of historical methodology that there is no control over the type nor range of data available, this work is not particularly affected by the disadvantages of historical research. The work is detailed, concrete, systematic, and thus addresses S.D. Clark's caution that historical sociology should not be a search back for grand laws. Rather this study examines the development of business and management education within a particular social, economic, and cultural milieu, thereby providing avenues of insight into the dynamics of social change and the permanence of particular structures.

1) University Calendar Course Descriptions

All available calendars published between 1900 and 1960 of the four universities were analyzed. When available, earlier calendars dating back to 1890 were consulted for historical and background information. Specifically, all course descriptions and other write-ups on departments of economics, political economy, business and commerce, sociology, and social work were analyzed for clues to develop-
ments in management education. In addition descriptions of applied science or engineering department courses were examined for Queen's between 1894-5 and 1959-60 and for Toronto between 1915-6 and 1946-7.

During the first period, 1900-1930, course descriptions were analyzed for statements regarding the beginnings of management education and specific teachings on the scientific management technique. Between 1930 and 1950 indications of change in teachings on management and the inclusion of psychology and the human relations perspective were examined and during the latter period between 1950 and 1960 more subtle changes to incorporate structural-functional theory of organizations and the psychology of leadership and administration were noted. The purpose here was to analyze changes in the curriculum vis-a-vis phases of management theory and practice.

The first task was to identify the beginnings of management education in departments of political economy, business, and engineering. Early forms of business education taught business techniques and skills necessary for success in operating a business. Gradually theories and principles of management were introduced into the curriculum and a larger number of courses included components on the management process. This study traces the inclusion of "management" topics in the skill oriented courses such as
accounting, financial management, and money and banking, and examines changes over time in the management oriented courses such as production management, industrial management, and labour problems. In addition the supportive curricula—psychology, sociology, political science, and social work courses—are examined during the first two phases for content reflecting an emphasis on management theories and process and the general problem solving framework.

For the early phase, 1900-1930, all course descriptions were carefully analyzed for management content. For the later phases, management content became the criterion for analysis of the calendar description. Descriptions of the following courses were found to contribute most significantly to developments in management education and along with introductory and university extension courses in management constituted the core management education curriculum: Industrial Management, Production Management, Labour Problems, Personnel Administration, Office Management, Industrial Relations, Executive Development Courses, and Administrative Theory and Problems. Chart 1.4 presents information regarding the years in which these courses were first offered at the universities. Related engineering and management courses were also examined. In addition supportive social science curricula in which the nature of work and work relations were studied were analyzed. The major courses in this
<table>
<thead>
<tr>
<th>Course*</th>
<th>McMaster</th>
<th>Queen's</th>
<th>Toronto</th>
<th>Western</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Management/</td>
<td>1950-1</td>
<td>1921-2</td>
<td>1921-2</td>
<td>1927-8</td>
</tr>
<tr>
<td>Business Admin.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Industrial Management</td>
<td>1946-7</td>
<td>1922-3</td>
<td>1922-3</td>
<td>1921-2</td>
</tr>
<tr>
<td>Factory/Production Management</td>
<td>1956-7</td>
<td>--</td>
<td>1922-3</td>
<td>1939-40</td>
</tr>
<tr>
<td>Labour Problems</td>
<td>1914-5</td>
<td>1911-2</td>
<td>1910-1</td>
<td>1919-20</td>
</tr>
<tr>
<td>Trade Unionism</td>
<td>1914-5</td>
<td>1908-9-</td>
<td>1920-1</td>
<td>1925-6</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1911-2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Socialism</td>
<td>1908-9-</td>
<td>1917-8-</td>
<td>--</td>
<td>1915-6-</td>
</tr>
<tr>
<td></td>
<td>1941-2</td>
<td>1955-6</td>
<td></td>
<td>1930's</td>
</tr>
<tr>
<td>Personnel Management</td>
<td>1942-3</td>
<td>1921-2</td>
<td>1939-40</td>
<td>1940-1</td>
</tr>
<tr>
<td>Sales Management</td>
<td>--</td>
<td>1952-3</td>
<td>--</td>
<td>1924-5</td>
</tr>
<tr>
<td>Office Management</td>
<td>1957-8</td>
<td>1921-2</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Financial Management</td>
<td>1941-2</td>
<td>1928-9</td>
<td>1920-1</td>
<td>1923-4</td>
</tr>
<tr>
<td>Public Administration</td>
<td>--</td>
<td>1921-2</td>
<td>1920-1</td>
<td>1933-4</td>
</tr>
<tr>
<td>Administrative Theory &amp; Problems</td>
<td>1954-5</td>
<td>1942-3</td>
<td>--</td>
<td>1943-4</td>
</tr>
<tr>
<td>Industrial Relations</td>
<td>1956-7</td>
<td>1938-9</td>
<td>--</td>
<td>1950-1</td>
</tr>
<tr>
<td>Executive Development</td>
<td>1953-4</td>
<td>1952-3</td>
<td>--</td>
<td>1948-9</td>
</tr>
<tr>
<td>Executive Problems</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>1923-4</td>
</tr>
</tbody>
</table>

* These are generic course titles. There may have been slight variations from university to university and from year to year. In most cases the courses were first offered through the Depts. of Economics and Political Economy or Depts. of
of Business & Commerce. However, in a few cases the courses were first offered in other depts. and then transferred to the business depts.

**Dates refer to years in which the university began to offer the course. Courses were offered throughout the period under study unless otherwise indicated.

Courses in this category were Industrial and Vocational Psychology, Industrial Sociology, Social Problems, and Trade Unionism. Courses offered through Extension Departments and later through graduate programmes were also included in the analysis.

There are numerous difficulties in conducting this type of research. Generally lacking any systematically organized archival or retrieval systems, studying the university as an organization presents a number of problems. While corporations, philanthropic institutions and similar organizations house elaborate record keeping systems, such data are for the most part unavailable at the universities. Systematic records of course outlines and textbook lists, for example, are not available. At the departmental level very little information is collected. Therefore for data regarding courses and textbook requirements, it was necessary to rely almost exclusively on information published in the annual calendars. While there is no reason to believe that this information is inaccurate, nevertheless, it is sketchy at particular points for the various institutions. Calendars differ in format and the types and amount of infor-
formation supplied. Each university often changed its publishing format and offered varying amounts of information from year to year. For these reasons it is difficult to specifically compare curricular developments from university to university although general comparisons may be noted.

Despite these problems course descriptions published in the calendars serve as the university's official statements on the subject matter of its curriculum. While the descriptions may or may not accurately reflect the actual content delivered in the classroom, they nevertheless outline the parameters of the subject area and define what ought to be included in each topic. By conducting a year by year examination of changes in these descriptions, conclusions are drawn regarding the officially recognized curricular content of management education programmes.

ii) Textbook Analysis

In order to understand the substance of the business curriculum, a selection of business textbooks are analyzed, specifically with reference to statements on scientific management, human relations, and organizational design. The analysis excludes classical works such as John Stuart Mills' Principles of Political Economy, Adam Smith's Wealth of Nations, Ricardo's Political Economy, Malthus' Essay on
Population, and Bohm-Bawerk's *Capital and Interest*, historical studies such as Toynbee's *Industrial Revolution*, Webb's *History of Trade Unionism in England*, Breckinridge's *A History of Canadian Banking* and Ross' *A History of the Canadian Bank of Commerce*, and government commission reports, documents, statistical records and other publications such as *Labour Gazette*. With these exclusions then, between 1900 and 1960 there were approximately 340 textbooks listed in the university calendars as required or recommended readings for the courses listed above as the core management education curriculum. Of these, 136 or 40% were selected for analysis.

Textbooks for analysis were selected on the basis of use patterns at the universities. A classification scheme was devised and books were to meet one of the criteria in the scheme to be included in the analysis. Chart 1.5 provides information on this classification scheme. Due to the frequency of omissions in the calendars during the later period, especially after the late 1940's, a few of the management education textbooks listed during this period did not meet the criteria of the classification system. However, these books were listed as primary texts for management courses. More significantly, if these books had been excluded based on the criteria below, the sample analyzed
Once selected, the textbooks were categorized according to subject. Seven subject areas were distinguished. In Chart 1.6 a summary of the categories, subject areas included and percentage of books analyzed per category is presented. As Chart 1.6 indicates, the 136 books chosen constitute a representative sample of management education textbooks. Variation in the percentage of books falling in the categories was primarily due to three factors: the availability of books for analysis, the use patterns and classification criteria devised above, and the difficulty in categorizing books by subject area. The over-representation of "critiques" in the sample needs explanation. The critiques were examined in a more cursory fashion and were mostly relevant to the early period under study. Overall these sources
<table>
<thead>
<tr>
<th>Category</th>
<th>Subject Areas</th>
<th>% of Sample N=136</th>
<th>% of Texts N=340</th>
</tr>
</thead>
<tbody>
<tr>
<td>General</td>
<td>introductory texts, theoretical works, historical works, general edited collections</td>
<td>40%</td>
<td>43%</td>
</tr>
<tr>
<td>Management &amp; Administration</td>
<td>industrial management procedures, administrative techniques, specific writings on scientific management, human relations, &amp; organization theory &amp; administration</td>
<td>14%</td>
<td>13%</td>
</tr>
<tr>
<td>Labour</td>
<td>labour problems, labour economics, labour institutions, trade unionism</td>
<td>17%</td>
<td>14%</td>
</tr>
<tr>
<td>Problem Solving</td>
<td>psychological analyses, sociology, immigration, problems of employment &amp; unemployment</td>
<td>14%</td>
<td>18%</td>
</tr>
<tr>
<td>Specific Studies</td>
<td>management in relation to advertising problems, sales, marketing, finance, public institutions, trade</td>
<td>8%</td>
<td>8%</td>
</tr>
<tr>
<td>*Engineering</td>
<td>engineering economics, management of factories</td>
<td>2%</td>
<td>3%</td>
</tr>
<tr>
<td>Critiques of Socialism</td>
<td>critiques of Marx and/or theory &amp; practice of socialism</td>
<td>5%</td>
<td>1%</td>
</tr>
</tbody>
</table>

*This refers to those texts used only in the Depts. of Applied Science & Engineering. Several of the engineering texts were also required in the economics & business courses and therefore fell into one of the other categories.*
were less representative of required texts for management education and more representative of readings in early political science, political economy, and theory courses. On the basis of these categories and subject areas then, the books were carefully analyzed as instructional aids in order to determine inherent lessons regarding management theory, its application, and the elimination of labour and other social problems.

All 136 books of the sample were read and statements from these works were selected highlighting the author's analysis of the general and particular themes of management theory as outlined in Chart 1.3. For each book analyzed then, the main concerns were the questions of: 1) how the author addressed the general themes of power and control, hierarchy and authority structure, stability, maintenance and survival, productivity, and task/goal orientation, and the particular themes of the phases; and 2) in what context did the author present an analysis of these themes. An author's presentation of a general theme is considered to be significant if a chapter, a selection of at least five consecutive pages, or at least ten scattered but major references to it were identified in the work. An author's presentation of a particular approach to management--scientific management, human relations, or structural-functionalist organizational analysis--or a description of technique, style,
or possible outcome of the management phase is considered to be significant if at least five pages or major references to it were identified in the work.

In each of Chapters 5, 6, and 7, the textbook analysis sections are divided into four sub-sections. Each of these sub-sections presents a compilation of major statements by the authors in answer to the following questions:

**Sub-section 1:** What are the general perspectives presented regarding management during the period? How is management defined? What is the perspective on capitalism or alternative systems?

**Sub-section 2:** How are specific themes or management theories presented and defined? Were the authors supportive or critical of the primary approach to management presented during each phase?

**Sub-section 3:** How was the approach to management in each phase justified? How did the authors address the general theme of social improvement? What themes were prevalent in the books during each phase?

**Sub-section 4:** How were managerial techniques popularly practised during the phase presented or described?

Conclusions are thus drawn regarding the substance of management education on the basis of analyses presented in the textbooks.

The methodology of textbook and content analysis has been criticized due to the problems involved in the interpretation of data. Used in conjunction with historical and documentary research methods, textbook analysis provides a detailed summary of the style, form, and curriculum content.
of business education. While there have been studies of the social and political context within which educational institutions developed,\textsuperscript{20} and studies of the "hidden curriculum",\textsuperscript{21} detailed analyses of curricula content have largely been neglected.\textsuperscript{22}

By combining historical and documentary research methods with detailed textbook analysis, this work contributes to the understanding of the higher education process, its curricula, and its social and political context. Moreover, in examining a pragmatic curriculum, this work provides a concrete analysis of the process, application and justification of management and administrative techniques in Canada.

Chapter Two presents a brief review of some of the major theoretical questions and problems in the area of sociology of education and socialization. The purpose of this chapter is to develop the theoretical framework in which the remaining analysis is presented.

The next two chapters study the development of business education in Ontario from the early 1800's to the 1930's. In Chapter Three a concrete historical examination of the development of business education in Ontario is presented. Of particular importance here is the question of the form of business education in its early stages and its gradual professionalization. Chapter Four specifically examines the transformation in business curriculum from its early focus
on business skills to its later emphasis on problem-solving and management.

Chapters Five, Six, and Seven respectively study the Scientific Management Phase, 1900-1930, the Human Relations Phase, 1930-1950, and the Structural-Functionalist Phase, 1950-1960, in management education. In order to understand the presentation of these theories in the business curriculum, university calendar descriptions and course textbooks are analyzed. Central to these chapters is the question of the presentation of management education as a problem-solving curriculum.

Chapter Eight analyzes the influence of Clarence Fraser and other key members of the Canadian management movement on the development of business and management education. Of central importance in the chapter is the question of liaison between management practitioners and academia.

Finally Chapter Nine presents the major conclusions of this work and its contributions to the specific understanding of the development of business and management education and the general analysis of the political economy of Canadian higher education.
Footnotes


3 Ibid., p. 18.

4 Ibid., p. 34.


9 Such a discussion is well beyond the scope of this writing. However, the following sources provide excellent concrete analyses: Braverman, Ibid., Clawson, Ibid., James W. Rinehart, The Tyranny of Work, (Don Mills: Longman Canada Ltd., 1975) and Richard C. Edwards, Contested Terrain: The Transformation of the Workplace in the Twentieth Century, (New York: Basic Books, 1979).

10 Due to the uneven development of business and industry within various sectors of the economy, the phases overlap considerably. However, the analysis presented here considers the development of "central tendencies" within the process as a whole.

11 Charts 1.1 and 1.2 summarize the author's interpretation of the development of management and the work relationship...
based on extensive reading. The terms, Simple and Systematic Management, are the author's. A similar conceptual scheme, however, is presented by Edwards, op. cit.

12 These dates represent "central tendencies" within the process of management development and management education.

13 With its early church affiliation and its more philosophical and less pragmatic approach to curriculum, McMaster is highly representative of the province's historically prominent universities.


15 Clark, Ibid., p. 270.

16 For the later period it may have been appropriate to interview the professors. However, names of professors responsible for teaching the courses were often omitted. Due to this inconsistency, the ineptly kept records, and costs involved, it was not possible to conduct interviews to determine the actual content of the business courses.

17 The decision to exclude such classics from the analysis was based on the fact that these works have been subjected to copious analyses and many of the textbooks under study devoted numerous pages to description and/or analysis of the works. Secondly, although these works were among the most popular books listed in the early years of business education, they were often recommended mainly as background reading. Third, these works were rarely recommended or required for management courses and the focus here is on those courses and textbooks employed to teach the fundamentals of management.

18 As noted previously textbook lists were not systematically maintained and textbook lists were frequently omitted in course descriptions. Textbook lists were less frequently published during the 1940's and 1950's and were generally not published at all after 1960. Exact dates on which the publication of lists ceased vary from university to university.


... no philosophy of education is fundamental until it is based on sociology— not on physiology, not even on psychology, but on sociology.
--William T. Harris, 1893

In 1891 when Lester Frank Ward expounded his theory that an equitable distribution of knowledge through education would have a levelling effect on the social hierarchy, a number of educators belonging to the National Educational Association were introduced to a new method of studying educational problems. Although the application of sociology to the study of schools was for some an offbeat solution to what was usually viewed as belonging to the realm of psychology, many educators in subsequent years began to explore the social environment for clues to the problems of public education. From such meagre beginnings, North American sociologists and educators recognized the importance of developing a sociology of education. While earlier writers emphasized the psychological aspects of education and learning, the sociologist's study of education was related to his/her interest...
in social responsibility and progress.

The pioneers of educational sociology held that the importance of education was that it guaranteed the continuation of the social order. This sentiment was expressed by Emile Durkheim who referred to education as "the means by which society perpetually re-creates the conditions of its very existence."² The task of education was to facilitate the individual's adjustment both to the occupational role and to the social environment for which he/she was "specifically destined."³ The school's role in the socialization process was to be accomplished through the authority of a teacher who was responsible to society and who dealt with subject matter and transmitted moral values relevant to the social order.

One of the most influential sociologists of the early twentieth century was Edward A. Ross whose work on social control profoundly affected subsequent studies on education. For Ross, education was to succeed religion "as the method of indirect social restraint." Education was also necessary, he said, as "an economical system of police."⁴ Ross gave warning, however, that education's role as a social control mechanism should not become common knowledge. Hence, he entrusted the important task of socializing and training the upcoming generation to a group of professionals who would act through the authority of the institutional relationship in the schools and their role as teachers to create a better
Educators' and sociologists' interest in the schools was related to their idea that social reform resulted from socialization through properly administered schooling. Compulsory schooling laws, disciplinary techniques, and other repressive measures were direct means by which society was guaranteed, at least to some extent, the creation of an orderly population. Such methods also offered the advantage of sorting and selecting the "feeble-minded" from the others so that they could then be placed in a position where they would prove to be most socially useful. This enthusiasm for social efficiency was extended even further by those advocating the establishment of specialized vocational schools.

Early educational sociology was related to "studies in social pathology." The sociology of education was expected to provide solutions to many social problems and, therefore, early topics in the field included the relationship between education and crime, child labour, crowded slums, urban living, broken homes, and ethnicity. Courses in sociology offered through the normal schools dealt with problems of family, poverty, crime, immigration, church, race, social settlements, socialism, recreation, and population problems. The strong belief in education as a problem solver prompted sociologists to urge public school officials to "learn from juvenile reform schools" which were thought to be "most persistent, comprehensive and effective ... in the domain of edu-
Thus, although it was undertaken in the spirit of beneficence, the work of the social scientists moved in the direction of social control rather than social service.

Following from this early tradition in the sociology of education, a body of literature began to develop during the 1960's and 1970's in which writers critically analyzed the nature, role, and function of education in North America by concretely examining the process of its development. The remainder of this chapter will briefly examine the conclusions of some of these writings and will specifically consider three main theses of the literature of education and socialization. These are the contribution of education to the reproduction of labour power, education and the social control thesis, and education as fostering the development of alternative political ideas and cultures.

1) Education and the Reproduction of Labour Power

One of the central themes of critical analyses of education is the contribution of schooling to the reproduction of labour power. It is generally argued that education has a dual role in this respect. First, through the process of sorting and selecting students into academic, professional, technical, university-bound or non-university-bound streams, the schools function to reproduce the existing pattern of social relationships and therefore existing inequalities.
Intrinsically related to this analysis is the argument that education is concerned with the development of particular personality characteristics and attitudes essential for maintenance of the ongoing social order. In general the political economy of education analyzes the contribution of education to the re-creation of the status quo and the strength of education in maintaining hierarchical and unequal class and social relations and questions education's contribution to the difficulty of social change.

The political economy of education is a response to the structural-functionalist interpretation of the role of education in the socialization process. According to the structural-functionalists, social institutions performed valuable functions in socialization and social control. While some social institutions such as the schools, the family, and the church specifically guided individuals and ensured the inculcation of proper behavioural norms, other institutions such as the workplace relied on the ability of these institutions to adequately prepare individuals for diverse future roles and similarly emphasized the importance of conformity, obedience, and normative behaviour. Social institutions thus contributed to the overall stability of society. Yet Parsons and others maintained that the re-establishment of equilibrium did not necessarily inhibit progress but rather moved the entire social system along the continuum toward
progress and "dynamic equilibrium." Such tasks, Parsons maintained, were performed within a sphere of value neutrality and therefore did not benefit any particular group but rather contributed to general social progress and development. Positivistic analysis of the school, microcosm of the social order, reinforced notions of social coordination and equilibrium and further legitimized the promise of a possible panacea.

For the structural-functionalists schools are social institutions designed primarily to transform the behaviour of individuals. What is most essential in schools, Coleman writes, "cannot be found in books of standard practice nor in the school principal's handbook of administration." Through the schooling process, students acquire norms, values, attitudes, and beliefs necessary for the maintenance of a stable social system. Developing required characteristics and behaviours in schools through carefully constructed scientific procedures paralleled the theory behind vocational guidance, scientific selection, employee testing, and personnel procedures advocated by the behavioural scientists only a few years earlier.

The problem for the sociologist was to ensure that the schools inculcated in the students, as efficiently as possible, the norms and rules of conduct appropriate for their later work in a bureaucratic setting. The structural-
functionalists' explanation for students' failure to acquire the "required qualities" lays outside the boundaries of the schools. To this end the family was often found to be an ineffective socializing agent. Only through the "structural arrangements of schools" and by observing the "behaviour pattern of teachers" as authority figures in "middle management" positions will effective socialization for modern society occur. Once the student is accustomed to the workings of the bureaucracy in schools and has internalized their rules of conduct and patterns of social relationships, an easy transition to the bureaucratic arrangements in the occupational world is possible. This may be due to the school's reliance on "universalistic" rather than "particularistic" criteria for determining success.

In this framework the sociologists' task was to study "negative" influences in school or workplace settings with a view toward their elimination. The prevalent mode of pursuing such studies was to examine the deviant individuals or groups and locate within them the reasons for failing to acquire socially acceptable behavioural norms. From the thrust of the structural-functionalist studies, then, it appears that social problems are the consequence of the individual's or the group's lack of responsibility in performing satisfactorily and in contributing to social progress.
Starting from the premise that schools perform "dysfunctionally" by reproducing the social division of labour and its inherent inequalities, critical analysts have examined concretely and historically the process of the development of schools and their effect on class and social relations. Samuel Bowles argues that as part of the state, the educational order reproduces an unequal division of labour and class inequalities in order to maintain the production process. Moreover, Bowles and Gintis examine the nature of work as alienating, the type of labour power required for the current work relations, and then discuss education's contribution to the continuation of that process. Bowles and Gintis' work essentially states that while the primary function of education in earlier historical periods may have been that of enlightenment, beginning with the reform movement and the massification of educational programmes, its purpose, like its curriculum, has become essentially pragmatic.

A major focus of the sociology of education is on the relationship between education and inequality. Studies such as those by Porter, Porter, and Blishen assume that social inequality would decrease if education were made more accessible to the lower class or if opportunities for education were further extended. This argument does not analyze structural problems which affect both the unequal educational
system as well as the continuation of inequality after schooling. The effects of social class on occupational attainment and mobility are uncovered by examining the unequal access to higher education based on class background, by measuring intergenerational mobility, by examining the rigidity of the upper levels of the class structure, and by analyzing the functions of education in reproducing the hierarchical division of labour and the existing stratification system. 17 Education does not create inequality but rather facilitates and legitimizes the re-creation of it. 18 In concrete terms, employers rely on the school's evaluation of students for selection of workers.

Concrete historical analyses of the development of schools have contributed to the understanding of the relationship between educational values and the larger social system. 19 In this regard Edward Krug's The Shaping of the American High School, 1880-1920 is an important work. Krug traces the development of American secondary education and identifies social service and social control as the two essential purposes of education contributing to the social efficiency ideal. In addition, Cremin and Katz examine school reform and the relationship between the ideology of progressivism and the imposition of education on the working classes. 20 Following from such analyses, Graham Bleasdale concludes that in modern schools, ideals of the reform movement
have been replaced with modern values such as consumerism, competition, pragmatism, and individualism. 21

Rather than studying how education generally served the interests of capitalism, many authors specifically examined how schools shaped the personality and behaviour of students to meet the requirements of work relations under capitalism. By examining the development of education and its function vis-a-vis the socialization process, the "hidden curriculum" becomes apparent. 22 Although many sociologists have assumed that the transition from home learning to the schools was a fairly smooth and natural process of "modernization" or "industrialization", a detailed concrete analysis of North American schools has revealed that this was not the case. For example, in his study of education and the Chicago working class, David Hogan writes: "Working class educational behaviour was more a consequence of structural factors than ideological imposition." 23 In a theoretical and critical appraisal of the Sociology of Education, Maurice Levitas has analyzed the phenomenon of mass schooling in relation to other historical changes necessitated in the working class family and the existence of class conflict over such changes as the length of the working day, the duration of a working life, and the number of hours available for work from the entire family. These conflicts between capital and labour, Levitas argues, in turn "have been decisive in structuring
the family, its internal division of labour and the consequent family role patterns."24 This included the assignment of roles based on sex and age and the socialization of children.

Closely adhering to this critical tradition, social historians have contributed to studies in the development of education by rejecting the structural-functionalist definition of socialization as the transmission of culture and questioning who guides, modifies, or controls this process of "cultural" learning.25 When the rationalization for the development of education is revealed through analysis of the words of its promoters, it is clear that in the main education was promoted in North America in the interest of the survival of capitalism and class relations.26 Moreover, several analysts have examined more recent statements by modern educational promoters and philanthropists as well as modern educational policies to find that answers to questions of order, control, stability, and survival are still sought through minor adjustments in mass schooling.27 Canadian school critic, George Martell, for example, has studied the language and content of the 1968 Hall-Dennis Report and concluded that although the report meant to recommend more open, meaningful school experiences for middle and working class children alike, the net result of such policy has been a replication of the existing class structure.28

To understand how education selects against the work-
ing class, it is useful to examine the labour market, educational requirements for jobs, and subsequent job performance. In a study of this nature, Ivar Berg has provided empirical data to demonstrate that the apparent relationship between amount of schooling and job performance has been overrated. Berg's data proves that personality characteristics and environmental conditions rather than educational achievement are critical determinants of job performance. The demand for a more highly educated work force, moreover, is related to the hidden curriculum. In a critical appraisal of the school system, Carl Bereiter has suggested that the only legitimate functions of schools are skill training and at the elementary level, custodial child care. Lessons in behaviour, values, and attitudes belong in the context of family life and thus, it is important to distinguish between schooling and education.

When distinguishing between schooling and education, it is useful to review Paul Freire's descriptions of traditional educational programmes as relying on "banking" or "depositing" information in a passive student, and in contrast of libertarian education--"conscientization"--or education as active participation by students in learning about their own existence and how to transform it. Following from Freire's work, Shor has argued that in North America critical literacy should provide the basis for analysis of
alienation, mass culture, and social and political inequalities.  

Specific periods of educational reform have produced school programmes which are more efficiently tailored to the needs of work environments than those of participants. Social reform in education has changed the face of education, but rarely its substance. It has covered the structural problems inherent in capitalist society while promising to solve inconsistencies in the delivery of school programmes and to make the programmes more relevant to students' and society's needs. Studying specific career educational programmes provides insight into the details of professional socialization. Historical studies on legal education by Auerbach, Seligman, and Johnson, for example, have all pointed to the unidimensionality of this form of professional training and the resulting similarity in programmes at various universities across the country. The present study similarly examines business and management education and argues that the particular format and content of management education was developed in response to notions held by its promoters regarding what a businessman must learn or how a businessman must prepare for future roles in industry or commerce.

ii) Education and Ideology: The Social Control Thesis

It is difficult to separate analyses of education as
a social control mechanism from those arguing that education essentially serves to reproduce labour power and re-create the class structure. While these arguments are interrelated, many writers have chosen to place primary emphasis on one of the arguments and hence clarify the issues involved in each position.

Of central concern to those interested in analyzing higher education as an agency of social control has been the question of who rules the universities. Under the direction of the state, members of the dominant class are chosen to occupy the "command posts" of the universities and in these positions they serve as "gatekeepers" of the educational order, guarding both the content and process of the educational system. The relationship between the universities and the dominant class is, however, a complex one. Universities "are not mere instruments of the capitalist class acting on its behest." While the universities do possess a degree of autonomy, this worldview is seldom dissimilar to the status quo, and thus these institutions "can only be understood within the context of the concrete relation between the universities and the capitalist class." In examining the business curricula the present study considers the concrete relation between academics and representatives of the capitalist class in their joint effort to develop and maintain a pragmatic curriculum.
Inquiries into the nature of university governing boards began with Thorstein Veblen's pioneering work, *The Higher Learning in America*. John Porter, Wallace Clement, David W. Smith, Ralph Miliband, and more recently Paul Axelrod have considered social and structural implications of the governors' roles for the educational order in particular and capitalist society in general.³⁶

Along with the question of who rules the universities, critical analysis of education has been concerned with the problem of who influences the development of education and educational policies. By examining activities of American foundations in African education, Edward Berman found that this form of American philanthropy was guided by a desire to promote a favourable climate for American political and corporate activities, and further perpetuated a form of cultural dependency on the United States.³⁷ Underlying purposes of this type of philanthropy or measures of educational reform have been examined. For example, in studying the development of the school system in Ontario, Susan Houston concluded that the Ontario school system should not be regarded as a humanitarian effort on the part of the upper class and the social reformers to offer schooling to the lower classes. Rather, Houston argued that the reformers were concerned with the moral socialization and social control of these children.³⁸ Joel Spring analyzed school reform as the means through which
far-reaching, yet subtle social controls were instituted for a corporate state interested in maintaining efficient production and in augmenting all forms of consumption. Spring analyzed the innovations of the reform movement such as junior high schools and vocational guidance and concludes emphatically that such measures have extended the school's realm of control by making education a part of the corporate model and effectively limiting the meaning of human freedom. From the reform movement came the notion that solutions to social problems were imminent. Within this context pragmatic programmes such as business and management education were developed. Management education thus incorporated the idea of problem solving in a complex and subtle fashion.

Education may be regarded as an agency of social control by examining inherent lessons in both overt and hidden curricula. School lessons reflect the ideology of their creators and thus any particular lesson may carry multiple messages to students. Even in technical education it is necessary to investigate hidden lessons regarding such questions as sex roles, the nature and structure of power, and racial inequality. Early literacy movements, for example, were found to have goals other than creating a literate population. Schools not only taught "society's more permanent values" but were also "necessary to adjust the young to the changing patterns of the economic system as well." While lessons in values taught are apparent upon examination of
specific curricula such as business education, a study of what is not included as curricula is meaningful as well. That women's history and working class history, for example, are not regular features of the curriculum is indicative of an obvious bias in the lessons at hand. Regardless of their formal presentation of "impeccable party neutrality", schools engage in "political socialization"—"mostly in terms which are highly 'functional' to the prevailing social and political order." Lessons in political ideology, moreover, have been found to account for the exportation of American education to the Third World.

Even early sociologists such as Emile Durkheim analyzed the relationship between schooling and the formation of ideas. Adopting a critical approach, writers such as Raymond Callahan have argued that the organization of schools as bureaucracies and the adoption of business values have seriously limited free-spirited learning. Students generally learn how to appease teachers and question neither course content nor the teacher's authority. This process has intensified in the transition from the nineteenth to the twentieth centuries and the gradual replacement of what Erich Fromm calls "overt authority" with a more subtle "anonymous authority." When the substitution of anonymous for overt authority is indicated, the extent of social control in the educational process is apparent.
iii) **Education and Social Change**

For some the social control thesis is flawed in its seeming reluctance to account for student revolt and the campus climate's contribution to fostering critical political ideas. The social control argument does not deny that university campuses provide a climate for the development of alternative political interpretations, activism, and movements for social change. However, these activities have historically been "contained" mainly at the campus level and have not sparked widespread social movement.\(^48\) Hence, the social control thesis is based on central tendencies of education to reproduce ideas to maintain the social order.

Studies of student revolt in North America have found that changes sought and won by students were those affecting their daily interests as students—tuition increases, or cutbacks on teaching staff, firings of popular professors, and course content.\(^49\) Even during the Vietnam War student activism in the United States did not change the nature of the military attacks and the duration of the war nor did it substantially change popular support for the military at least during its early years. What it did accomplish, however, was the enlightenment of many who would otherwise be unattentive to matters of politics and the state.\(^50\)

Although there are relatively few in number, courses
in radical politics, sociology, and economics are openly offered at Canadian universities. While this seems to contradict the social control thesis, the effects or functions of offering such courses must be examined. Radical analysis of this sort is primarily confined to the campus. As such, student activists are set apart from other sectors of society and are most often labelled as "young idealists." Not only are the issues and tactics often described as beyond the realm of reality but a dissimilarity of interests in terms of the context of their daily existences separates students from other potential sympathizers. In addition, students do not constitute a social class but rather "a social situation with particular location in class relations." Thus, students involved in movements held competing interests vis-a-vis political action and social change.

A serious flaw in both popular and student movements has been their emphasis on schools as vehicles of social change. During the 1960's inequality in the school system with respect to tracking, career selection and the general differences between teaching methods in suburban and city schools provoked many educators to openly criticize the system. Critics attacked the schools for their authoritarian structures based on fear and repression, their class, racial, ethnic and sex biases, and their inability to foster the desired qualities of creativity and self-direction.
reforms included free schools, head start programmes, more community involvement and control, decentralization of both the administrative bureaucracy and the classrooms, and technological changes to allow for more efficient delivery of subject matter. Many of the critics offered blanket reforms and prescriptions for the future educational process but lacked concrete recommendations on how they were to be instituted. Other suggestions were addressed to various racial, ethnic, or low income groups but failed to recognize problems inherent in the system as a whole. Proposals were frequently impractical vis-a-vis structural realities. Critics were not often in agreement on goals of the system and their uncoordinated efforts toward building better schools were confusing to both educators and the general public. Upon close examination of various critical works, however, two dominant themes emerge: that the school can provide more equality of opportunity and improve its role as a vehicle of upward social mobility and that a general improvement in the structure and style of schools may facilitate and enhance the growth of creativity and other desirable characteristics.

Critical assessments of the traditional school system were popularized when the writings of A.S. Neill, John Holt, Jonathan Kozol, Paul Goodman, Edgar Z. Friedenberg, Neil Postman and Charles Weingartner gained widespread recognition by both academics and the general public. Even the
free school movement of the late 1960's did not prove to substantially alter the hidden curriculum of the schools. By suggesting that the schools could potentially solve social problems, educators assumed that the structure of society was sound, that the problems within that structure were solvable and that schools were both capable of solving the problems and fostering social change. School reform for many has been a convenient diversion from the more arduous task of improving the basic structural arrangements of society. Reformers and critics alike have been trapped by their focus on education as a panacea.

The notion of education as a panacea places the educational system at the centre of the social system where it supposedly can effect positive and fundamental social change. This obscures past historical lessons that education has yet to eliminate social problems and, more importantly, it masks the structural conditions inherent within the socioeconomic system which limit the machinery of social change. By searching within the educational system for clues to the development of a better society, people will be content to experiment with the schools, and will not question the more fundamental bases of social power and hence, social change. Thus, the idea of education as panacea has created a dependency on the schools for the solution to social problems and has maintained people's faith not only that there is, indeed,
an ultimate panacea but that it is clearly within reach.
Footnotes


3 This refers to Durkheim's definition of education: "Education is the influence exercised by adult generations on those that are not yet ready for social life. Its object is to arouse and to develop in the child a certain number of physical, intellectual and moral states which are demanded of him by both the political society as a whole and the special milieu for which he is specifically destined." Emile Durkheim, translated by S.D. Fox, Education and Sociology, (New York: The Free Press, 1956), p. 71.


8 Even Parsons' conception of social change was based on the assumption of the "perfectability" of capitalism. He wrote: "'in the transition from capitalism to a different social system surely many elements of the present would be built into the new order.'" Cited in Alvin W. Gouldner, The Coming Crisis of Western Sociology, (New York: Avon Equinox Books, 1971), p. 184.


10 Coleman, Ibid., p. 12.

11 Dreeben, op. cit., p. 84.
"Universalistic" behaviour is oriented toward future and societal goals while "particularistic" behaviour is concerned with the satisfaction of immediate personal, familial or friendship needs. While the family teaches particularistic roles, it is the school which prepares the child for universalistic ones.


35 John Barkans and Norene Pupo, "Canadian Universities and the Economic Order", in Nelsen and Nock, op. cit., p. 69.


41 See Michael Apple, "Commonsense Categories and Curriculum Thought", in Dale, Esland, and MacDonald, op. cit., pp. 174-84.


44 Lawrence S. Lifshultz, "Could Karl Marx Teach Economics in America?", Ramparts, (12:9, April 1974).

45 Miliband, op. cit., p. 214.


50 These comments are made in reference to North American student involvement. More significant inroads have been made by student activists in the Third World. However, it is inappropriate to isolate examples of student movements and social change without taking into account the particular social and political context within which the movements occurred. For this reason, cross cultural comparisons will not be undertaken here. Rather, analysis will be limited to the North American tradition.

51 Yeo, op. cit., p. 226.

52 We may note exceptions as for example in the case of France 1968.

Chapter Three

The Historical Development of Schools of Business and Commerce in Ontario's Universities

"Education... is our apprenticeship for the business of life." 1

Perhaps the most influential report on education in Ontario was published in 1912. This was the Report of the Royal Commission on Industrial Training and Technical Education written under the guidance of John Seath, then Superintendent of Education for Ontario. The report succinctly concluded that if Canada were to rank among the industrial nations of the world, then the educational system would need reorganization and restructuring of its objectives and philosophy. The educational system was charged with "leaving too many helplessly equipped for the battle of life." 2 To remedy this situation the commissioners urged that the "useless branches" of the curriculum be "lopped off" and in their place be grafted "new shoots" of knowledge most productive for manufacturing and commercial development. 3 This suggestion was one in a series of events which triggered the full establishment of business and commerce programmes in Ontario's higher educational institutions. Prior to this, during
the late nineteenth century, the Toronto Board of Trade, the Canadian Bankers' Association, and other such organizations had attempted to establish business courses within departments of political economy. However, it was not until after the turn of the century that the most sincere effort was made by businessmen, educators, political figures, and others interested in social progress and development to execute plans made earlier for effective business education within the university setting.

This chapter will examine the historical development of schools of business and commerce within Ontario's universities. Early forms of business education in the elementary and public schools through adult education classes will first be analyzed. The focus, in particular, will be on the development of business education in the nineteenth century and the popularity and promotion of this form of pragmatic education. Finally, the introduction of business curricula into the universities and the professionalization of business education in this process will be examined.

Mid Nineteenth Century Social and Educational Reform: The Pragmatic Curriculum and The "Modernization" of Schools

The first evidence of commercial education in Ontario technically dates back to 1796 when Richard Cockrel opened an evening school in Niagara in which he offered such courses
as arithmetic, bookkeeping, and writing. These courses were intended for adults who had not necessarily been educated previously but who desired a pragmatic learning experience. Cockrel advertised his "school" in the *Upper Canada Gazette* stressing his desire to teach "any particular branch either in the practical or speculative mathematics." Following this lead, another Ontarian, James Blaney, opened a school in Niagara in 1797 in which he offered reading, writing, arithmetic, bookkeeping, and practical mathematics. While these attempts to establish practical schools should be acknowledged for their historical significance and for their creators' imaginative efforts at self-employment in a pedagogical field, their general impact was negligible since neither institution operated for more than a few months. It would yet be a number of years before any continuing and successful schools offering a business oriented or practical curriculum would become a more permanent part of Ontario's educational system.

While some historians have been content to argue simply that these schools had little success because the lack of electric light and central heating made night classes almost impossible, this is not an adequate explanation as it ignores the social factors involved in an innovative programme's inefficacy. The establishment of adult evening classes in commercial and other courses during the first half of the nineteenth century was an untimely event in a
society which was characterized primarily by pre-capitalist economic formations. Although schools did exist before mid
century, these schools were inconsistent both in quality and in courses offered, few in number, subjected to clerical con-
trol, often the source of local political animosities, and relatively poorly attended. In 1846, for example, 49.8% of
the 5 to 16 year olds in Upper Canada were registered in the common schools while by 1876 this increased to 92.6%. Prior
to the mid nineteenth century schools were simply antithe­
tical to the needs and desires of the farmers who lived mainly self-sufficiently in small isolated settlements and who relied on all members of the family or productive unit to labour cooperatively on a daily basis in order to effec­
tively maintain this self-sufficiency. Before mid nineteenth
century also, schools were neither free, universal, nor com­
pulsory. Although these ideals had been incorporated into the School Act of 1850, it was not until 1871 that the school had become a fully centralized, organized mass institution which incorporated elements of both the classical, academic curricula and the pragmatic, vocational subjects. 

Beginning with the 1837-8 rebellion and agitation for Responsible Government, the nature and character of the schools came under the close scrutiny of men like Egerton Ryerson who worked to eliminate their aristocratic tendencies. In 1844 Ryerson was appointed Superintendent of Education for Upper Canada and within weeks of his appointment began to
study the European and American school systems for clues to the improvement and modernization of Canadian schools. His observations, conclusions and prescriptions for Canadian schools were written in his famous 1846 Report on a System of Public Elementary School Instruction for Upper Canada.

Ryerson's most ardent statements in his 1846 Report were concerned with the importance of practical education. He argued that a practical form of education was more appropriate for the changing economic and social structure with its goals of progress, development, and efficiency. Ryerson suggested that the "mere acquisition" or "general diffusion of knowledge" was frivolous and therefore, "does not merit the name of education." Instead, he described education as "practical life in principle" and said that "practical life is education in action."

Through his campaign for universal, compulsory, and practical education, Ryerson promoted the ethics, mentality, and lifestyle appropriate for the newly emerging working and social conditions of industrial capitalism. Ideas of account keeping, accurate and careful planning and organization, and general business ethics and principles were advanced as more suitable to a modern industrial capitalist society than the formerly imprecise style characterizing an agrarian society. Ryerson, for example, spoke of the importance of the knowledge of accounts for the mechanic, the farmer, and the family as well as for the tradesman and the merchant. This branch
of knowledge which he saw as essential to one's prosperity both in personal terms in one's "labours and dealings" as well as for a "commercial community" was, he suggested, unnecessarily neglected in the schools.

Ryerson's struggle to institute the practical curriculum was met with fierce opposition by those desperately clinging to the last remaining elements of the old order. In this regard hostility developed in 1831 over the nature of the Upper Canada College curriculum. A petition signed by burgeoning capitalists of the day--Robert Baldwin, John Baldwin, James E. Small, F.T. Billings, Hugh Richardson, John Ewart, Daniel Brooke, Jacob Latham, Thomas Moore, Q. Fairbanks, R.C. Horne, and John Murchison--was circulated to Lieutenant-Governor Sir John Colborne and other college officials. The petition demanded that commercial education be introduced into the curriculum so that students will be qualified "for discharging, with efficiency and respectability, the scientific and other business of Tradesmen and Mechanics." The officials, however, were convinced that a college education did not necessarily have to be overtly pragmatic for it to qualify students for the more earthy professions. They were concerned about "frustrating the original object of the college" and were convinced, at the same time, that at the college a boy's "Commercial Education has not been neglected."

Education had historically been more involved in the socialization process or in fostering "moral culture" than
in the facilitation of intellect or cognitive development and
in this capacity was not "neglecting" its role in preparing
students for any particular occupation. At the ceremony of
the opening of King's College, June 8, 1843, the point was
clearly made that a university course "provided habits of
industry and perseverance." As a "School of Discipline", the
university was further to aid in developing in its students
"punctuality and order" and to enforce "subordination and
deferece to authority." What was misconstrued by the pro-
ponents of the classical curriculum were the overall goals
of those in favour of instituting practical curriculum. With-
out sacrificing the historical functions of education, the
pragmatists simply desired a more energetic curriculum which
would be more representative of the work ethics of industrial
capitalism.

The idea that the university was fundamentally a fin-
ishing school rather than a training centre persisted among
those interested in maintaining the institution's "ivory tower"
image. The general fear was that the university would lose
its integrity if the curriculum became too practical. McGill
Principal William Peterson pointed out in an address entitled
"The Place of the University in a Commercial City" that it
is not necessary to sacrifice well rounded education for spe-
cialization. Although he emphatically stated that "it is
not beneath the dignity of a university to take an interest
in practical matters, such as the problems of banking and
finance, sanitary reform, water supply, taxation, charity organization and municipal questions".\textsuperscript{17} it is clear that the worry remains that "the pressure of commercial interests may tend to depress the standard of liberal education and the old traditions of culture."\textsuperscript{18} The debate, therefore, no longer ensued simply over the question of classical versus pragmatic education but rather sought an adequate solution for compromise between the "quality" of the longer classical curriculum and the need to graduate men into practical affairs.

Notwithstanding the arguments of the classical education promoters which were heard well into the twentieth century, by 1870 it was clear to most officials and educators that the schools seriously lacked the facilities, faculty, and curriculum to act as a significant force in economic progress and social development. In his Speech from the Throne, December 6, 1870, 4th Session, First Parliament, the Lieutenant-Governor referred to the "expediency of making ... Education more practical and directly instrumental in promoting the interests of Agriculture and Manufactures."\textsuperscript{19} A practical, universal, and free system was expected to play a pivotal role in the nation's well-being.

By the 1870's then, the move toward "modernization" had become part of the conscious efforts of politicians, educators, and members of the dominant class alike. In this "modernization" drive, education was to play a primary role both in teaching appropriate skills and knowledge and in pro-
moting national progress.

The Triumph of Pragmatic Education and
The Development of Business Curricula

In his 1870 Annual Report of the Schools of Ontario, Ryerson defended the modernization of the schools to its critics by arguing that the aim should be to make the school system stand "in harmony with the progressive spirit of the times and comprehensive enough to embrace the various branches of human knowledge which are now continually being called into requisition in the daily life of the Farmer, the Artizan, and the Man of Business." This constituted somewhat of a challenge not only because the necessary facilities, trained teachers, and finances were inadequate as yet to realize this objective but also because this would necessitate a change in the general orientation toward learning. Alongside those who opposed pragmatic education stood those who doubted its value. Men engaged in practical business affairs were skeptical of the school's ability to teach people the practice of business. Skillful business practice was thought only to be acquired through actual experience and long hours of apprenticeship in the backrooms and warehouses and with the retailers, financiers, and clients. The formalization of business learning through schooling seemed to threaten or to call into question the integrity of those who had graduated through the "learning by doing" technique.
The formalization of business learning was representative of the tendency during this period to objectify, to rationalize, to subject to close scrutiny and to organize affairs which had previously been dealt with in a "laissez-faire" manner. Furthermore, this new form of education was expected to transform the psyche of agrarian people and "make thinking and reasoning beings of the mere creatures of impulse, prejudice, and passion." This education promised also to "give them objects of pursuits and habits of conduct favourable to their own happiness." Along with this individual benefit the school "promise" was extended to the community which would begin to prosper by an educated citizenry because the "temptations of vice and sensuality" could be lessened and the individuals would be taught to "identify... with the general interest." Classical curriculum with its imprecise hypotheses, random attempts at theorizing, philosophical, but non-conclusive postulates, unsupported assumptions, and lack of data was insufficient to produce men with the energetic spirit and self confidence of science necessary for business and industrial progress. Hence, we witness the triumph of pragmatic curriculum.

Business was not viewed as school curriculum as its introduction through private schools in the early nineteenth century indicates. While the early business schools enjoyed only a short-lived success, schools established after mid century were noted for their longer duration. In the 1860's pri-
vate vocational schools offering commercial education were established. The first of these, the British and American College established in 1860, advertised for students in The Globe, boasting that its "Bookkeeping Department is as thorough and intensive as that of any Commercial College on the Continent ..." Three other colleges with a similar curricular emphasis were opened in 1862--Bryant and Stratton's Commercial College in Toronto, London Commercial College, and Canada Business College in Hamilton. These early schools were followed by the establishment of J.M. Musgrove's National Business College in Ottawa in 1866, the Ontario Business College in Belleville in 1868, four schools in Toronto--the Canadian Business University and Shorthand Institution in 1879, Baker's Shorthand School, Lowe's Commercial Academy, and Nimmo-Harrison College, Central Business College in Stratford in 1887, Brantford Business College in 1890, and in London, Forest City Business College in 1885 and Western Ontario Business and Shorthand Academy during the 1880's. By 1903 business colleges had also been built in Windsor, St. Thomas, St. Catharines, Galt, Woodstock, Sarnia, and Berlin. Several of these "parent" colleges also established branch operations in various parts of the province.

In the public schools, commercial education dates back to the middle of the nineteenth century following Egerton Ryerson's famous 1846 Report on Education in the Province of Ontario. Ryerson urged that mechanical, agri-
cultural and commercial knowledge be pursued by the common schools. By the next year he was able to proudly report that the introduction of studies such as algebra, geometry, surveying, natural philosophy, chemistry, astronomy and bookkeeping were "sanctioned by the Legislative Department of our Government and ... approved by the most distinguished and experienced men of our times." Significantly, he also reported a large increase in the number of pupils engaged in practical studies as compared to the previous year.

The ability of the schools to produce successful businessmen was clear to Ryerson. In his annual Report of 1870 he argued that the high schools should adopt an orientation toward business training as the Model Schools of Ontario had previously done. Model School graduates, he said, "have been thoroughly prepared in Bookkeeping and other kindred branches." Through this education, Ryerson continued, not only are these students "fit ... at once for practical work in the counting-house and other departments of Mercantile life" but, more importantly, "the result has been that boys trained there have been much sought after by Merchants and others." Part of the problem in establishing business curricula lay in the definition of what constituted this curriculum. Because most people assumed that one naturally acquired business skills on the job and that one's personality in large part determined one's success, there was enormous difficulty in submitting the job of business to
close scrutiny in order to determine the teachable, quantifiable, and necessary areas for business study beyond the basics of single and double entry bookkeeping.

The turning point in commercial education for the high schools came in 1871 when the new School Act widened the scope of the curriculum to include commercial subjects, such as commercial arithmetic, insurance, commission, brokerage, purchase and sale of stock, custom house business, taxes, interest, and single and double entry accounting. Although bookkeeping, including a knowledge of commercial transactions, was a required Grammar School subject as early as 1865, the 1871 School Act legitimized its status as acceptable "school" material. The definition and requirements of a commercial education were no longer to be decided upon by the individual school administrators. Previously "no special attention" had been paid to commercial subjects but in the new programme of studies outlined by the Act, requirements were clearly specified. Along with the Act of 1871 a circular was sent to the Boards of Trustees of high schools in Ontario listing the complete requirements for the English course in high school. Although this course did not lead to specific job training like the commercial education programme, its orientation was decidedly pragmatic. Much of its emphasis was, in fact, on commercial subjects. Students, for example, were to take bookkeeping and arithmetic in forms one through four and penmanship in forms one and two.
Although the School Acts provided for the teaching of commercial subjects and the graduates were quite readily accepted and respected by the majority of employers, the idea that pragmatic education did not belong in the schools persisted. Somewhat embarrassed by the mere notion of pragmatic education, school officials often rationalized the development of pragmatic curriculum by arguing that it was established in response to popular demand. Without committing themselves to a position in favour of pragmatic education and technical training, they craftily engaged in a form of debate over such education. They resolved the issue either by describing it as a progressive experiment or by arguing for its necessity in certain circumstances or for particular groups of people. The educational promoters were cautious not to offend members of the middle and upper classes whose sons and daughters would in all probability by virtue of their class background attend high school and university. Hence, pragmatic learning was usually assigned a "second class" standing vis-a-vis the academically oriented and traditional classical curriculum.

The numbers enrolled in commercial subjects in the high schools grew dramatically during the late nineteenth century. In 1867 only 23% of students in Grammar Schools took bookkeeping; this figure rose to 45% in 1882 and to 82% in 1887. Meanwhile bookkeeping was dropped from the public schools in 1882 since only 37% of those enrolled studied it. At the same time bookkeeping was made into a compulsory sub-
ject in the lower high school forms. The Department of Edu-
cation passed a provision for the granting of Commercial
Diplomas in 1885.

The Legislature's next and perhaps most important
step in certifying and promoting business education occurred
when the Education Act of 1891 made provision for the forma-
tion of a commercial department in high schools and collegi-
atc institutes in Ontario. This led to the development of
the commercial specialists' certificate for which nine papers
were required: stenography, drawing, banking, bookkeeping,
freehand drawing, blackboard and memory drawing, model drawing,
industrial design and commission arithmetic. To this list
penmanship and plane and solid geometry were added in 1893.
The emphasis on industrial design and art was more closely
related to curricula in technology and engineering programmes
rather than business. However, the art subjects were dropped
in 1896 when banking was enlarged to include areas such as
exchange, shorthand, dictation, business forms, and laws of
business. Over the next ten years the requirements for the
commercial specialists' certificate underwent a number of
changes to include even more business subjects.

By the early 1900's even the classical colleges and
preparatory collegiate schools devoted more time, effort, and
space to the teaching of commercial subjects. Although the
Classics Department was still "the chief feature of the
College", by 1902 at Upper Canada College for example, it was
"thought wise to devote more attention" to commercial work and for this, two large rooms were set aside, one for typewriting and one for a college bank. The daily newspaper which was described as the "one great textbook" of the businessman was studied in literature classes for its up-to-date reports of committees, minutes of meetings, proceedings of conventions, and resolutions.

Subject matter was, in fact, overtly saturated with business principles. Composition lessons included such tasks as writing advertisements and telegrams, and recording minutes of committee meetings and accounts of local events. Along with these lessons, students were to study business through geography, history, arithmetic, and natural science. Geography, for example, included lessons on natural resources, manufactures, imports, exports, commercial facilities of Canada, and trade relations. Penmanship included price and parcel marking, billhead designing and ornamental writing and in French and German classes, students were expected to practise business correspondence in these languages.

By 1900 schools for girls also had established commercial departments. The purpose of the commercial curricula for women was "to give not only the ordinary preparation for business life, but to go much further, and equip a student to act as a Private Secretary or to take full charge of an office." For example, St. Joseph's Academy in Toronto offered commercial certificates for girls or diplomas in steno-
graphy and typewriting; Ottawa Ladies' College Commercial Department offered courses in stenography, typewriting and commercial arithmetic; Whitby's Ontario Ladies' College included commercial subjects in its curricula, and Ursuline College for Young Ladies in Chatham housed a business school which offered courses in bookkeeping, business practice, penmanship, commercial arithmetic, commercial law, business correspondence, typewriting and stenography. In general the courses for women were designed to prepare students to assist in the administration of business corporations. Most often courses in banking, insurance, purchase and sale of stock, shipping, storekeeping, and trade were unavailable or not recommended for women while typing, stenography, shorthand, penmanship and basic bookkeeping were widely offered in girls' schools or highly recommended in mixed schools.

The most important recommendations for commercial and industrial education were made by John Seath in his 1910 Report on Technical Education and Industrial Training. His main suggestions were to align the school courses more closely with the requirements of various types of business, to provide both practical and theoretical courses in business for teachers, and to extend teachers' commercial certificate requirements to include such areas as agriculture, art, household science, and industrial subjects. Following the report, the Department of Education took further initiative in developing commercial education by providing better and more extensive faci-
lities for training commercial teachers and by upgrading the standards of the commercial courses available in the high schools. The results of the study led directly to a concentrated commercial curriculum and to the establishment of a High School of Commerce in Toronto in 1911.

The purpose of this commercial training, according to Seath, was to give the student "the training which enables...[the employee] to become an efficient one after proper experience." Seath acknowledged the criticisms of businessmen concerning business education by saying that "a boy [sic] cannot be educated for business" because "it can be learned only in the office or warehouse." The purpose of education is not that "the student will be at once as useful to his [sic] employer as if he [sic] had spent the time in a business office", but more significantly it equips students with values necessary for business, such as efficiency and the desire for profit making. Moreover, business students have proven to "qualify themselves for wage-earning positions" with "comparative ease." Seath also argued that business education was not particularly costly as were other forms of practical education requiring expensive equipment. Furthermore, its practicality alone appealed to many, for as Seath pointed out, "many parents believed that if their children take ... [practical subjects] at school, they will be in a better position to earn a livelihood." Seath recommended the establishment of two commercial
courses, a General Business course and an Office course. The four-year General Business course was "intended for those about to enter business life in some of the more responsible positions, eventually becoming travellers, buyers, managers, etc." In other words this course would graduate the well-rounded businessman who would be required to study the English, German, and French languages, and all aspects of business practice, trade, and industrial production. The three-year Office course was intended for lower level employees or "bookkeepers, accountants, stenographers, secretaries, etc." These students would specialize in accounting, commercial arithmetic, shorthand, and typing. In both cases, for the first time provision was made to offer these courses in the evening schools for "those who are engaged in business by day and whose means have not allowed them to utilize, before entering on business, the opportunities of the day school." 

During the first half of the twentieth century, rarely did high school business graduates continue their education at university. A high school business education was all the academic preparation needed to gain access to even high level managerial positions. University education was at most a theoretical education while the high school offered what most young, aspiring middle and working class people desired --a business career. The struggle for the establishment of business education in the university therefore, was, in part, a struggle to convince the upper class whose members patronized
the universities of the necessity and usefulness of this form of education at the higher levels. Part of the difficulty faced by the business education promoters was due to the pervasive belief that theoretical education was superior to the pragmatic forms especially since the latter had historically been intended for the lower classes. It was not until the dominant class realized that there was a sound, theoretical and practical body of knowledge growing from reputable disciplines such as political economy that the establishment of business education was endorsed at the university level. This "stamp of approval" was bound to the discovery that business curriculum held important lessons even for those whose families and class members had participated successfully in business practice for years and to the fears that their hegemony in economic affairs may be seriously shaken if they ignored the value of university level business education and research.

The University's Approach: From Political Economy to Business Education

The introduction of business oriented courses in the universities came long before Queen's University graduated its first commerce students in 1921. The educators and other administrators who clung desperately to the vision of the "ivory tower" and who dispelled the notion of pragmatic education and job training programmes as university material finally gave way to outside pressure on the university by busi-
ness groups such as the Canadian Manufacturers' Association, the Canadian Bankers' Association, the Institute of Chartered Accountants of Ontario, the Society of Industrial Accountants, the Canadian Credit Institute, the Boards of Trade, and the Canadian Investment Dealers' Association, and formal departments of business and commerce were established at Queen's in 1919, at the University of Toronto in 1921, at the University of Western Ontario in 1921 and at McMaster University in 1935. The educators' rationale for promoting commercial education was, according to O.D. Skelton, that "the practice of business is developing rapidly a body of principles which may be formulated and taught." In other words, business had come of age as a science and in doing so was becoming comparable to the older professions of law and medicine. As it became professionalized in the university it was clear that university trained businessmen would become higher ranking executives and not merely workmen or clerks as those positions were intended for high school graduates and others.

Although the formal establishment of business administration departments in the universities took place for the most part during the 1920's, business subjects were taught as early as the 1890's when courses in bookkeeping, commercial arithmetic, mensuration, actuarial science, commercial drawing, public finance and taxation, money, credit, and banking, trusts, problems of distribution, capitalistic organization, and trade unions and labour economics were offered
through the Political Economy departments. The course not only taught the students rudimentary and advanced business skills or "how to become successful businessmen" but rounded out this practical orientation with theoretical lessons in solving social problems. In other words, university educated businessmen were expected to become problem solvers who would not only engage in the profit making ventures of their respective firms but would strengthen or guarantee those ventures through wise decision-making and ability to manage workers and other affairs of the organization.

There is little evidence of a commercial curricula in the universities before the middle of the nineteenth century. In 1844, however, a professorship in political economy was established at King's College (University of Toronto). The approach at this time was to teach the "theory of the pragmatic." That is, although subjects could be presented in a highly practical or experimental manner, teaching was mainly oriented toward theoretical or "book" learning.

Along with King's College's pioneering efforts in teaching political economy, references to the development of business oriented courses, whether theoretical or practical in nature, were scarce. An 1856 list of courses offered at Regiopolis College in London included bookkeeping and a Victoria College University calendar listed bookkeeping as a preparatory course one should take in Grammar School "to qualify pupils for the University course." Many years later,
in 1882, Queen's University established a Political Economy department. The idea of teaching political economy in Ontario schools was initially supported by Egerton Ryerson who described it as "the science of national wealth or 'the means by which the industry of man may be rendered most productive of those necessaries, comforts and enjoyments which constitute wealth'."\(^{42}\)

Although educational promoters theorized on the value of practical education, this form of curriculum was rarely found in Ontario, until the mid 1880's when schools like the Canadian Literary Institute began to "prepare students for commercial pursuits.\(^{43}\) The Canadian Literary Institute, which was affiliated with the University of Toronto announced the organization of a Commercial Department in 1881.\(^{44}\) During the next school year the organizers of this Commercial Department advertised the course by promoting education as "universal capital." The thoroughness of the commercial curriculum was especially appealing. For example, in the course aptly called Actual Business, the student was to assume the responsibility of conducting a business. Cash capital, blank notes, drafts, cheques, bill heads, invoices, account sales, and certificates of deposits were supplied. As a merchant, the student was then to buy and sell for cash on open account by giving and receiving notes and drawing and accepting drafts. Bills of goods were to be issued as well as invoices for merchandise shipped and sold on account and with letters to con-
signee giving full instructions. Along with this course students also studied practical bookkeeping, business penmanship, letter writing, commercial law, and business arithmetic. The aim of such curriculum apparently was "to impart such instruction as shall enable our students worthily to occupy the most responsible positions to which they may be called in the business world."

Within the university this outright teaching of capitalist organization was questioned on moral grounds. When Queen's University established a department of political economy which included both economics and political science in 1882, Adam Shortt apprehensively spoke about the problems involved in teaching the component subjects of political economy separately. In 1893, for example, he wrote that "this separation has serious disadvantages." The teaching of the narrower discipline of political science "presents the central government from being seen in its true perspective with reference to the other organizations of society" and the subject of economics tends to "take as the basis of an independent science the subject of wealth and the best possible means for its production and accumulation" and this "produces a tendency to regard wealth in itself as a kind of final object." For Shortt, this problem raised important moral questions since "the getting of wealth implies the using of man as one of the agents to that end ..." Shortt's projection of political economy as possibly entailing a profit-making orientation as
an end in itself was not questioned by those in the vanguard of educational decision-making.

While Adam Shortt continued to debate the problems inherent in teaching "value laden" subject matter at Queen's, across the province in Toronto, William James Ashley was offered the Chair of Political Economy and Constitutional History in 1888, a post which he filled until his appointment at Harvard in 1892. Throughout his career Ashley worked toward developing economics as a separate discipline and was particularly interested in developing the idea of professional instruction for business executives. His particular goals were to "make business a 'learned profession'", to make the subject of business interesting to intellectuals, and to give businessmen the opportunity to take a broad view of business policies and operations as a whole. Although he was unable to accomplish this during his short time at the University of Toronto, he worked toward these ends throughout his career at Oxford, Toronto, Harvard, and Birmingham. His stay at Toronto affected the orientation of economics, political economy and political science there and the subsequent move toward business education shortly after the turn of the century.

Ashley opposed the English socialists' view of Marx's theory of surplus value by arguing that the employer class was no greater an oppressor than other social classes. He welcomed the full scale emergence of capitalism and the tra-
sition from small individual employers to large companies. It was in this style of interest in economics and economic history that he encouraged the development of research on current Canadian problems and political science and economics at the University of Toronto. During his last year at Toronto before his Harvard appointment, he taught courses in Elementary Economics, the History and Criticism of Economic Theory, Economic History of Public Finance, and Political Philosophy.53

After the turn of the century the universities slowly adopted a business curriculum. In Toronto, for example, in response to pressure on the University by the Canadian Manufacturers' Association and the Toronto Board of Trade, a two year diploma course in commerce was developed in 1901. As described by the University of Toronto Presidential Report of 1902, the course was clearly designed to satisfy the needs and desires of the business circles. The report thus described the institution of the course:

In view of a feeling existing widely in business circles that a shorter course leading to a diploma instead of the usual degree in Arts would be of advantage to young men [sic] contemplating a business career, and especially in view of the representations made to this effect by the Toronto Board of Trade, the Senate instituted in June, 1901, a two years' diploma course in Commercial Science leading to a diploma in the subject. 54

The course requirements included English, two modern languages, mathematics, drawing, physics, and chemistry or other science
options, economic theory, industrial history, banking, transportation, public finance, and commercial law. As described in the Calendar of 1906-7, the course was "intended to supply facilities for the training of young men [sic] who purpose entering upon a business career, especially [in] domestic and foreign commerce, banking, or those branches of the public service ... in which a knowledge of business is essential ..." 55

The businessmen were obviously pleased with the University of Toronto course and thus promoted their whims by offering scholarships, medals and other such prizes to the most successful participants. 56 In response to this new practical curriculum, in fact, it was noted that "there has grown up an increased interest in the University on the part of the business community as manifested in many benefactions." 57 Scholarship funds were organized, for example, by such groups as the bankers of Toronto from the Canadian Bank of Commerce, the Dominion, Imperial, Standard and Traders' Banks, the Union Bank of Lower Canada, and the executive members of the Toronto Board of Trade. 58

Following this, the University instituted a course in actuarial science in the department of mathematics in 1906 and courses in commerce and finance leading to a B.A. degree were organized in 1919. 59 Although the courses were essentially pragmatic, students were promised theoretical training as well. Thus, the calendar read:
Students who look forward to banking, insurance or the work of any other financial institution, as well as those who propose to engage in some branch of commerce or manufacturing will each find among the options provided an appropriate theoretical training. 60

In the 1921-2 session, the Faculty of Arts established a course in Commerce leading to a Bachelor of Commerce degree. Students would, therefore, have the choice of graduating with either a degree in arts from the Department of Commerce and Finance or a Bachelor of Commerce degree from that department. The difference was that "the former offers the advantages in general education of an Arts degree; the latter is designed to provide instruction in those branches of education specially adapted to the study of business."

The new Bachelor of Commerce degree was intended "to provide a training for business and commercial life in general and at the same time to prepare applicants for the consular service, trade commissionerships abroad, for the foreign representation of Canadian firms as well as for the statistical and employment departments of large business houses." 61

Although the academic entrance requirements were no more stringent than for other courses, requiring the usual combination of English, history, mathematics and modern and ancient languages, the students were to demonstrate their practical abilities in business before completing the course. Students were asked to "produce evidence of employment for a definite period in a commercial firm, in public service,
The first Bachelor of Commerce graduates formed the class of 1925.

Queen's University, the pioneer in practical business education at the university level in Ontario, offered courses as early as 1913 under the Department of Political and Economic Science in the Principles of Economic Theory, Economic Geography, Money and Banking, Corporation Finance, and Public Finance and Taxation. The trend toward practicality in these and other such subjects was clear. Even seemingly philosophical courses, such as The Principles of Economic Theory, leaned toward the more pragmatic approach. This course, for example, promised to examine "the principles of Economic Theory, and their application in such concrete problems as money, banking, the tariff, transportation, the distribution of wealth, and the labour question."

The impetus toward the establishment of the commerce degree at Queen's came in 1914 when Queen's offered extramural courses in banking under an agreement with the Canadian Bankers' Association. The course, offered under the Department of Economic and Political Science, was immediately successful. Over 400 enrolled in the first year and bankers commented that the courses served to raise standards among their staff. For its work Queen's was awarded the distinction of becoming the educational and examining agent for the Canadian Bankers' Association. In conjunction with the Association, the University was responsible for creating the
syllabus for the courses, conducting examinations, and awarding diplomas. Courses were designed primarily for staff members of Canadian chartered banks. In a similar pattern extramural courses in accountancy under an agreement between the University and the Institute of Chartered Accountants began in 1921. Like the Bankers' Association, the Institute was also pleased with the University's work. It issued a statement that these courses "relieved the Institute of the labour of teaching students, ... made the requirements for membership more uniform, and ... raised the education standard in the profession of Chartered Accountancy."66 By this time courses in accounting for full-time students were also abundant.

The most important move toward institutionalizing practical business education at the higher levels was made in 1919 when courses in commerce and administration were established under the Department of Economics. Not only did this move in itself make a statement about the importance with which education administrators and policy makers regarded the burgeoning commercial curricula, but it seems that the move was also accomplished with an air of utmost permanency. The event was marked by the publication of a new and separate calendar.67 By 1921 two candidates were awarded the Bachelor of Commerce degree. Queen's University was, in fact, the second institution for higher learning in the British Empire, following only the London School of Economics and Political
Science, to grant such a degree. Study of the organization and regulation of labour and capital pre-dated the introduction of commercial subjects. As early as 1900 the Department of Political Science offered a class at the senior level in Theory of the State, a class at the junior level in Political Economy and classes for honour students in Political Economy and Society and the State. These courses provided justification for the Canadian state's paternalistic and active role in the regulation of capital and labour relations. The state as regulator of the economic sphere was presented as a neutral body lending balance to the demands of both capital and labour. Study and debate was centered around possible consequences were capital and labour to be left unchecked in a system of laissez-faire. Course material included readings from the "Masters", A. Smith, J.S. Mill and Aristotle in the honours class and Plato, Locke and Socrates in the senior class. Students were also warned of the dangers of an overly restrictive state. Thus, one of the final examination questions read: "What are the chief evils which threaten modern society through increased state interference?" The state's delicate role of promoting equilibrium between the forces of labour through trade unions and capital seemed to answer the recurring question of the balance of power for political science enthusiasts. Moreover, the problem of rectifying the ongoing conflictual relationship between capital and labour was a continuous con-
cern. Questions especially around the settlement of labour problems with respect to hours of work, determination of wage rates, reasonable labour, and trade unions constituted a large part of the course material and subsequent examination questions. 72

The focus of the political science courses was directed toward seeking solutions to social problems, particularly the problems stemming from labour and capital-labour relations. By 1919-20 the Department of Political Science incorporated Economics, Politics and Sociology and the calendar described its honours programme as specializing in the study of "the more significant theoretical and practical problems" in these three areas. 73 It is not surprising that the Queen's programme later became preeminent in the field of public administration.

In the 1910-1 calendar the social problems perspective was more clearly determined. The Introduction to Sociology offered previously was dropped for a more specific course on Labour Problems. Drawing on Adam and Sumner's Labour Problems as an authority, the course sought to provide answers to the questions of the legality of sympathetic strikes, boycott and picketing, policies of the closed shops, profit sharing as a possible solution to labour problems, and the responsibility for the burden of industrial accidents. 74 In 1911-2 the Department of Political Science was renamed the Department of Political and Economic Science, but the courses
offered remained unchanged from the previous year. In 1913-14 a course called "Social and Charitable Work" on "principles and methods of present day social betterment activities" was introduced and taught by O.D. Skelton. In the same year, a graduate course in Social Problems including both labour problems and socialism was made available to students along with the usual list of Economic Theory, Finance, Commerce and Transportation, Public Finance and Taxation, Political Theory, Comparative Government, Jurisprudence and Anthropology and Social Origins.

This approach to social, political and economic studies was similar until 1918-19. At this time, the study of problems was tackled in a more pragmatic manner. Two new courses in particular, Applied Economics, described as "the application of economic principles to such concrete problems as money, banking, the tariff, taxation, the combination movement, and the labour question" and Social Problems, "an introductory survey of the development and organization of society, and of concrete social problems, with special reference to Canadian conditions", furnished the students with a more direct view of local problems and their possible solutions. Along with these, the course in National Problems discussed pragmatic issues, including "economic reconstruction, social insurance, immigration, race, language and sectional difficulties, community organization, imperial relations, and international relations."
For the 1919-20 academic year, a special calendar outlining the requirements for the new degree of Bachelor of Commerce was published. The need for business education was described as a matter of urgency:

Business affairs and social relationships are taking on a new complexity. Broad issues of economic justice have grown insistent. The scope of public activity has widened. New international relations impose new tasks and offer new opportunities alike in private industry and in public service. With this development there has come, particularly in the United States and latterly in the United Kingdom, a recognition that the university must take a greater part in preparing men [sic] for these wider tasks. 78

To specialize in commercial subjects, students had the choice of pursuing a Bachelor of Arts in economics and political science or a Bachelor of Commerce, both four-year courses, and additionally had the option of taking a fifth year of study for a Master's of Commerce degree. Subject options were wide ranging. A General Business course was offered along with specialized options in Banking and Finance, Accounting and Auditing, Commercial Specialists' Courses for teachers, Foreign Trade, and Public Service. In each, particular requirements along with a given combination of the more general courses rounded out the programmes. 79 Whether he/she chose to specialize or not, overall the prospective businessman was offered theoretical background, a myriad of skills, and useful information, as well as a glimpse of the social problem context within which business was to carry on its practice.
According to O.D. Skelton who was largely responsible for the establishment of the Queen's School of Commerce, the provision of university business courses was the "natural outcome" of the three "converging forces"—the university's service orientation, the students' desires, and the business community's needs and expectations. Among university officials there was a "growing recognition" that they must incorporate all forms of knowledge and "relate themselves in appropriate ways to all phases of constructive human activity." At the same time students were beginning to see that a university education was "the normal rather than the exceptional means of rounding out a life training" and was no longer reserved for those entering the old professions but was a logical step for those desiring business careers. Among business circles there was a "growing need for systematized and scientific analysis" of business knowledge due to the "growing intensity of competition, individual and national; [and] the growing accumulation of available data as to methods, processes, tendencies."^80

In order to satisfy the needs of various forms of business and public service, the commerce course incorporated broad analyses of theoretical and applied business subjects rather than relying merely on the narrow specializations. For example, along with the usual courses in accounting, finance, banking, marketing, investments and statistical methods, Queen's commerce students were given a wide selection
of choice in supportive courses. It was clear to Skelton and others that "certain qualities of temperament and character" were indispensable for success. Although even the correct combination of courses was not considered adequate compensation for intrinsic character flaws, the university made promises with respect to the type of businessman it would graduate. According to Skelton:

The university can train men [sic] in orderly and systematic thinking; it can give them a background of fact and theory; facility in gathering and analysing relevant data; a grasp of such technical tools as accounting and statistics and, not least, some vision of the professional ideals which should animate the business world. 81

Because general arts and science subjects were required for the Commerce degree, it was further argued that this course provided as broad a training for "life and citizenship as the established cultural arts courses." Knowledge of letters and of economic relationships, both "indispensable" for the educated were essential aspects of the new commerce programme. In general commerce courses included a specific number of required arts courses, a number of economic requirements, and optional specialized subjects. The mixture of required and optional courses varied somewhat by university according to its particular specialization and by individual student according to career aspirations. The Queen's programme was generally more well defined along career paths than most other programmes.
Originally the courses at Queen's were organized under eight groupings: general business, banking and finance, accountancy and auditing, commercial specialist, foreign trade, public service, secretarial and social service. In effect these groupings allowed more specialization at Queen's than at the other universities in the initial stages of development. For example, the list of accounting and auditing courses included Elements of Accounting, Intermediate Accounting, Advanced Accounting, Cost Accounting, and Auditing and Internal Check. Students were given a choice among these courses but overall were subjected to more indepth study in one particular area than students in comparable courses at the University of Toronto. This trend continued until 1929 when Queen's adopted a year and honours system. The programme was narrowed to two courses of study, a general business course and a course in accounting and auditing, and in conjunction with the new orientation of business practice in general, the course shifted its focus from practical business activities to a broader analysis of business organization. This changing focus of business courses was described in the Queen's calendar in this way:

The courses are designed to give the prospective man [sic] of business some cultural and professional background; to provide him [sic] with a prospective which has been too rarely attained by any leaders in present day business. They are further designed to give the students an adequate grasp of the various techniques now being used so extensively. As business becomes more a matter of planning, organizing and accurate analysis
and less a matter of mere bargaining, the methods of accurate record and analysis, provided by modern accounting and statistical practice, have become more elaborate and necessary... 83

Thus, the aim of the university course in commerce—"to train an executive with range of vision and power of analysis, not a competent clerk"—was to be realized.

At McMaster University, commercial work was undertaken through its affiliates, Woodstock College and Moulton Ladies College in 1889. In the former commercial work was required in the first two years of a four-year course while in the latter it was required in the first year of a three-year course. 85 For the next five years evidence of any further adoption of business options is sketchy. Mathematics courses usually included commercial arithmetic, mensuration, and later discounts but most courses offered were rather theoretical in nature. Due to McMaster's religious affiliation with the Baptist Church and its role as a theological college, its general orientation was philosophical rather than pragmatic. Unlike the University of Toronto with its appointment of William Ashley and Queen's with Adam Shortt and O.D. Skelton, McMaster's faculty at this time did not include an academic advocate for commercial work. This is not to say that the institution lacked the essentials for a commercial education at about the same time as the other institutions but rather that its primary emphasis lay elsewhere. Nevertheless, by 1893-4 McMaster offered M.A. level courses in Political
Economy and introduced Economics at the B.A. level in 1896.

McMaster's approach to political economy and later business education joined the emerging tradition of problem solving curriculum. Not only was this curriculum more theoretical than that offered at the other institutions but it encompassed the grandiose ideal of creating a better society by teaching preventative and curative approaches to social problems. The study of social pathology from defectives and delinquents to general social or labour unrest to charity and the problem of the unemployed was embraced in the Political Economy Department from the early 1900's. McMaster, in fact, was the first Ontario university to include sociology and sociological works in its programmes. Sociology was introduced in the school year 1897-8 at the Master's level in Political Economy. Franklin Giddings' Principles of Sociology was a required textbook, along with Rae's Contemporary Socialism, and Boehm-Bawerk's Capital and Interest and The Positive Theory of Capital. This particular schedule of practical and speculative curriculum seemed to provide a rationale based on an altruistic philosophy of social accomplishment and social betterment for this religious institution for teaching the most worldly and material affairs of economics and modern business.

In 1904-5 courses in Political Economy were offered at the B.A. level. Until this time courses in economics had been described as covering the topics of public and private
economics, economic theory, economic history of England and America and important problems of the day. Textbook lists included Marshall's *Principles of Economics, Volume 1* and Ashley's *Introduction to Economic History and Theory* and the recommended reading often included such classic economists as J.S. Mill, Adam Smith, Ricardo and Malthus. Although even the junior matriculation mathematics courses covered business oriented topics such as commercial arithmetic, discounts, problems in stocks and later interest, commission and insurance, undergraduates were not given opportunities to move beyond the theoretical in the field of commerce. However, the 1904-5 offering of Political Economy at the third and fourth year level seemed to break through the largely theoretical and general orientation previously offered with specific work aimed at exposing new worldly problems in such areas as public finance and taxation, money, credit and banking, railroads, trusts, problems of distribution and trade unions, labour economics and socialism.

By 1906-7 the third and fourth year political economy course descriptions were more specific. The third year course covered the laws and working principles of modern political economy and money, credit and banking while the fourth year course taught economics of the working man, various methods of industrial remuneration, the place of labourers in the evolution of industry, and structure and principles of trade. Additional fourth year special courses were offered in public
finance and capitalistic organization, public expenditures, public debts, financial administration, taxation, trusts, and railroads. Similar political economy courses were scheduled until 1914-5 when details outlined in the Faculty of Arts Calendar revealed that many further aspects of the commercial curriculum had now been incorporated. Along with the now customary requirements of the Introduction to Political Economy and Money, Credit, and Banking, courses in capitalistic organization, socialism, tariffs, trade and commercial policy, public finance and taxation, and trade unionism and labour problems were described in some detail.

The problem solving approach of the McMaster courses was apparent at both the M.A. and undergraduate levels. The course in labour problems, for example, was designed to give the student insight into how to negotiate if faced with various labour problems in the future career. Topics mainly included policy and legal issues facing labour. Sociology was first listed at the undergraduate level in the 1906-7 calendar. At this time topics included institutions of society, methods of social amelioration, social dynamics, and social pathologies, and among the number of reference books were Ward's, Sociology, Small's General Sociology, Giddings' Principles of Sociology, Ross' Foundations of Sociology, Brooks' Social Unrest, Gilman's A Dividend to Labour, and Henderson's Social Settlements, Dependent Classes. A few years later in 1908-9 the theme of "social improvement" was even more pro-
ounced as the recorded lecture topics in social control, social ideals, achievement and improvement, and defence of society against crime, intemperance and prostitution seem to indicate.

By entering into the commercial field through the approach of problem solving, McMaster's students were provided with a rationalization of the continued and obvious need for the pragmatic curriculum. Unlike the other schools at the time, McMaster undertook the task of organizing its commercial and pragmatic curriculum by first answering the question of why it should be pursued and secondly by providing the "how to's", that is, skill development courses. Accounting and statistics were, for example, offered for the first time in 1915-6, a year after the first undergraduate course in labour problems and nine years after the introduction of sociology. Political economy courses were only offered at the third and fourth year undergraduate or graduate level until 1913-4 when an Introductory Industrial History course was introduced at the second year level. Eventually Elementary Principles of Political Economy, a study of the laws and working principles of modern economic organization, was substituted for this course. However, it was another two years before two fundamental and permanent courses in the commercial field were introduced. These were Principles of Commerce and Principles of Finance.

Gradually a uniformity developed among university
business programmes both in types of courses offered and in their orientation. Some of the differences may be attributed to the unique characteristics of the institution such as, for example, McMaster’s religious affiliation, or to the surrounding environment within which the university itself developed. Whatever the early pattern of development, reorganization, and change, generally the early Ontario university business education leaders held a common goal, that is, to provide "a sound foundation for what may be broadly called 'business' career." This, it was argued, was "becoming more and more widely recognized" as more large companies and businesses were hiring these graduates with a view to employing them in positions designed to smooth the sometimes abrasive conditions facing business domestically and abroad.

The important role a university educated businessman would eventually play in the corporate world was clear to members of the local Chamber of Commerce and Board of Trade in London as they engaged along with the Dean of Arts, Dr. Fox, in support of commerce and finance courses at the University of Western Ontario. The School of Business Administration was officially set up in 1920 after delegates from all Western Ontario Boards of Trade and Chambers of Commerce were invited by university authorities to a meeting of the London Chamber of Commerce where they were promised that Western would institute the "most practical business education possible." Movement toward the establishment of what was even-
tually to become Ontario’s version of the Harvard Business School came long before the 1920 official acceptance and ratification of the curriculum some men had been building for years.

The development of commercial curricula at Western may be traced to changes in the organization and structure of the Department of Political Science. Although a course in economics had been offered at the university since 1902, its orientation held little practical significance. As a compulsory subject in the undergraduate general arts course, students were introduced to basic elements of economic theory and principles of industry. However, in 1915-6, the Department of Political Science was reorganized to include some of the early commercial topics.

At this time the Department of Political Science incorporated five major subject areas: political economy, history, mathematics, law and political philosophy. Of these political economy and history constituted the core of the department's courses. Significantly, these courses included elements of commercial curriculum. Second year students, for example, were introduced to the works of Adam Smith, Ricardo, Mill, and Marx among others, while third year students studied banking, money, domestic and foreign exchange, public finance, taxation and statistical methods. By fourth year students were taught to apply theory to practical situations and to use commerce as an entry to other professional fields.
Thus, topics covered included economic theories in relation to wages, capital and interest, international trade and tariff systems, labour conditions and problems such as syndicalism and socialism, and literary and commercial journalism. 99

During the following school year, 1916-7, the field of political science appeared to be more succinct as the department was described as covering three rather than five major areas: political economy, government, and law. These areas seemed to overlap more closely in subject matter and orientation and in this way, the commercial focus was more concentrated. For example, along with those introductory and advanced courses as listed above, courses in the problems of distribution especially in relation to interest and wages and in transportation were listed separately. 100

In 1918-9 political economy was separated from the Department of Political Science and was made into a distinct department covering both political economy and government and law. With this change the students were provided with a more specialized programme. Through this department in 1919-20, second and fourth year courses in corporate finance covering the study of stock markets were offered for the first time. This practical look at the workings of "Wall Street" was an indication not only of the changing orientation of university curriculum from its former mainly philosophical outlook, but this was also an important step in the university's endorse-
The Department of Commerce was established in 1920-1 and a description of courses first appeared in the 1921-2 College of Arts Calendar. During that year courses in Advanced Accounting, Commercial Law, Business Organization, Efficiency, Principles of Advertising, Buying and Marketing, Credits and Collection, and Theory and Practice of Banking were offered. University educated businessmen were not expected to become mere "numbers" men engaged in the perpetual game of balancing accounts and carrying out routine paper transactions. Accounting and other such skill courses were to serve as an introduction to the technical side of business which would be carried out in the corporate enterprises and banks by those specifically hired and trained in such matters. Thus, as the calendar reported, the Elementary Accounting course was designed to teach students about the role "that accounting may play as an aid to business administration."

The thrust toward management education was apparent at the Western business school from its beginning. This was obvious not only from the course content but also from teaching style. During its first year of operation, the department had only one instructor, J.W. Westervelt. Westervelt taught the courses by means of class discussion and illustrative laboratory exercises. He aimed to minimize the routine aspects of commercial curricula such as bookkeeping while teaching a thorough understanding of the principles
involved. Although business education in this form did not seem to suffer from the overt authoritarianism of traditional educational approaches, the shaping of students' behaviours and attitudes was accomplished through other, more subtle methods. Business teaching at Western was modelled after the Harvard Business School's "case method" style. This method was introduced and used continuously since 1922 when Professor E.H. Morrow was appointed to the Department. Morrow, a Canadian, had been trained at the Harvard Graduate School of Business Administration and was himself therefore a student of the famous "case method."

By relying on this method of problem solving, Morrow's courses were designed with the expectation that students would take the role of the corporate decision-makers rather than that of the technicians. The student's ability was judged with regard to logic and perceptions as well as ideology and personal characteristics and the question of their accommodation to the corporate organization and its goals. Pressures to perform in a particular manner were subtle. Yet the orientation was clearly seen to be practical. Graduates of the Western business courses were reported to "fit into a business organization promptly and acceptably and with the ability to bring to ... [the] new position a university-trained mind that has been coached in the application of facts rather than theories."\textsuperscript{104}

Perhaps due to its affiliation with the Harvard Busi-
ness School, Western's approach to business education was far more practical in its early years than courses offered at Toronto, McMaster, and Queen's Universities. Attempts were made by faculty members to use actual problems of local business concerns as case materials and to invite business executives to share their organizations' problems, monitor classes and teach. In the 1923-4 Calendar alone, five out of the eleven courses offered by the Department of Commerce were described as including either actual problems submitted by businessmen, businessmen as discussion facilitators, or frequent field trips by students to various business organizations. For example, it was reported that the course in Marketing Problems "will be largely handled by businessmen who will assign problems within their own experience" and in the Finance Problems course, "businessmen will be frequently invited to lead the discussion on many of the problems submitted." Similarly, in Executive Problems "it is hoped that the problems will in almost every instance be assigned by an executive in some business concern" while the arrangement for Industrial Management was that the students take and report on several factory trips. The work in Applied Cost Accounting was to be "done entirely in the field" and "be of practical use to some business establishment." In addition, the Department reserved space in the classrooms "for a limited number of men in business who wish[ed] to avail themselves of the lectures." Thus in the course
of their education, Western's business students had occasion to acquaint themselves firsthand with the business world, make contacts from within, and gain experience in interaction, negotiation, and problem solving with those with whom they would later meet on the job and would engage in similar exercises at higher stakes.

Reflections on the Utility of Business Education

By the 1920's business education had become fully institutionalized within the universities. Although the debate regarding the acceptability of the commercial curricula in the university continued, it was clear that the business curriculum had been instituted with an air of permanence. Not only had departments and faculties been developed but business subjects were now interwoven into lists of required, prerequisite, and recommended courses.

In many respects, the business departments stood apart from most other departments in their ability to offer students a variety of accounting, bookkeeping, organizational and other related skills along with a theoretical analysis and world view strongly linked to an acceptance of the developing Canadian socioeconomic framework. The promise for business students was two-sided. On the one hand, the students were trained with technical expertise and know-how in practical affairs. On the other hand, although their degrees
were more worldly than most others offered at the university level at the time, as university graduates they were granted the same rights and privileges as other graduates but the recognition bestowed upon their unique combination of practical pursuits added an attractive element of marketability to their newly acquired Bachelor of Commerce degrees.

Although some of the established businessmen resented the graduates for not having to make the "long crawl" like themselves, the graduates were generally accepted when they demonstrated their ability to perform as if they too had taken the promotion route. Expectations of the businessmen were such that these new university educated colleagues would offer analytical insight into problem solving within the corporate sphere.

The incorporation of business subjects into the university led to questions concerning the nature of the discipline's practical skill training versus its theoretical and debatable components. After the initial struggle for the university's official endorsement of subject matter, the business education promoters' prime concern was one of pressing business study into the broader areas of international commercial questions, industrial organization, and work and the personnel function. While teaching practical business skills was pushed further and further away from the central focus and for the most part was relegated to the realm of the high school business departments, university students were
gradually introduced to the question of the administration and control of corporate organizations and management and the nature of the personnel function. Not only was this area of management more acceptable in the university sphere due to the theoretical and debatable questions it addressed but research questions were more justifiable because the area had previously been unexplored. Many "truths" concerning corporate organization, management, and control were yet to be uncovered. This curriculum was well integrated with other developing disciplines at the time. In conjunction with supportive curricula such as sociology, political science, economics, and psychology, the commercial departments also began to participate through their research foci on social problem solving. In other words, the discipline held promise.

The "promise" of the business departments was to explore further possibilities and smooth existing problems in production techniques, manufacturing, marketing, resource development, transportation, financial and banking issues, and international business relations in order to achieve a "healthy" and internationally recognized Canadian economy. To accomplish this goal, objective interests were largely pursued in the area of the management of work and the work process. As long as labour problems lingered, it was generally argued that progress would lag in both national and international spheres. This promise, then, of the business educators and promoters to correct labour problems lent an
air of acceptability of business education to all its former critics.

Pointing to labour as a source of difficulty and concern inadvertently laid the blame for business problems on what seemed to some to be an uncompromising, undisciplined labour force. What easier solution could there be than to study labour and the question of how to control its unpredictable character in order to achieve harmony and profit in industrial and commercial spheres. Thus was born the full development, justification, and acceptance of management education within the university.

The next chapter will study the development of management education and its central focus, sources of support, and functions.
Footnotes

1 Egerton Ryerson, "The Importance of Education to an Agricultural People" in J. George Hodgins, editor, Documentary History of Education in Upper Canada, Volume VII: 1847, 1848, (Toronto: L.K. Cameron, 1900), p. 141. Hereafter the Documentary History will be referred to as D.H.E.


3 Ibid., pp. 2094-5.


5 One sign of success was that chains of business colleges grew. For example, H.B. Bryant and H.D. Stratton opened their first business college in Cleveland in 1853. By 1863 there were ten schools in the chain including one in Toronto. For a general overview of business education, see Paul A. Moreland, A History of Business Education, (Toronto: Pitman Publishing, 1977).

6 See, for example, Vernon, op. cit., p. 95.


9 The ideals of free, universal, and compulsory schooling were embodied in the School Act of 1850 but were not fully enforced until the School Act of 1876.


14 Ibid., p. 30.


17 William Peterson, "The Unity of Learning." An Address Delivered at the University of Wisconsin, June 9, 1904, in Ibid., p. 242.

18 Ibid., p. 240.


20 Ibid., p. 268.


22 Quoted in Vernon, op. cit., p. 105.


25 The English Course was the term used to describe what is now referred to as General Arts curriculum which is the usual university or college bound course.


28 Ibid., p. 207.

29 Ibid., p. 254.

30 Ibid., p. 266.


33 Ibid., p. 323.

34 Ibid., p. 326.


36 Ibid.

37 Ibid., p. 329.


43 Annual Catalogue of the Canadian Literary Institute for 1873-74, (Toronto: Dudley & Burns, Printers, 1873), p. 16.

44 Directory of the Terms, Studies, etc., of the Canadian Literary Institute in Affiliation with the University of Toronto, (Woodstock: Sentinel-Review Book & Job Print, 1881), p. 8.


47 For most of his academic career, Adam Shortt was associated with Queen's University. He started as a tutor in Philosophy and was then appointed first holder of the Sir John A. Macdonald Chair of Political Science, a post he occupied from 1891 to 1908. He served as a trustee of
Queen's from 1909 to 1931 and was appointed first Chair of the Civil Service Commission. His research centered on Canadian political economy, especially currency, banking, and credit.


49 Ibid., pp. 95-6.

50 For biographical detail on Ashley, see Anne Ashley, William James Ashley: His Life, (London: P.S. King & Son, 1932).


52 Ashley was appointed Dean of Commerce at the University of Birmingham in 1902.

53 Calendar for the University of Toronto for the Year, 1891-2, (Toronto: Rowsell & Hutchinson, 1891), p. 135.


55 Calendar for the University of Toronto for the Year 1906-07, (Toronto: The University Press, 1906), p. 403.

56 Ibid., p. 404.

57 Alexander, op. cit., p. 96.

58 Ibid., p. 257.

59 Calendar for the University of Toronto for the Year 1920-21, (Toronto: University of Toronto Press, 1920), p. 200.

60 Calendar for the University of Toronto for the Year 1909-10, (Toronto: University of Toronto Press, 1909), p. 190.

61 Calendar for the University of Toronto for the Year 1921-22, (Toronto: University of Toronto Press, 1921), p. 292.

62 Ibid.
One examination question, for example, read: Discuss the idea held by some workmen, that the less they do in the present, the more there will be for them to do in the future.
78 Queen's University, Courses in Commerce ... 1919-1920, op. cit., p. 1.

79 Among the general courses recommended were: Money and Banking, Corporate Finance, Investments, Marketing: Raw Materials and Manufactured Goods, Labour Problems, National Problems, Factory Management, Accounting, Commercial Law, Office Management, Trade Documents, and Economic History and Geography.

80 Skelton, op. cit., p. 70.

81 Ibid.

82 Moreland, op. cit., p. 151.

83 Queen's University, Kingston, Canada, Courses in Commerce and Administration, 1928-29, (Kingston, 1928), p. 7.

84 Skelton, op. cit., p. 74.


88 McMaster University, Arts, Theology Calendars, 1896-97 to 1901-02, (Toronto, 1896-1901).


92 McMaster University, Calendar, 1906-07, op. cit., pp. 52-3.

94 McMaster University, Arts, Theology Calendar, 1913-14, (Toronto: R.G. McLean, 1913), p. 53.


101 Western University, London, Canada, College of Arts Calendar, 1921-22, (London, 1921), p. 78.

102 Ibid., p. 77.

103 Ibid., p. 78.


106 Ibid.
Chapter Four

From Business Skills to Management Education: The Development of a Problem Solving Curriculum

Training for business must become an essential part of our national program of preparedness. The demand of business for this training is universal. 1

The movement toward the study of management and managerial concerns and away from the more practical skills of operating a business began with the development of the university business departments. While many people continued the debate over whether or not business students could learn business skills in schools and whether or not academics were the most capable business teachers, others pursued the more fundamental question of what areas a business curriculum should encompass. Without question, there was agreement that the curriculum should cover the subject matter necessary for an understanding of everyday practical business concerns—accounting, money and banking, marketing, transportation, and manufacturing problems. These areas alone, however, did not account for the increasing complexity of the modern corporation nor for the objective and subjective elements of the work process itself. Indeed, as capitalism developed,
the university educated businessman would be expected to make mature and responsible decisions regarding the direction and control of the labour process, to act as potential mediator in conflictual situations, and to maintain a relatively problem-free environment.

This chapter examines the transformation of the business curriculum from its earlier focus on business skills and know-how to its later concentration on problem-solving and management. The response of the businessmen to business and management education will first be studied. Changes in the curriculum to include management will then be documented. Finally, the curricula and supportive subject areas will be examined vis-a-vis their function and outlook toward management in general and the labour process in particular.

Response of the Businessmen: First Rejection, Then Endorsement

Somewhat skeptical of academia's apparent lack of pragmatic learning tools, businessmen were, at first, opposed to the notion of business education. Many of them desperately clung to the notion of the long, hard organizational crawl. This attitude seemed to serve as a source of self-protection and self-respect. The quick university route to the top seemed to denigrate their own personal careers and be a rather flippant pronouncement on their biographies.

Concern with standardization and objective certifica-
tion of skills was premature during the nineteenth century. There was generally more direct contact between the owner and the employee and there was greater concern with apprenticeship and on-the-job training. This is not to say that apprenticeship and on-the-job training were eliminated in the twentieth century. However, there was a noted shift away from the employer-as-teacher model for basic as well as specific knowledge. Rather, the twentieth century employer began to show a preference for employees with a basic and sound background on which skills and organization specific proficiency could be built. Structurally, changes in business organizations in complexity, size, management, and ownership and control patterns facilitated the need for standardization and certification of an employee's abilities. This task became a primary function of the twentieth century schools. Schools at all levels were assigned the role of screening future employees and were designated as impartial in this task. Because business lacked the regulatory entrance requirements of the other professional fields, certification through schools was to serve as a safeguard against the less serious and inclined applicants. The goal was to maintain excellence while guaranteeing ample opportunity for entry into the profession.

The notion of university trained businessmen still presented many practical problems for the employers. Employers were unsure of the new graduates' expectations regarding
mobility, career advancement, and salary levels. There was also concern expressed about the potential development of resentment and other morale problems. While businessmen approached the idea of hiring graduates cautiously and curiously, students were warned that their education would not immediately serve as a "ticket" to top positions. University personnel, it seems, took precaution not to discredit Canadian business executives who had not had the opportunity for a business education by announcing to students that "no university training, it is true, can supply the place of natural aptitude and character, or remove the necessity for practical experience." Business education promoters had the most delicate job of selling the programme to these hopeful benefactors who themselves neither had the advantage nor required the security of such an education.

Starting the university graduate at the bottom with gradual promotion up the organizational chart was too slow a route for most anxious graduates. At a time when a degree was optional as a means to employment, it was evident that incentives were necessary to attract educated employees. While high school graduates could realistically expect a slow but steady advancement if warranted, university graduates could expect to start working in the lower ranks as part of their continuing education in order to gain practical experience and then to progress rapidly to higher level positions.

In an address to the Canadian Club in Toronto, Pro-
fessor C.R. Fray urged Canadian business magnates to hire graduates with a view toward shaping them into company executives. In a similar statement a few years later, Professor E.H. Morrow, who headed the Department of Commerce at the University of Western Ontario sought to clarify the role of the university vis-a-vis training for business. "Salesmanship, like all other technical arts of business," he warned, "must be learned in practice, and it is the function of the business and not of the college to teach it." The "burden of training" new employees had not vanished with the rise of the commercial curriculum. "In its relation to business," Morrow argued, "the average college offers a selective rather than a teaching service, and when the employer engages graduates as salesmen he needs to exercise the same discrimination as when engaging salesmen under ordinary circumstances." The college assumed the responsibility for graduating "only those ... who show promise of reaching the higher ranks in business." Like the specific on-the-job training programmes, the university courses were not expected to transform personalities into successful and skilled businessmen. Where abilities were quite apparent, however, the university courses promised to cultivate these competencies successfully and efficiently.

While some businessmen regarded business education as an unnecessary delay for those intending to work in the field, others scorned the university for its "tainted" teach-
ings and its toleration of undisciplined habits. According to Financial Post sources, the university's general arts course had "lamentably failed" its task of properly preparing students for work. However, the commerce course was expected to inculcate "in the newly fledged graduate a point of view and an immediate capacity which will make him, [sic] to the extent of his [sic] ability, an asset rather than a source of irritation to his [sic] first employer." One solution offered was a combination of discipline, hard work and challenging classroom circumstances. Morrow, for example, set down as one of Western's objectives "to stretch the student's mind on the hardest stuff we can give ..." Generally, the case against higher education was made on the basis of the perception of a liberal student atmosphere and its detrimental effects on the seriousness and self-discipline required in a business career.

To counter this notion, the schools struck back with various descriptions proselytizing the merits of the university business graduate. The first challenge facing the university was to distinguish the business graduate from the other general arts graduates. While for some time university personnel had been arguing that "on the whole a university man [sic] is likely to be more trustworthy, and have a higher sense of honour" and that university students "show that they possess the necessary energy and ambition for successful business life", the task of gaining wide acceptance
for the business programme seemed to require more specific proof of its value. This was partly accomplished by pointing out that the object of the commerce course was "to train young people so that they may serve, in business or closely related vocations, a more useful social purpose than would be probable if they entered the field of business with no university training ..." Furthermore, it was especially important to disassociate the idea of business education with skill training. Business, it seems, was becoming a matter of personality, logical analysis, and scientific technique. It was these elements necessary for success that the university had promised to cultivate.

As the role of the businessman incorporated more and more tasks related to the management of men, materials, and administrative affairs, the focus of business education began to reflect managerial concerns. The idea of management and management education was, in fact, rather a vague notion. Many of the leading protagonists spoke of the importance of personality and the personal characteristics of what was thought to be a good manager. The desired qualities of a manager ranged from foresight and ingenuity in the movement of materials and in the smooth operation of production to adroitness, discretion, and diplomacy in supervising workers. Beginning in the mid 1920's many statements about the attributes of the business programme were oriented toward its need to shape "a maturity of judgment", the "exercise of
... discrimination\textsuperscript{13} and other qualities suitable for the responsible manager.

The area of management remained an enigma for some time both intellectually and pragmatically. During the 1920's and even the early 1930's, management remained a question of personality or acquired personal characteristics. Eventually, however, management was classified as a skill. When management was viewed simply as a matter of personality, any form of higher education was argued to be appropriate for the future manager.\textsuperscript{14} Defined as a skill, however, management education was seen to require the specialized training facilities provided only by Faculties of Commerce and Business Administration. As a pragmatic curriculum, this form of higher education offered both businessmen and the prospective student body a concrete and measurable select field of expertise.

**Changes in Focus: Management Education**

The decision to begin to educate Canadians as executives dated back to the turn of the century meetings of the Canadian Manufacturers' Association in which it was often mentioned that resources were lacking in Canada for the preparation of Canadians for professional and more responsible positions in Canadian industry. The Canadian Manufacturers' Association, in fact, presented the Governor-General-in-
Council with a resolution in that regard in 1906. This resolution was endorsed by several branches of the Canadian Manufacturers' Association as well as by the principals of the Universities of Laval, McGill, Toronto, Queen's, Dalhousie, and Manitoba, the federal government, and the Toronto Board of Trade.15

Progression toward the incorporation of courses in management was evident during the late 1920's. At first general courses in industrial management were offered but specializations in various fields soon became apparent. The most prolific area was that of human management. Starting with basic courses in labour and labour problems, by the late 1930's, the universities had included courses covering most aspects of the employer-employee relationship and the personnel function. Although developments at each university followed a different path, for the most part, by the mid 1940's and certainly by 1950, business graduates at McMaster, Toronto, Queen's and Western Ontario Universities, would have been introduced to similar packages of business principles, operational skills, and labour management issues.

i) McMaster University

Developments in the adoption of management courses at McMaster were rather slow as compared to the Universities of Toronto, Queen's, and Western Ontario. In fact, it was
as late as 1966-7 that the Political Economy Department was officially divided into the separate departments of Commerce, Economics, and Political Science. However, future businessmen were aptly prepared at McMaster where managerial concerns were studied from the initial development of business oriented programmes. The McMaster Political Economy Department offered a variety of courses which encompassed the study of a broad range of problems normally encountered by business executives. For example, a course in Modern Economic Problems covering population problems and immigration was introduced in 1925. This new course would complement those established courses in labour problems in which wages, conditions of labour, and trade unionism were studied, as well as sociology courses covering urban problems, immigration and race attitudes, and social pathology or problems of population, mental attitudes, and social institutions.

During the late 1920's and early 1930's, McMaster offered a similar political economy "package" to students which, along with appropriate elective courses, provided a general orientation to business practice and management. By 1935 the University had reorganized its presentation of courses and options and announced in a bulletin that:

Many large business and financial enterprises now regularly engage a few university graduates with a view to developing men [sic] for executive positions. Each year finds an increasing number of university-trained men [sic] reaching positions of responsibility in manufacturing, banking,
commerce, etc. While men [sic] who have taken almost any course (classics, science, mathematics, history, literature) have found recognition in the world of affairs, yet it is natural that a student with general business in view should elect one of the courses in Political Economy. 20

Three years later in 1938, McMaster once again published a "Bulletin of Information" with another statement on commerce and finance education. This time, however, the appeal was much stronger. "As preparation for positions of responsibility in large commercial or financial establishments", the Bulletin announced, "university training is now regarded as essential." Further, students were "advised to select one of the courses in Political Economy" if intending to "look ... forward to a specialized business profession such as banking, insurance, large-scale marketing, foreign trade ...".21

In its acknowledgement of the importance of university and especially business training to future employees, the university began to present a more specialized programme for the business profession.

Gradually, the McMaster courses incorporated areas of management. In 1941-2 a Political Economy course called Business Organization and Corporation Finance was described as covering the field of financial management22 and in 1942-3 another course in labour problems was added.23 While personnel management subjects were not included in Political Economy Departments for some time at McMaster, interest in this subject area was apparent given that the topic was often covered
through Sociology, Psychology, or the Department of University Extension. In 1942-3, the University offered a course in Personnel Administration through its extension programme in collaboration with the University of Toronto. The course was designed for recent graduates who were working in personnel departments of companies and was taught by "successful", experienced personnel managers. The range of topics varied from areas where detailed knowledge of the personnel function had already been apparent, such as "Factors in Building an Efficient Workforce" and "Selecting the Right Person for the Right Job" to areas which had not as yet been subjected to copious research, such as "Problems in Group Relations" or "Organizing Accident Prevention Programmes."24

Similar topics were offered for day students in Vocational Psychology, a course which was also offered regularly in the extension programme.25 In 1944 a diploma course in Vocational Guidance or Career Planning was developed due to the success of the Vocational Psychology course and its increasing enrolment. Beginning with General Psychology and Political Economy, this course introduced students to "practical applied psychology with instruction in the use of tests and measurements", Occupational Information, Job Analysis, and Personnel Procedures, School Organization and Administration, and Educational and Labour Legislation.26 In the next few years while this course was further developed and professionalized in the extension programme, it was also offered to day
students in psychology.

By the late 1940's several options were open to those McMaster students seeking a managerial career. By working toward either a degree in political economy with electives in appropriate psychology or sociology courses or a psychology degree with a political economy minor, the graduate would appear to be prepared for managerial specializations. Instead of or in addition to a bachelor's or honours degree, the future manager could also choose among various options and diploma courses offered through the Department of University Extension. In 1946-7, for example, the Registered Industrial Accountant (R.I.A.) degree was offered through extension programming. In this course the student was exposed to various levels of accounting and business mathematics along with industrial legislation and industrial organization and management.

During the twenty year period between the late 1920's and late 1940's, then, management education became a more prominent feature of Departments of Political Economy, Psychology, and University Extension at McMaster. The change was gradual, but steady. Often when a course had proven its success in the extension programme, it was soon integrated into the mainstream degree schedules. While this progression differed slightly from the course of events at the other universities, it reflected McMaster's particular orientation while acknowledging generally the changing needs in corporate manpower.
ii) University of Toronto

At the University of Toronto the business curriculum underwent changes more readily than at McMaster to include management subjects along with the traditional commercial courses. By 1922-3, for example, three courses in particular, corporate finance, public finance and administration, and business administration were described as including methods of administration, central and local administration, and management of incomes. The Business Administration course was a series of lectures by experts on various aspects of business administration. In addition to these courses, Social Problems and Labour Problems were also offered. While Social Problems lacked description in the calendar, Labour Problems included the following topics: evolution, types and methods of trade unions, problems of industrial relationship, and various schemes for attaining industrial harmony or peace, and wages and other forms of payment in relation to productivity.

Similar to McMaster’s approach, many programmes at the University of Toronto aimed at finding the solutions to social problems. University of Toronto was the first Ontario university to establish a Department of Social Service. This department combined the study of various aspects of social economics, community development, and social problems of poverty, unemployment, immigration, housing, and welfare and
their governing legislation with theoretical material on organizational development, industrial society, and psychology and practical case work. Patterned after the Political Economy Department, the Department of Social Services shared many of Political Economy's professors as well as its subject matter.

During the late 1920's, the university began to experiment with specific extension activities aimed at and often designed by particular occupational groups. The call for trained workers in the insurance field, for example, was heard as early as 1920 when J.B. McKechnie, then President of the Insurance Institute of Toronto, observed that a "large percentage" of insurance company staffs were "unfitted for their positions owing to their lack of knowledge of the business." To rectify this, he recommended that the Insurance Institute "lay down as the minimum of educational qualifications that a young clerk should have junior matriculation or its equivalent."29

Over the next few years, recommendations for insurance teaching at the university level were not addressed. In 1925, however, a course in life insurance salesmanship at the University of Toronto was announced by J.G. Taylor of the Life Underwriters' Association. This course was to be jointly taught by staff of the economics department and insurance businessmen.30 This and other similar courses were well supported and attended. Three years later in 1928 in
an address, V. Evan Gray, president of the Insurance Institute of Toronto cried out that "the principle need of the casualty insurance business is men [sic]." Once again, prominent Canadian businessmen acknowledged the need for training for both business practitioners--salesmen, accountants, and underwriters--as well as for business managers, department managers, administrative assistants, banking executives, and personnel supervisors.

Although a Bachelor of Commerce degree was offered at University of Toronto, a separate department for that purpose was not established. From time to time the name of the Political Economy Department was changed to reflect the commerce options. For example, in 1933-4 the Political Economy Department was renamed the Department of Political Science and Commerce and Finance, covering Commerce, Economics, Political Science, and Accounting. Requirements for the commerce degree included a number of economics and political science courses, modern languages, history, and optional courses in psychology, social service, and later sociology. During the 1938-9 year, a Master of Arts degree in Commerce and Finance was established with compulsory courses in Business Administration, Corporate Finance, Accounting, and Industrial Law, and elective courses in Marketing, Financial Institutions, Manufacturing, Transportation, Public Utilities, and Business History. Commerce or business administration, it seems, was defined as incorporating many different areas
of subject matter—economics, political science, business skills, social sciences, and social services—and the establishment of a separate commerce department would not eliminate the need for students to seek out such courses to complete their programmes.

A number of the University of Toronto courses addressed questions concerning the nature of the economic system and sought solutions to the various social problems stemming from this system. One course, Economic Basis of Social Life, for example, studied "modern economic organization with reference to the way in which economic factors condition social life." Another course, Organization of Industry, provided a description of modern industry with emphasis on large scale business enterprise, labour organization, and unemployment. The Structure of Modern Industry included a description of "the important characteristics of modern industry as a basis for understanding the pure theory of economics and discovering some of its limitations." One of the required textbooks listed was F.W. Taylor's *Scientific Management*. Such courses did not propose changes to the existing system but rather sought an understanding of the ways in which individuals could be adjusted to fit the given economic framework.

The ideas of the adjustment of individuals to the system and of finding remedies to an ailing economic system were popular ones especially during the 1930's. The course
in Labour Problems studied "problems and disabilities of labouring people such as unemployment, industrial accidents and disease, overstrain, monotony, low wages, and standards of living" and also reviewed workers' actions to overcome such problems through unionizing, consumers' cooperatives, and political action along with employers' attempts to rectify labour's situation. Similarly, Income and Social Welfare and Industry and Human Welfare examined problems of industrial development and social well-being. Solutions, it seems, were found within the nexus of newly emerging government programmes. Thus, schemes of government finance were examined along with "government protection of standards of work and life."

The social problems framework of the commerce and economics courses and suggested electives was apparent. One course aptly called the Diagnosis of Business Conditions and first listed in 1928-9 analyzed implications of contemporary changes in Canadian industry, trade, and finance. While some problems were seen as arising from the economic system in general, it was often argued that these problems were related more specifically to the rates of change within the system, the difficulties of the business cycles, and the slow adjustment of both individuals and government services rather than to the particular goals or overall functioning of the system. Several courses in the supportive curricula were designed in order to analyze this relationship of economics
to social life more specifically. One of these options was Sociology. First listed in 1926-7 as a course in Social Science in the Department of Political Economy, by 1935-6 six courses in Sociology were offered. Along with these, three Psychology courses appropriate for commerce and economics students were listed. These were: a special introductory psychology course for students of economics, Applied Psychology, and Industrial Psychology. Through these courses, the future business manager was provided with various perspectives in determining the exact nature of the problem and could propose solutions based on this broad knowledge of the forces affecting the business enterprise. It was this grasp of theory and broad basis of knowledge which distinguished the modern business manager from the earlier businessman.

Although courses in labour and other social problems had been taught for some time, the first direct listing of personnel management as an area of business management appeared in 1925. The Business Administration course topics were arranged under three headings: financial control, home and export marketing, and personnel administration. This division marked the first stage in the development of bodies of expertise within management and later led to specializations within the discipline.

Courses within the area of personnel management specifically addressed the question of how to adjust the worker to his job "in such a way to bring about efficient production
and a satisfying mental state.\textsuperscript{39} These courses were practically oriented, providing direct information and guidance to the future personnel administrator. Industrial Psychology, for example, offered through the Psychology Department, examined principles and methods in personnel work in business and industry.\textsuperscript{40} However, the most explicitly detailed and practical courses in the subject, the Problems of Personnel Administration and Psychological Aspects of Personnel Administration, were listed under the Department of Social Services. Recommended for commerce students, these courses covered all aspects of the personnel function and offered practical learning situations as well. Problems of Personnel Administration was described as a supervised reading course with visits to industries and special lectures by personnel officers in Toronto in order to find solutions to personnel problems.\textsuperscript{41} Detailed analysis of personnel problems and methods of personnel administration were offered in Psychological Aspects of Personnel Administration. This course covered employment and problems in job adjustment, mental tests and methods of appraising applicants for jobs; workers' training programmes; fatigue--methods of investigation, reduction and influence of hours of work, rest pauses, rates of work, ventilation, illumination, and noise; job attitudes and factors affecting them such as supervision, repetitive work, and how to develop favourable attitudes; the problem of safety and treatment of accident proneness; and how to deal with disinterested, inef-
ficient, and temperamentally difficult or generally maladjust­
ed employees. For the most part, personnel management was concerned with employee adjustment. It was the purpose of such courses to provide instruction on how to shape employee behaviour to concur with organizational needs and goals.

During the 1920's and 1930's, business education at the University of Toronto gradually adopted a management perspective. While many of the problems studied—unemploy­ment, wage structures, government services—lacked solutions within the given framework, adjustments were sought to ensure a smoothly functioning system. Although similar to McMaster in the social problems approach, courses at University of Toronto perhaps offered a more specific and practical educa­tion to the student seeking specialized training within the field of management.

iii) Queen's University

At Queen's University the development of the managerial focus in the commerce programme was both systematic and pro­gressive. In its first year, in fact, not only had the Queen's programme included management subject matter but this and other areas were taught using "the problem method." Used in conjunction with lecture and textbook methods, teaching by the problem method allowed the student as an active parti­cipant in problem-solving "to develop the principles underly­ing business and political activity." The problem, or case
method as it was later called, was based on the assumption that business problems could not be solved by "making hit or miss guesses" but rather by following scientific logic based on "natural and economic law." By solving the given problems by inductive reasoning, the expectation was that the student would build and inculcate "a systematic body of principles underlying business activity", "the power of investigation and analysis", and "the habit of thinking systematically on business subjects ...". To add a further measure of reality to this pragmatic form of learning, the student was presented with actual business problems to solve and instruction was often given by businessmen. This practice was followed in courses such as Marketing, Industrial Management, Business Finance, and Business Policy.

In developing business and managerial skills, students were encouraged to seek as much firsthand experience as possible. Many of the courses included field work. In Industrial Management, for example, classroom work was supplemented with visits to plants in and around Kingston. Before graduating, students were required to submit investigative reports based on actual observations and visits. In addition, students were expected to work for at least one summer in "approved business establishments or in public offices." Through the summer work experience, the student was to gather data for a graduation year thesis and insight into a preferred area of specialization. Thus, within three or four years, from
start to finish of the course, the commerce programmers expected students to have developed a frame of reference and method of analyzing business problems and to have carried out this theory through practical investigation and experience in a chosen field of specialization. Queen's orientation can somewhat be attributed to its close relationship to the business community. A vital part of the programme was taught by outside lecturers. The list of outside lecturers for any year, in fact, read like a "Who's Who" of Canadian business, industry, and government.46

The Queen's programme was apparently designed to develop the future businessman's "cultural and professional background" as well as leadership skills and knowledge of managerial techniques.47 In its early stages, the programme embraced a definition of the role of the businessman which included both technical and management skills and knowledge. Upon its development, the Queen's programme included the study of management issues. Even in 1919-20, evidence of this was clear. Through the Political and Economic Science Department, a course in Labour and the State was offered along with one called National Problems, covering economic reconstruction, social insurance, immigration, race, language and social difficulties, community organization, imperial relations, and another entitled The Social Theories of Veblen.48 During this same year, two of the prescribed essay topics, "Unemployment, Its Causes and Remedies" and "The Working of
the Canadian Industrial Disputes Investigation Act" addressed the issues of work force management and relationships to the work process.

During the next year, 1920-1, with the establishment of the Bachelor of Commerce course and the clarification of requirements for Pass and Honours students in Political Science and Economics, a number of courses focussing on management issues was listed. These were Factory Management, Employment Management, and Office Management. In 1921-2 two courses covering relevant management issues were offered. One course, Problems of Labour, studied "problems arising out of the wage system, and their attempted solution by legislation, organization, and internal management", and the other course, Business Policy, was taught by special lecturers and arranged "from the point of view of the chief executive."

This course covered location, expansion, factory management, labour administration, finance, insurance, transportation, and selling policy. During the same year, that is, in 1921-2, Dr. H.S. Person, Managing Director of the Taylor Society of New York City, was invited as an outside lecturer to deliver a series of lectures on "Administration Management." Encompassing one of the most systematic and comprehensive programmes to date in Ontario on management issues, the lecture topics included Administration and Management; Control--planning, preparation, scheduling, inspection of process and results; and Problems and technique of management and administration.
Significantly, and perhaps as a follow-up to this highly esteemed event, a course in Industrial Management was established in the next year in 1922-3. The object of the course was "to acquaint the student with some of the problems to be met with in industrial plants." Problems were to be studied not in relation to specific industries but to the machine shop type of factory. For the course students were "well advised to purchase" a copy of Frederick W. Taylor's *Shop Management*. This seemed to be not only one of the first and therefore more significant courses in management offered but it was also the first in which a particularly well developed and organized set of management principles and practices, that is, Taylorism, was to be followed. By 1924-5, the Industrial Management course had been refined and now included "a study of the organization of the factors in industry and of the relations and labour problems involved." Factory management was the key concern in this course, although the application and transferability of principles of factory management to the office were also dealt with.

The scope of management was also subjected to careful scrutiny as it was defined, re-defined, and refined. Particular concrete areas of organizational concern were placed within the managerial sphere. A course in Management and Costs, for example, offered at Queen's in 1928-9, studied the organization of factors in industry, emphasizing labour relations and problems, in relation to costs to management.
Aiming to minimize costs by attending to labour problems, in other words, was a tangible task within a broad definition of the role of management. With the demarcation of concrete tasks and responsibilities of management, a management curriculum could be developed through substantial task analysis techniques and subsequent preparation of learning objectives. However, with many areas of management there was considerable vagueness and uncertainty vis-a-vis skills and knowledge required for the job. Managerial success was often attributed to diffuse personality characteristics. The curriculum prescribed, then, to encourage the development of managerial "characteristics" was one which allowed not only for the attainment of "technical efficiency" but instead for "what amount[ed] to a new ideal of culture." The idea of fostering professionalism was more important "as business [was] becoming more a matter of planning, organizing, and accurate analysis, and less a matter of mere bargaining ..." In rounding out its subject matter to include the subjective along with the technical materials, the business education programmes were viewed as providing a rather unlimited range of management opportunities.

During the 1930's few changes were made in the Queen's commerce course offerings. With respect to the area of management, one specific course, Industrial Management, was consistently listed and courses in Labour Movements and Problems, Socialism, Population Problems, Business Administration, Busi-
ness Investigation, Applied Economics, and Economics Problems were offered sporadically throughout the decade. Despite the depression, the commerce department continued to grow and thrive. In fact, in 1937 the Department of Industrial Relations was developed as a section of the School of Commerce with former student J.C. Cameron appointed as its director. In this respect, the study of management and personnel problems gained paramount recognition. Rather than vaguely referring to the study of labour problems, the Industrial Relations course from 1938-9 onwards was described specifically as "a social study of employer-employee relations" and discussions were to cover "the main economic and human forces which give rise to labour problems and the attitudes of employers, employees and the public thereto." In line with this statement, the Industrial Management course was now reported as "a study of the application of the principles of management in industry [with] special attention ... directed to employer-employee relations." Hence, an increased awareness was developing among personnel and labour management specialists of the dynamic relationship between employer and employee. This new focus would displace the formerly static view held regarding labour problems and difficulties in management. This change ipso facto signalled an early recognition of the manageability of labour.

After the depression, problem solving became one of the major foci of the Queen's commerce curriculum. Yet there
were differences between this programme and those offered at McMaster and Toronto. Sociology was not offered at Queen's until the 1951-2 session and although Psychology courses were offered since the 1920's, the orientation was mainly toward scientific investigation and experimentation in such areas as intelligence, nervous impulse, sensation, experimental psychology, mental testing, and behaviourism. The exception here was the introduction in 1934 of an Applied Psychology course which for many years, drew on the work of Viteles and other well known industrial psychologists.  

While the McMaster and University of Toronto programmes allowed for the general social science problem solver to use skills in the field of business, the Queen's programme reversed this and left the business problem solver to generalize to other fields. With business and commerce as the main field of inquiry, solutions adopted would reflect a more serious concern for the smooth and efficient operation of organizations and public administrative bodies. Thus, historical study of the Queen's commerce programme lends insight into current uses of management theories within public domains, educational institutions, charitable organizations, and all spheres of social life.

iv) University of Western Ontario

Across the province at the University of Western Ontario,
the commerce programme was characterized by its practicality. Even such appropriate theoretical material as economics was "not unduly stressed" and in this respect the business administration courses were separated as early as 1921 from those in economics. This approach guaranteed that the student would graduate "with an outlook upon business conditions that enables him [sic] to fit into a business organization promptly and acceptably and with the ability to bring to his [sic] new position a university-trained mind that has been coached in the application of facts rather than theories." Courses most often taught in this manner included executive problems, sales management, applied cost accounting, industrial management, finance problems, commercial law, marketing problems, advanced accounting, and business statistics.

The Western system facilitated the development of a relationship based on mutual dependency between students and the firms involved with the programme. Obviously the students needed the cooperation of the business community to share problems, data, and sometimes study or work space. With this system, the firms gained access to the Western faculty members who were some of the most able business problem solvers in the country. The work done by students was usually accomplished "in cooperation with members of the staff at the request of businessmen who wish[ed] to have studies made of certain phases of their business." As an additional bonus
for business, students frequently worked during the summer for firms whose operations they wished to study, and for this privilege, their work was usually unpaid. For business, however, perhaps the most important aspect of the Western training was its promise to train students "to cultivate a business point of view." This was the "underlying idea" of the programme according to E.H. Morrow who argued that "by dealing with actual business problems, ... by reading the literature of business", and by meeting with and hearing executives discuss their problems in the lecture rooms, the process enhanced "the tendency to make ... [students] think along sound and practical lines."63

Due to its association with Harvard and its use of the case method approach, Western's School of Commerce was not designed in order to impart business skills but rather was planned as a management training school. This was reflected in the curriculum. In 1924-5 the course roster included Executive Problems, studying questions "of a general executive nature", such as production, sales, and financial policy; Sales Management, "a survey of the problems of the sales manager"; and two courses in Industrial Management, one on organizations using Taylor's Shop Management, and Kimball's Principles of Industrial Organization as textbooks, was to study "the field of management particularly as exemplified in the management of manufacturing concerns" and "various types of organization and the fundamental principles of management";
and the other was to consider implementation of the ideas, including common practices in departmental control.64

Along with these, a course in advertising, designed to acquaint the student with the role of advertising in sales policies and accepted advertising practice, was offered. Within this general field, Commercial Distribution, Marketing Problems, and Marketing Investigation all provided further experience and analysis.65 Similar courses were not available at the other universities for years to come. Exposure to such new materials as well as to suitable experiences and techniques contributed to the overall prestige and marketability of the Western graduate. Thus, a few years later, in the 1932-3 Calendar, the course's purpose was clearly stated:

Its purpose is not to give a training for men [sic] who desire to become advertising technicians, but rather for those who, as executives, have to consider the use and application of advertising to accomplish results in business. 66

Accordingly, as managers in this area of expertise, they would provide valuable input to other managers in sales and production and in this way would contribute to the development of the firm's overall strategy.

During the late 1920's the Department of Commerce was renamed twice. In 1926-7 it became known as the Department of Commercial Economics. Perhaps more reflective of the general orientation within the curriculum content and course objectives, it was renamed once again in 1928-9 as the Department of Business Administration. The name change itself did
not trigger changes in content but rather the adoption of the title of "Business Administration" indicated the more general thrust of the department as it set out to prepare students as management specialists.

In 1927-8 the Department began to offer a course entitled Introduction to Business Organizations. This course replaced the existing introductory course called Business Arithmetic which quite simply covered mathematical functions as required in business. The concern of the new course was clearly representative of the general trend in business education. The department aimed to train students with the marketable and transferable skills of management and administration rather than with more specific expertise in a given business area such as production, sales, accounting, marketing, or finance.

Further indications of the specific direction of the Department's curriculum are gleaned from the courses in Insurance Problems and Sales Management. First offered in 1927-8, Insurance Problems was designed for actuarial students and was described as covering the organization, financial, and sales phases of life insurance companies. The course was not concerned with the mechanics of actuarial science but was intended for the insurance problem-solver. Similarly, Sales Management surveyed "the problems of the sales manager" rather than those of the salesman. Lectures were largely delivered by sales executives who were to discuss current problems in
marketing, pricing, credits, collections, advertising, and significantly, the "handling of [the] sales force." While courses previously offered in these areas focused on the mechanics of the insurance business or sales functions per se, the new trend incorporated the idea that graduates in Business Administration would not, in fact, be selling insurance or marketing products themselves, but instead would manage the work of others in those and other areas of the corporate organization. The direction of the business department was clarified further in later course descriptions. In the Calendar of 1929-30, for example, the Introduction to Business Organization course was said to be presented "from the point of view of the business administrator" and the object of the Marketing course was to "afford training in the analysis of typical selling problems" and to analyze corporate policies.

Along with its general management and administrative thrust, there was also an indication of a movement toward a more scientific approach not only to business curricula but among business experts in the study of business phenomena. Research in both technical and socio-behavioural areas was marked by its adoption of scientific technique and its proliferation of quantifiable data and analysis. This tendency was reflected in the curriculum. The Marketing course, for example, promised to deal with "consumer buying habits and motives", a subject previously disregarded as an area of
scientific inquiry. Moreover, industrial management and labour relations were persistently studied to determine the most effective methods of production and appropriate administrative techniques to increase labour's efficiency. Thus, the Industrial Management course covered most aspects of labour management from problems arising in the location of an enterprise to the conduct and control of production, labour requirements, and executive organization. 

By 1939-40 most areas of the curriculum had been reorganized and/or altered to highlight the management function. One particular course, Executive Problems, was actually "designed to coordinate the courses of the department and to emphasize problems of business policy." While this course provided convergence for the entire curriculum, individual course descriptions placed further emphasis on management. The 1940-1 listing of Manufacturing exclusively covered methods of controlling manufacturing operations as outlined in the prescribed textbook, *Industrial Engineering*, by Barnes. In addition, the course in Advertising was said to touch "only incidentally on the technique of advertising" but instead stressed "the place of advertising to the other functions in business management." A special course in Factory Management examining established principles and practices of factory control was offered along with two courses in industrial management; one emphasized management problems connected with trends in industry and the other investigated questions of
industrial relations, industrial organization, production, distribution, and finance.

Through a series of slow but successive changes, the curriculum eventually incorporated intensive study and analysis in the scientific management of all aspects of industrial and factory management, sales, and financial administration as well as business policy analysis. Along with the management of materials and technical processes, the courses revolved around the question of management of three diverse but not mutually exclusive groups. Some courses mainly examined techniques in the management of groups, like consumers, outside the organization, others studied interorganizational relations, such as the relations between business and government, while a third group of courses investigated techniques of internal control or the management of employees. All courses, however, were presented from the executive or "top level" point of view.

During the 1930's the business curriculum was integrated with other disciplines. In the 1930-1 session a special course, Chemistry and Business Option, combining the study of business, economics, political science, chemistry, and modern languages was offered through the Department of Chemistry. Although business administration courses were often open to non-business students, many were too specialized or too intensive in their requirements of factory trips and laboratory work to appeal to a wide variety of students. In
1932-3 the Department of Philosophy and Psychology designed a new course which was open only to students in the intensive study of Business Administration. This was Business Psychology, an application of psychology to modern business. Just as the study of business was applicable to those in other specializations, many fields of inquiry provided specialists in business administration with novel approaches to technical areas of management and especially to the management of personnel.

Studies in organizations and organizational development were, in fact, becoming more popular and as the most prevalent form of organization, the business corporation, served as a model for case studies in sociology, psychology, and human relations. In particular, the study of labour problems grew in popularity. Starting with the 1927-8 session, a course in Labour Problems was offered in the Department of Economics and Political Science. The course began with "a preliminary study of the psychology and history of the labour movement" and then went on to discuss the following topics: immigration, wages, standards of living, women and children in industry, industrial accidents and sickness, unemployment, trade unionism, the employers' approach to the labour problem, labour legislation, and methods of industrial peace. In the same year, the Calendar published a list of courses leading to a Master of Arts degree in Economics and Political Science and among those recorded were Risk Bearing, Insurance,
Population, Immigration, Sociology, and Trade Unionism. 78

Sociology, studies of labour issues, and other problem oriented courses were available only at the graduate level until the 1930-1 session when Introductory Sociology as well as Labour Theory and Problems were offered in the undergraduate programme. The sociology course was largely concerned with issues of social accommodation and social control. 79 By starting with an examination of "the causes of industrial unrest and the remedies advocated", the labour course was also involved with problem solving as it progressed through the topics of unemployment, inadequate wages and industrial accidents, trade unionism, labour legislation and employers' remedies, and then finally considered various theories of social reform and suggested types of social organization—utopias, socialism, and syndicalism. The course ended with an analysis of the "indictment of capitalism and the latter's defence." 80 By the end of the decade in the session of 1939-40, several sociology courses were offered in the Department of Economic and Political Science along with a more complete programme of economics courses, a number of courses in public administration, governments, and municipal affairs, studies in international issues, and more specific direction in the Master's programme. 81

Although the business administration department incorporated subject matter which was aimed at problem solving, the focus was specific. That is, students were presented
with actual business cases to solve and the point of view to be adopted in these exercises was that of top level management. In this respect the University of Western Ontario's programme differed from those at the other universities where the commercial curricula had embraced a more broadly defined problem solving orientation. The supportive curricula at the University of Western Ontario served to round out a very specifically oriented programme and provided an avenue through which those interested generally in the business fields but intending to work in the public rather than the private sector could seek additional training. In many respects the curriculum offered outside the Department of Business Administration did not differ significantly in theoretical analysis nor orientation.

A Master of Arts degree in Business Administration was available at the University of Western Ontario beginning with the 1930-1 session. Economic Theory, Public Finance, Business Trends, Trade Unionism, and Sociology were among courses listed leading to the Master's degree. Starting with the 1932-3 term, an additional one-year certificate course for graduate students was offered. According to the Calendar's description, the purpose of this course was "to emphasize a few fundamental principles involved in accounting, finance, production, distribution, and personal efficiency." This extra year of study provided an opportunity to sharpen the graduate's business management skills and general outlook.
For example, the accounting course broadened one's "acquaintance with the principles of accounting so that one will know not only how his own business stands, but how to place his investments based upon an analysis of the financial statements of other businesses." Similar descriptions were provided for other components of this programme. However, the most direct promise of the course was made with respect to the proper cultivation of attitudes. Accordingly, through its study in Personal Efficiency, the course aimed "to develop the right mental attitude in a man towards his work, his business and his whole life, whether it be finance, production or sales activity."

Hence, the Department of Business Administration was concerned with all aspects of training and socializing business executives from the development of management skills to the cultivation of what its members and the members of the business community at large defined as appropriate modes of thought and custom for the Canadian trained business executive or manager.

**The Supportive Curricula**

Although the development of the departments of business education at each university followed slightly different patterns, the overall goal to train management personnel was similar. In this task department faculty were advised and
assisted by prominent Canadian businessmen who, for the most part by the 1930's, were fully supportive of this form of education. University educated businessmen were expected to mediate in international problems, solve national problems, and push toward a more progressive and harmonious future. The nation would no longer look to the philosophers or even to the politicians for direction or purpose but rather was now urged to look toward the new business sages who were supposedly, as Dr. Henry Laureys, the Canadian representative at the International Congress on Commercial Education in 1932 believed, "going to pull the world out of its economic mess" since for these learned businessmen "the solution of problems had no secrets."86

Coincidental with the "internationalization" of the university trained businessmen, language requirements in the business programme were introduced. English, French, Spanish, and Latin were established as part of the commercial degree because it was said that these courses were to educate students to be "super-salesmen and higher types of commercial agents, both at home and abroad."87 Incidentally, the Carnegie Corporation of New York financed the study and development of language education in Canadian business schools.88 To this end at a subcommittee session for Economics and Commerce teachers at the Thirteenth National Conference of Canadian Universities in 1929 it was agreed that all commerce programmes would include a language other than English, that
courses in commerce should be closely aligned with other courses in the faculty of arts, and that degrees in commerce should be fully equal in academic status and rank to B.A.'s in arts. 89

The necessity of providing businessmen with training in modern languages was recognized at the turn of the century by University of Toronto President James Loudon. 90 Years later, submissions to the National Conference of Canadian Universities by financier Andrew T. Drummond and Frank Beer of the Canadian Trade Commission, urged the universities to undertake the development of curricula in the history, literature, institutions, business customs, and languages of those countries with which foreign trade was growing. 91 The appeal for an international focus to domestic business education programmes was made in terms of economic benefit. The International Congress on Commercial Education in 1932 adopted resolutions to enable young graduates "to move freely from one country to another for a stay in practical training" so that they would "become citizens of the world, fit and qualified for their role in the international market." This strategy was based on the notion that "national well-being depends on international well-being" and that commercial education is "one of the best channels for promoting international well being." 92 Notions regarding the corporation's "license" to transcend nation-state boundaries were apparent and acceptable.

As a form of pragmatic education, business training was gaining popularity as a "catch-all" for a variety of occu-
pations. Many educators and administrators, for instance, viewed business education as suitable training for government service, legal work, general administrative employment, and social service. The knowledge base of business education was that of the workings of the corporate organization. This entailed knowledge of the bureaucratic form, its limits and its efficiencies as well as means to possible improvement. The curriculum was based on the goal of profit maximization and internalization of the authority structure inherent in the corporate bureaucracy.

As a consequence of the growing division of labour within corporate and other bureaucracies, the area of secretarial science was transferred from Departments of Commerce and Business Administration. In most cases this form of commercial education was removed from the university altogether and was relegated to the auspices of the high school. During the late 1920's, the Department of Secretarial Science at the University of Western Ontario shared the resources of the Department of Business Administration. Accounting and bookkeeping courses offered through the latter department were intended for secretarial students. The Department of Secretarial Science offered little beyond Shorthand and Typing Skills and Office Practice. However, students were provided with opportunities to engage in office administration and management from the secretarial level during their practicum as they were given the responsibility of supervising members.
of an office staff. 94

The role of the curriculum in preparing students for managerial or administrative careers was further strengthened by the supportive curricula offered in social sciences. Most notable among the elective courses were those in Sociology and Psychology. The social problems approach was explicitly presented in the university calendars and in advertisements for the business programmes. For example, one McMaster calen-
dar described the business programme as an "education that will solve society's major problems" and listed "war, crime, disease, unemployment ... [as] a few of the most pressing." 95 Courses in Psychology offered an analysis of the individual's problems and their solutions. Psychology was originally offered through the Departments of Philosophy and the major subject areas were sensation, thought, emotion, perception, instinct, memory, and imagination. During the 1930's Psychology became more analytical and courses in applied and experimental psychology began to appear. By the 1935-6 session at Queen's, for example, both industrial psychology and J.B. Watson's behaviourist psychology were given. 96 These later additions provided numerous opportunities for application in the organizational setting and industrial sphere.

With the general belief in a scientific approach to the study and solution of social and individual problems, a body of knowledge in management and personnel relations was developed. In the corporate organization managers were held
responsible for the achievement of corporate goals and for maintaining smooth operations and harmonious labour relations in this endeavour. The need for specific training in this task was clearly identified by academics and businessmen alike. However, the active promotion of this form of education was often undertaken by personnel experts and members of the Canadian management movement.

Management Education and Its Problem Solving Message

By the 1930's the central question addressed by Departments of Business Administration and Commerce was that of "how to manage." Within organizations the manager was expected to find solutions to many problems, that is, problems concerned with profit, finances, advertising, product marketability, production management, and labour relations. In preparation for these tasks, students were taught to see themselves as "troubleshooters", ready with advice on how to remedy the organization's situation.

By the 1940's management had become a science which had evolved through distinct phases. The first set of principles that distinguished management and shed light on the manageability of the work process was that of scientific management. Simply, the work process was scientifically broken down into smaller components and the worker's movements in each function were measured to determine maximum
efficiency. Following the work in scientific management came the human relations approach. This school studied the process of fitting the worker to the job to ensure the smooth functioning of the organization. Using scientific management and the human relations approach as the basis for models, several variations on these themes were later developed and experimented with. In most cases the management experts were concerned with further and more detailed analysis of the worker and his/her characteristics and the job, its component parts and its potential for manageability. In every case, the issue was control.

As corporate organizations and their management experts experimented with various approaches to management, work, and the personnel function, the Schools of Business Administration and Commerce responded by incorporating the new ideas into the curriculum. It was the schools' task to teach future managers to view the work process in its component parts, to manage the worker and the work process, and to accept the notion of managerial authority as status quo and therefore unchangeable.

The next chapter will study the introduction of Taylorism and scientific management in the business schools and will specifically analyze the conception of work and its manageability as presented through course textbooks.
Footnotes


2 Queen's University, Kingston, Canada, Courses in Commerce and Administration, 1921-22, (Kingston, 1921), p. 7.

3 Ibid., p. 5.

4 Quoted in Financial Post, 15:42, October 21, 1921, p. 3.

5 Quoted in Financial Post, 20:38, September 17, 1926, p. 10.

6 Ibid.

7 Financial Post, 18:50, December 12, 1924, p. 20.

8 Financial Post, 15:42, October 21, 1921, p. 3.


11 W.A. Mackintosh, "The Curriculum of a Course in Commerce", Canadian Political Science Proceedings, (II, 1930), p. 95. Mackintosh, a professor at Queen's, was a member of the executive committee of the Canadian Political Science Association.

12 Ibid., p. 98.


14 The argument was often made, for example, that arts courses were appropriate as vehicles of socialization for future businessmen. Arts courses were expected to teach qualities of the higher culture and to provide avenues of insight into human nature and social affairs. See, for example, Mackintosh, op. cit.

16 McMaster University, Arts, Theology Calendar, 1925-26,
(Whitby: C.A. Goodfellow & Son, 1925), p. 75.

17 McMaster University, Arts and Theology Calendar, 1930-31,

18 McMaster University, Arts and Theology Calendar, 1929-30,

19 McMaster University Calendar, 1930-31, op. cit., p. 71.

20 McMaster University, Bulletin -- An Outline of Purposes

21 McMaster University, Bulletin of Information, (Hamilton,

22 McMaster University, Calendar of the Faculty of Arts,

23 McMaster University, Calendar of the Faculty of Arts &

24 McMaster University, Department of University Extension,
"Course in Personnel Administration, 1942-3", (Hamilton,
1942).

25 McMaster University, Calendar of the Faculty of Arts

26 McMaster University, Department of University Extension,
"Diploma Course in Vocational Guidance (Career Planning)"
(July-August, 1944).

27 University of Toronto, Calendar of the Faculty of Arts,
1922-23, (Toronto: University of Toronto Press, 1922),

28 Ibid., p. 207.


See also Financial Post, 23:17, April 26, 1929, p. 6.

32 University of Toronto, Calendar of the School of Graduate
Studies, 1938-9, (Toronto: University of Toronto Press),
pp. 47-8.
33 University of Toronto, Calendar of the Faculty of Arts, 1933-4, (Toronto: University of Toronto Press, 1933), p. 114.

34 University of Toronto, Calendar of the Faculty of Arts, 1927-8, (Toronto: University of Toronto Press, 1927).

35 Toronto Calendar, 1933-4, op. cit., p. 114.


37 University of Toronto, Calendar of the Faculty of Arts, 1925-6, (Toronto: University of Toronto Press, 1925), p. 245.

38 University of Toronto, Calendar of the Faculty of Arts, 1924-5, (Toronto: University of Toronto Press, 1924), p. 233.


40 University of Toronto, Calendar of the Faculty of Arts, 1934-5, (Toronto: University of Toronto Press, 1934), p. 136.

41 Toronto Calendar, Social Services, 1939-40, op. cit., p. 25.

42 Ibid., p. 24.

43 Queen's University, Kingston, Courses in Commerce and Administration, 1921-22, (Kingston, 1921), p. 8.

44 Ibid., pp. 8-9.


46 For example, the list of outside lecturers for 1922-3 included E.W. Beatty, President, C.P.R.; W. Casey, General Manager, Canadian Locomotive Co.; R.H. Coats, Dominion Statistician; H.S. Person, Managing Director, The Taylor Society; and V. Ross, Vice-President, Imperial Oil.

47 Queen's University, Kingston, Courses in Commerce and Administration, 1928-29, (Kingston, 1928), p. 7.

48 Queen's University, Kingston, Calendar of the Faculty of Arts, 1919-1920, (Kingston, 1919), pp. 152-3.
49 Queen's University, Kingston, Calendar of the Faculty of Arts, 1920-21, (Kingston, 1920), p. 133.

50 Queen's University, Kingston, Calendar of the Faculty of Arts, 1921-22, (Kingston, 1921), p. 113.

51 Ibid., p. 117.

52 Courses in Commerce and Administration, 1921-22, op. cit., pp. 10-1.

53 Queen's University, Kingston, Calendar of the Faculty of Arts, 1922-23, (Kingston, 1922), p. 114.

54 Queen's University, Kingston, Calendar of the Faculty of Arts, 1924-25, (Kingston, 1924), pp. 114-5.

55 Queen's University, Kingston, Courses in Commerce and Administration, 1928-9, (Kingston, 1928), p. 22.


57 Courses in Commerce and Administration, 1928-9, op. cit., p. 7.

58 Queen's University, Kingston, Calendar of the School of Commerce and Administration, 1938-39, (Kingston, 1938), p. 25.


60 Queen's University, Kingston, Calendar of the Faculty of Arts, 1934-35, (Kingston: Jackson Press, 1934).


62 Ibid.


64 University of Western Ontario, Calendar of the Colleges of Arts, 1924-25, (London, 1924), pp. 82-3.

65 Ibid., p. 81.
66 University of Western Ontario, Calendar of the Faculty of Arts, 1932-33, (London, 1932), p. 112.
67 University of Western Ontario, Calendar of the Faculty of Arts, 1926-27, (London, 1926), p. 95.
68 University of Western Ontario, Calendar of the Faculty of Arts, 1927-28, (London, 1927), p. 100.
69 University of Western Ontario, Calendar of the Faculty of Arts, 1929-30, (London, 1929), p. 93.
70 Ibid.
71 Ibid., p. 95.
72 University of Western Ontario, Calendar of the Faculty of Arts, 1939-40, (London, 1939), p. 95.
73 University of Western Ontario, Calendar of the Faculty of Arts, 1940-41, (London, 1940), p. 90.
74 Marketing and advertising courses, for example, fit this description.
75 University of Western Ontario, Calendar of the Faculty of Arts, 1930-31, (London, 1930).
76 Western Calendar, 1932-33, op. cit., p. 176.
77 Western Calendar, 1927-28, op. cit., p. 102.
78 Ibid., p. 106.
79 Western Calendar, 1930-31, op. cit., p. 113.
80 Ibid.
82 Western Calendar, 1930-31, op. cit., p. 115.
83 Western Calendar, 1932-33, op. cit., p. 113.
84 Ibid.
85 Ibid.
86 Dr. Henry Laureys, Canadian Society for Commercial Education, "The Training of Responsible Business Administrators" in Report by Dr. Henry Laureys concerning the
International Congress on Commercial Education held in London from the 25th to the 29th of July 1932, (Montreal, 1932), p. 34.


88 Proceedings of the Tenth National Conference of Canadian Universities, held at Dalhousie University, Halifax, 1925, p. 15.

89 Proceedings of the Thirteenth National Conference of Canadian Universities, held at Chateau Laurier and the University of Ottawa, 1929, p. 30.

90 James Loudon, Convocation Address, University of Toronto, October 2nd, 1899, (Toronto: Rowsell & Hutchinson Printers, 1899), p. 3.


93 Gradually courses in law were also removed from the business curriculum. While legal knowledge to a degree was necessary for corporate administrators and businessmen, the detailed form of legal education as we now know it, was not required. As the study of law was removed from the business and political economy curricula, a concentrated study of corporate law was developed within Faculties of Law.

94 University of Western Ontario, Calendar of the Faculty of Arts, 1928-29, (London, 1928), p. 179. The separation of secretarial science from business administration within the university held further implications. While this move did, in fact, create another possible area of specialization, and served to separate office workers from office administrators, it also contributed to the sexual division of labour.

96 Queen's University, Kingston, *Calendar of the Faculty of Arts, 1935-36*, (Kingston: Jackson Press, 1935).
Chapter Five

The Principles of Scientific Management and Taylorism: Theories in the Business Curriculum

Management begins in technology and ends in administration. 1

As management education emerged within the business curriculum, researchers readily sought answers to the question of how to sufficiently analyze and understand the work process and the dynamics of labour relations. Meanwhile educators deliberated over the problem of translating lessons from industry into appropriately testable curricular matter. The emergence of management education was a slow but meaningful process, reflecting not only the recognition and acceptance of management ideas by academics and scientists but also the beginning of a movement seeking to replace existing suppositions regarding the labour question with a universally qualified and systematic knowledge base. Mirroring an earlier breakdown in technology, by the end of the 1910's, specialization was required in the area of administration as well.

While business skills such as accounting and bookkeeping were readily translated into lessons and a progression of courses from introductory to intermediate and advanced
was developed, this was not as easily accomplished with management education. Although many businessmen and a variety of academics held a wide range of assumptions about management, many of these ideas had not been studied systematically and therefore were mainly theoretical rather than concrete in nature. The interpretation of such theories into business subject matter presented a great difficulty for educators. Speculation in this area was not acceptable in a pragmatic curriculum.

The publication of F.W. Taylor's *The Principles of Scientific Management* in 1910 was indeed timely. As a quantifiable theory, scientific management proposed a particular programme of responsibilities for the future manager. Its promise of increased efficiency and profit and its time and motion methodology affected the work of managers, furnishing them with both justification and purpose as well as specific tasks in their jobs. The introduction of scientific management and related theories provided a sound scientific knowledge base for management education and a model career plan for students or future managers.

This chapter studies the introduction of scientific management in the business curriculum. Taylor's theories were the first specific theories covered universally by Canadian departments of business administration and commerce and as such, profoundly affected later developments in subject matter. In order to understand the impact upon Canadian
business curricula, courses and textbooks incorporating scientific management principles used in the business schools will be examined. This data will be presented along with an analysis of the ideology of management and its historical justification through scientific management.

Prelude to Scientific Management: The Social Problems Focus

The publication of F.W. Taylor's *The Principles of Scientific Management* in 1910 and the growth of a scientific management movement was one effort among many others dedicated to curing a great number of social problems plaguing America. While Taylor developed his ideas regarding the management of the worker, others studying psychology and sociology began to employ scientific method in order to discover truths about human nature and behaviour. Their findings were used in an experimental approach to solve a number of "problems" in areas such as merchandising and advertising, vocational guidance and career planning, educational programming, urban development, and work related difficulties. Their work was, in part, developed in response to the general and prevalent assumption that it was possible to eliminate social problems if they were properly studied and researched.

Psychology, and in particular, industrial psychology developed as part of a general move toward social efficiency and scientific analysis during the first decades of the twen-
tieth century. Its development was largely based on the pre-
mise that human behaviour profoundly affected organizational
goals and as such it was imperative to businessmen and fac-
tory managers that psychologists begin to establish through
experimental procedure truths about human behaviour under
various circumstances. As the need for social science research
was expressed among businessmen and industrialists, the sci-
entists themselves were accorded a special status as contri-
butors to the organization's overall goals. While the psy-
chologists sought social efficiency by establishing truths
about individuals and their behaviour, sociologists examined
the broader social forces affecting individuals' behaviour
and orientation toward work, community, and more general and
sometimes rather diffuse "societal" goals. Although method-
ologies and theoretical viewpoints differed, both groups pur-
sued their particular form of social science in order to encour-
age the development of social harmony, industrial peace, and
social progress.

During the early years of the twentieth century sociolo-
gists sought to establish order and social harmony by ana-
lyzing the component parts of modern complex society, isolating
particular social problems requiring urgent reform, and orga-
nizing a course of action to overcome identified elements of
disharmony. The major founders of North American sociology
included William G. Sumner, Lester Frank Ward, Franklin Gid-
dings, Edward Alsworth Ross, and Albion W. Small. While dif-
ferences were apparent within their particular sociologies, these men generally agreed on the direction in which social change should occur and expressed fondness of the social, economic, and political patterns of the emerging corporate structures through their works.\textsuperscript{3} Early sociologists sought to preserve what they saw as the "good society" and provided rationale for this goal. Within a society characterized by profound changes and consequently confusion over social values, priorities to progress, and methods for reform, it was the task of the sociologist to sort out the variables creating confusion or limiting progress and thereby provide a path of progressive development and harmony for the community and larger society.

While early work in sociology was somewhat less than concrete, it provided some ideological justification for "laws" of capital accumulation and profit-making within a capitalist economic framework and thus ripened the climate for later developments in management and the rationalization of the work process. Furthermore, this sociology was based on an accepted notion that scientific analysis was the key to the correction of social problems.\textsuperscript{4} As social thinkers developed a scientific technique and analysis of society, recommendations for social change could be tested and evaluated.

Underlying early twentieth century sociological analysis was a persistent belief in the science of social reform. Giddings and Ward in particular sought solutions within the
educational system and Albion Small approached the area of social problems by way of analyzing capitalism as a system and its particular components, namely industry, corporate organizations, and forms of management. Small's work, in fact, seemed to be a pioneering effort in the study of industrial sociology and sociology of organizations. His proposed solution was to create a more smoothly functioning form of capitalism and one of the ways in which he expected to facilitate this was through proper management of corporations. He insisted on solving labour problems by examining alternatives concretely through the presentation of social facts, and the process of social change and social adaptation. He argued that social facts indicate what "ought" to be and this alone is not constructive. Sociology should be involved with discovery leading to social adaptation. Hence, for labour problems the question is to "'experiment with practical checks and balances'" in order to "'discover by experience what serves to secure more stable equilibrium among workers'." Small used the term "social sanity" to describe organizations or social institutions in which stability and equilibrium were demonstrated. Included in the network of organizations demonstrating "social sanity" were Proctor and Gamble and the National Cash Register Company. Curiously, National Cash Register's form of "social sanity" was to introduce a type of scientific test as an aid to the selection of clerical employees while Proctor and Gamble, a leader in personnel
matters, experimented with psychological testing to determine
job success and employees' attitudes.\textsuperscript{8}

The emergence of the social scientist consultant to
industry was indicative of the professionalization of the
social sciences and the subsequent recognition of this field
of inquiry for purposes of profit-making. Professionalization
of the social sciences was, in fact, Thomas Haskell argues,
not just a response to industry but rather was an important
part of it.\textsuperscript{9} Through the American Social Science Association,
the main professional body representing the interests of social
science, action was taken toward various types of social reform.
Unlike other professional organizations, the positions in this
association were not monopolized by academics. The membership
was, in fact, made up of lawyers, doctors, educators, humani­
tarian reformers, and businessmen. Due to the association
of businessmen with social reform, their image became remark­
ably wrought with benevolence. While it was apparent that
businessmen expressed their desire for social reform, it was
also and perhaps more significantly obvious that they sup­
ported the need for a science of reform.

Industrial psychology and sociology developed during
a time when the need for social reform and re-creation of
order and stability was apparent. The search was on for a
panacea. Behind this search was the assumption that under
a somewhat confused surface of events lay a harmonious and
rational social order. Social problems were thought to per-
sist due to faulty means of coordination among key institutions of society rather than because of irreconcilable conflict among parts of society, key actors, and their spheres of interest. Curing social ills seemed to be a matter of coordinating social institutions, promoting interaction among various types of social reformers, and establishing support for scientific endeavours aimed at reform.

In the area of labour reform, problem solving was specified in concrete fashion with the development of Taylorism and other forms of management. With scientific management an attempt was made to coordinate knowledge of behavioural principles with those of engineering. When the marriage of social science and engineering had proven to be useful in solving specific labour problems, employers and those in positions of power recognized the efficacy and widespread applicability of such principles and began to employ them under various circumstances within their domains. Efforts to operationalize the findings of social science, in essence, worked to secure its reputation as a serious field of inquiry aimed pragmatically at social and humanitarian reform.

Gauging Efficiency Through Scientific Management: The Emergence of the Management Technique

It was within a climate of social reform and problem solving that F.W. Taylor developed his principles of scientific management. While Taylor was not the first to undertake
the labour question, his work appealed to a broad range of reformers, capitalists, and social scientists since it was both systematic and concretely based. Early developments in industrial and social psychology may be seen, in fact, as a prelude to scientific management which merely concretized more boldly some of the previous ideas regarding the manageability of labour.

Taylor's main concern was with the elimination of "soldiering", the restriction of output among workers. He argued that in order to eliminate soldiering, it was essential that foremen subject every job and even more minutely, each task within each job to rigorous scientific analysis to determine the steps involved and the necessary time required to accomplish each step. With this knowledge, Taylor explained, the manager could assign the worker his duties with the assurance that the assignments were accomplishable within the time frame provided. Questions by workers regarding the unfairness of employers or their inability to complete tasks on time could be easily dismissed with the employer's scientific evidence of the suitability of the requirements for the time allotted. The practice of Taylor's principles would, in effect, vest all knowledge regarding the structure, organization, mechanics, limitations, and outcome in the higher levels with management rather than on the shop floor with the workers.

The most important feature of Taylor's scientific management was his concept of control. Scientific management
signalled the worker's loss of control over his/her own work. This was not an unintended consequence of Taylorism, but rather, it was a conscious effort by Taylor to transfer control from workers to management as part of a general scheme to increase efficiency. Taylor explained the process in this way:

Thus all of the planning which under the old system was done by the workman, as a result of his [sic] personal experience, must of necessity under the new system be done by the management in accordance with the laws of the science; because even if the workman was well suited to the development and use of scientific data, it would be physically impossible for him [sic] to work at his [sic] machine and at a desk at the same time. 11

The idea of managerial control did not emerge out of Taylorism but Taylor's contribution added another dimension to its practice.

As an engineer Taylor dealt with the production process and the worker's place in it in terms of the ascendancy of a smooth functioning technological sphere. His work verified assumptions regarding the regulation and predictability of labour and in this respect held promise for those seeking solutions to social problems. Taylorism was precise, efficient, and scientific. Its rules were clear and its impact on the flow of production was easily measured. Its tools were fairly simple, requiring the use of time and motion studies and the stop watch. Its description was neat, uncluttered by the expectation of human error on the part of the
worker in any task performance.

F.W. Taylor's principles represented a logical extension of the rationality of Weber's bureaucratic "ideal type" and the division of labour welcomed by both Weber and Adam Smith. The utility of specialization and compartmentalization of labour had been debated and agreed upon for almost a century before Taylor even began his research. The importance of Taylor's work lay in its practicality. Within two years of his publication of The Principles of Scientific Management in 1911, it had been translated into nine languages and a plethora of articles appeared in American journals on the application of these principles to many facets of life.12

One of Taylor's objectives was to maximize the daily output of each worker. He assumed that man was in essence an economic animal, limited in the pursuit of material gain only by his physiological capacity.13 "A fair day's work" for him was what a man could accomplish without damaging one's physical health. The ultimate goal was to use inefficient human beings in as efficient a manner as possible. This could be accomplished, Taylor argued, as long as the manager provided the worker with "some special incentive ... beyond that which is given to the average of the trade."14 The benefits of this scheme, ranging from less wastage, higher wages, the elimination of unskilled workers, a reduction in the cost of living, and industrial peace, Taylor pledged, would far outweigh the costs.15 Moreover, under scientific manage-
ment, through analyses of tasks and capabilities of workers, management defined "a fair day's work" and it was left to the worker to produce within those parameters provided.

The use of Taylorism's precise task analysis, time and motion study, and one-way formal communication of orders essentially functioned to destroy the craft involved in work. Braverman referred to this practice as the "dissociation of the labour process from the skills of the workers" or as the separation of conception from execution. While traditional management styles, Taylor argued, made "it necessary for each workman to bear almost the entire responsibility for the general plan as well as for each detail of his work", "his implements", and "all of the actual physical labour", scientific management alleviates the worker of this responsibility. Instead management assumes the duty of establishing "many rules, laws and formulae which replace the judgment of the individual workman."

Taylor encouraged workers' identification with their employers and their acceptance of scientific management schemes by perpetuating a belief in the existence of worker-management cooperation. He dismissed the question of conflictual interests, arguing that scientific management is based on the principle that the "true interests" of employers and employees are "one and the same." Grievances were to be settled on the basis of scientific method by management rather than ideologically by unions. The Taylor system did, in fact, thwart
the growth of unions and workers' organizations by spatially separating the workers and pacing them to the machine. 19

During the reform movement, any proposed innovation in the structure or organization of society or its social institutions invited the question of a possible panacea. Taylor himself made no claims to this effect and, in fact, wrote:

It is not here claimed that any single panacea exists for all of the troubles of the working-people or of employees. As long as some people are born lazy or inefficient, and others are born greedy and brutal, as long as vice and crime are with us, just so long will a certain amount of poverty, misery, and unhappiness be with us also. No system of management, no single expedient within the control of any man or any set of men can insure continuous prosperity to either workmen or employers. 20

Taylor claimed, however, that "inevitable" periods of depression faced by any country will be "fewer, shorter, and the suffering less" if the principles of scientific management are substituted for "the rule of thumb."

What the reform movement lacked in precision and efficiency, Taylorism offered in abundance. Taylorism proposed to manage workers scientifically without undue emotional involvement, much as an engineer could manage a machine and other industrial resources. Yet while scientific management had proven to be successful and Taylor's expertise was in demand as a management consultant, the open practice of scientific management was severely criticized. 21 At a time when humanitarian reform was the order of the day, Taylorism appeared as harsh and uncompromising. Taylor himself took
the view that "'all employees should bear in mind that each shop exists first, last, and all the time, for the purpose of paying dividends to its owners.'" General resentment toward the idea that workers were of secondary importance to management discouraged outright advocacy of the Taylor system.

Essential aspects of scientific management have formed the basis of modern theories of management which take into account the structure and organization of the production process. Although it does not exist as a separate school, this can be attributed to the fact that it has "become the bedrock of all work design." Taylor's principles are no longer debated but instead are starting points for any proposed alterations to methods of management commonly employed. Starting from that basis, then, modern management principles can be accomplished more efficaciously and perhaps more subtly.

Toward a Theory of Labour Management: F.W. Taylor's Scientific Management in the Curriculum

Just as Taylor's principles of scientific management were growing in popularity, the need for more pragmatic education was declared in educational circles. Although Taylor's principles translated themselves into lessons for the future business manager, their incorporation within the school curriculum did not occur immediately. Scientific management, in fact, was not often taught as a separate theory
of management. However, the principles were infused in many separate lessons, giving the student the overall impression that there were particular and absolute "truths" in the management process.

1) Scientific Management and the Applied Science Curriculum

The growth of management as a separate occupational category can be traced to changes in the nature and structure of the corporate organization and to the rationalization of its functional necessity via the Schools of Commerce and Business Administration. Management education originated in the faculties of applied science where engineers were taught how to assemble and manage workers, materials, and machinery, and to engage in production. In Canadian industries most engineers—in one survey over 60%—eventually worked mainly as administrators rather than as engineers. While engineers were considered to be excellent administrators, it was suggested that the engineering skills were being wasted on managerial functions and therefore a new group should be trained to perform the management tasks for the engineer. Hence, the category of the professional manager was developed as distinct from both the businessman and the engineer.

Both within schools and the industrial sphere, those interested in technology and its most operative modes raised questions of business organization and management. A Cana-
dian report on American technical schools in 1871, for example, noted that the various engineering courses at the Massachusetts Institute of Technology in that year included the study of political economy. On June 6, 1899, the Toronto Board of Trade appointed a special committee to study technical education. The committee consisted largely of Board of Trade members who were expected to work closely with members of the Toronto Board of Education and the University of Toronto in preparing its report. The report acknowledged the necessity of closely coordinating business and industrial forms of education. In suggesting the establishment of complementary training programmes for both merchants and industrialists, the committee recognized the relatedness of the curricula of these pragmatic departments and their common needs and emphasis in relation to production.

With the development of management education, the need for management training in engineering was not eliminated. The ability to manage and perhaps later to recognize the need for management consultation, was required of the engineer. As C.R. Young, Dean of the Faculty of Applied Science and Engineering, University of Toronto and President of the Engineering Institute of Canada, pointed out:

... [the engineer] must ... conduct his [sic] operations with strict regard to the principles of economics and finance and sound management of a highly varied personnel. More than anything else he [sic] must become a co-ordinator of a complex system of men and machines. 27
Engineering incorporated both arts and sciences, and management—the science of promoting human efficiency and the art of handling men—was simply a logical extension of the engineering function.

Before 1900 applied science curricula had been designed to impart the practical skills involved in engineering. Changes in engineering education paralleled those in business education. Both disciplines had begun as skill building courses in which the primary focus was the teaching of "how to" engage in business or production. While this particular focus was never dropped, gradually the philosophy and practice of management was incorporated as a central and prominent feature of each discipline. In the case of engineering, a curriculum based on skill building alone would be open to the same criticisms that were applied to Taylorism; that is, it would appear short-sighted in its lack of understanding of personnel matters. For the discipline of management, its association with practical engineering was most beneficial. For the efficient practice of management, managers required some specific knowledge of technology and the production process in order to synchronize their handling of men with the engineers' control of materials and production.

The promotion to management for an engineer was generally desirable. Engineers had historically worked to shed their roots as technicians and to gain recognition as professionals from both the universities and other professional
groups. With great difficulty professional engineers sought distinction not on the basis of their technical knowledge but rather on the basis of their supervisory authority on the shop floor.28

During the 1920's and through the 1940's, a large number of managers, and especially those at lower levels, were educated and trained as engineers. This was due to several factors. First, men trained in faculties of business were mainly employed to carry out day-to-day operations of business firms and while these activities included some aspects of management, graduates were mainly hired to employ the skills they had acquired during their business training. Secondly, management education in the faculties of business, as described in Chapter Four, developed slowly and the concept of the business manager as trained through the faculties of business administration was not overly popular until perhaps management specialists such as Clarence Fraser began to promote management in Canada through the development of a Canadian management movement and other such organizations. Thirdly, and most importantly, the practice of management as it is now known, originated in the sphere of mechanical engineering with Taylor's principles of scientific management. Gradually as management became centralized within the corporation, engineers' supervisory authority remained at or near the shop floor whereas managers trained in faculties of business administration were offered positions with more
decision-making and administrative authority. This process occurred as management was increasingly treated as a specialization itself rather than as a branch of either business or engineering.

At Queen's University the issue of management was first addressed in the engineering curriculum. Engineering education, in fact, began with the inclusion of business perspectives. Courses in mining engineering offered through the School of Mining and Agriculture at Queen's in 1894-5 included a section on mine accounts.\(^\text{29}\) This interest in business grew and during the next year in 1895-6, as indicated in Chart 5.1, Mining Engineering and Ore Dressing included courses in the Principles of Employment. These courses were conducted from the point of view of management with sessions on inspectors' inquiries and employers' liability.\(^\text{30}\) In addition, starting in 1903-4 an advanced course for students specializing in mining covered mine management, accounts, and the commercial side of mining.\(^\text{31}\)

Less than ten years after the School of Practical Science became University of Toronto's Faculty of Applied Science and Engineering in 1906 following the passage of the University Act, students in Mechanical and Electrical Engineering were introduced to the practical side of business management in their education. Eight months of shop work was required, the object of which was to teach graduates "some practical knowledge of the duties of the workman in
... engineering, as distinguished from those of the purely technical" work. Practical experience was seen as essential even for those students eventually intending to enter "sales or other non-production departments." Such experience was best acquired under "commercial conditions" and therefore could not be easily re-constructed in the classroom setting.33 Besides this requirement in Mechanical Engineering, the other engineering departments--civil, mining, analytical and applied chemistry, chemical, electrical, metallurgical--listed two business courses, Business and Finance and Limited Companies, in the 1915-6 calendar.

Broadening the perspectives of applied science began with the recognition of the desirability of control over the production process and hence the work force. While business and other social conditions were somewhat beyond the scope of the engineer's realm of control, activities of the workers, as Taylor clearly demonstrated, could certainly be regulated by the engineer. The engineer's role in managing labour was first attended to in the fields of Mechanical and Mining and Metallurgical Engineering. In 1920-1, a course entitled Shop Management and Costs was offered for fourth year students in Toronto's Department of Mechanical Engineering and was recommended for others in Electrical and Chemical Departments. In the same year the Department of Mining and Metallurgical Engineering offered Mine and Plant Management.34 Chemical engineers at Queen's were required to take Economics and
railway engineers attended lectures on duties of staff and responsibilities of persons in authority. 35

By 1916-7 Economics courses were required at Queen's in Engineering. Required textbooks were similar to those intended for commerce students in the Department of Business. During the same year, an additional course, Works Organization and Accounting, was required for the fourth year students in Mechanical and Electrical Engineering. This course more openly addressed the role of engineers in management. Significantly, classes in the "selection of equipment and organization of staff for highest efficiency" not only taught the future engineer about the centrality of his/her role as administrator of the production process but also incorporated elements of scientific management in recognition of production management as a primary task of management. 36

Starting in 1922-3 Toronto's Faculty of Applied Science offered a more complete list of management related subjects, most of which were heavily influenced by Taylor's scientific management. By this time, courses in Business, Economics and Finance, Engineering Economics, Engineering Law, and Management were offered by all engineering departments. In most of these courses there was some reference to labour issues and management, indicating that the university educated engineer was expected to acquire a broad range of knowledge for his later professional career.

By the early 1920's management had been clearly iden-
### Chart 5.1

**Scientific Management at Toronto and Queen's: Applied Science Courses, 1895-1925**

<table>
<thead>
<tr>
<th>University, Course &amp; Year</th>
<th>Theme</th>
<th>Common Subject Areas/Techniques</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Queen's:</strong> Engineering &amp; Ore Dressing, Principles of Employment, 1895-6</td>
<td>labour management &amp; legal issues</td>
<td>- wages &amp; contract work - legal issues, such as Arbitration Act, Workmen's Compensation - accidents - administration</td>
</tr>
<tr>
<td><strong>Toronto:</strong> Commercial Law, 1920-1; Engineering Law &amp; Contracts &amp; Specifications</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Queen's:</strong> Economics for Mining, &amp; Metallurgical, Civil, Mechanical, Electrical, &amp; Chemical Engineering, Minerology, Geology, Analytical &amp; Applied Chemistry, 1907-08</td>
<td>general business theory &amp; administration</td>
<td>- accounting, financial reports - general business methods - money, banking, public finance - issues in economics, such as investments, trusts - structure of industry &amp; social conditions: trade unionism &amp; labour management - methods of efficiency &amp; plant organization</td>
</tr>
<tr>
<td><strong>Toronto:</strong> Mine &amp; Plant Management, 1920-1; Shop Management &amp; Costs, 1920-1; Introduction to Business, 1922-3; Economics &amp; Finance, 1922-3</td>
<td>practical problems in administration &amp; management</td>
<td>- factory accounting, costs of projects, expenses, depreciation - operating conditions &amp; organization - organization &amp; selection of personnel - organization for maximum efficiency</td>
</tr>
<tr>
<td><strong>Queen's:</strong> Works Organization &amp; Accounting, 1916-7</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Toronto:</strong> Engineering Economics, 1920-1; Management, 1922-3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>University, Course &amp; Year</td>
<td>Theme</td>
<td>Common Subject Areas/Techniques</td>
</tr>
<tr>
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</tr>
</tbody>
</table>
| Toronto: Mine Cost Keeping & Management, 1922-3 | labour management | - problems of cost keeping  
- time & motion study  
- problems of management  
- relations of staff to each other  
- relations of staff to labour |
| Toronto: Industrial Management, 1924-5 | labour & plant management | - industrial organization  
- location, arrangement, construction, & equipment of plants for efficiency & economy  
- process routing  
- scheduling work  
- methods of superintending  
- employment management  
- systems of compensating labour  
- systems of distributing indirect expenses |

Sources: Queen's University, Calendar of the School of Mining, 1895-6, (Kingston, 1895), p. 29; Calendar of the Faculty of Science, 1916-17, (Kingston, 1916), p. 42, p. 85.  
University of Toronto, Calendar of the University of Toronto, 1920-21, (Toronto, 1920); Calendar of the University of Toronto, 1922-23, (Toronto, 1922), p. 466, 473, 474; Calendar of the University of Toronto, 1924-25, (Toronto, 1924).
tified as a function of the engineer and over the years courses were offered specifically in management techniques. In 1922-3 a separate course entitled Management was offered through Toronto's Faculty of Applied Science for the first time. Chart 5.1 traces the introduction of management subject areas and themes in the Applied Science Departments at Toronto and Queen's. At both universities there was an increasingly notable emphasis on labour management issues, although cost accounting and general economic issues were maintained as essential subject areas throughout the period.

Although commerce students were also taught the essentials of management, the managerial technique was not as important a part of the skill of running a business at as early a date as in applied science. This was perhaps due to the fact that engineers were trained in design—and this included problem solving and efficiency in operations. Engineers contacted workers on a daily basis and acted as shop foremen. Graduates in business, however, were not often seen on the shop floor and did not work alongside workers in a position equivalent to the engineer or foreman but instead remained in the upper levels of banks, corporations, and the public service as accountants, bankers, executives, and investors. Although these businessmen also required the cooperation of labour at the lower levels in order to maximize profits and efficiency, obtaining that cooperation was not at first considered a primary aspect of their jobs.
While labour management during the early years, then, may not have been a direct concern of businessmen, it was included in some form in early business education. At Queen's, before the establishment of the Department of Commerce in 1919, courses in Economics offered through the Department of Political and Economic Science examined the labour question, "tendencies of the organized labour movement", and modern socialism. With the development of the Department of Commerce, courses in management and problem solving gradually became a more prominent feature of the business curriculum. Factory Management, Office Management, and Labour Problems were listed in the first Queen's business calendar among the special subjects leading to a Bachelor of Commerce. Students were advised to "take certain courses in Applied Science" if they were "looking forward to work in the field of production."

The movement of the engineering profession toward the field of management was most clearly demonstrated in Toronto's course and departmental descriptions of the Department of Mining Engineering. "The work of Mining," the calendar read, "is directed more to the development of the proper attitude of mind towards mining problems than to the teaching of actual mining methods." An important part of the students' training took place in the Department's assaying laboratory. Here the purpose was to "drive home ... [a] broad Engineering philosophy" and this was accomplished with lessons in "the size of the apparatus, the completeness of the processes in short
intervals of time, the extreme accuracy of results ... [and] the relation of the extent of error to time and method."39 These lessons were deemed invaluable in the "development of a proper perspective in regard to errors and accuracy in measurements" since the academic laboratory was very similar to field laboratories.

Along with the technical skills, "the mental processes involved" in problem solving and the relationship between the theory and practice formed "one of the best fields for the development of Engineering philosophy."40 This philosophy was clearly stated in the description of Mine Cost Keeping and Management. According to the 1922-3 calendar, "one of the fundamental features that must not be lost sight of by the Mining Engineer is, that his [sic] work is designed primarily for purposes of financial profit."41 Hence the course was presented "with details from this point of view." Closely following this framework, two years later in 1924-5, an Industrial Management course was developed and required for Mechanical, Chemical, and Electrical Engineers, replacing the former Shop Management and Costs. Courses of this nature extended the engineer's concept of technology and design to include the process of management and the control and accurate predictability of labour.

Following the lead of one of the top American engineering departments and due to the demand for engineers with business training, during 1921-2, a one-year course for engi-
neers was developed at Queen's. The course was designed to appeal to two types: those who intended to eventually enter the administrative side of engineering and those who immediately required some business know-how for their jobs. During this year-long course the graduate engineer would intensely study business subjects such as Business Finance and Business Law, Financial Organization of Society, Marketing, Business Statistics, Business Policy, and Accounting. In addition, required courses in Labour Problems and Industrial Management would supplement those already taken in the engineering programme. The next year, in 1922-3, the Applied Science calendar described the course as "preparing men who already have the technical equipment for work in the administrative and financial branches of industry." A few more business courses --accounting and costs and money and banking--were added along with another administration course in Office Management.

Commerce for graduate engineers was offered year after year with only minor variations in the combination of courses offered and required. Finally in 1958-9 a special diploma in Business Administration was granted to graduates in engineering upon completion of the year. The course was heavily oriented toward developing skills in management. Industrial Organization and Management, Management Accounting, Management Seminar, and Industrial Relations were all offered during 1958-9. While the diploma perhaps symbolized the official recognition of the work of engineers in administration,
it by no means altered the performance of administrative duties by engineers without such a certificate. Management of the cost of labour was an important theoretical issue raised in Labour Problems courses. A more scientific approach was used in Cost Accounting. This approach reminded managers of the dispensability of non-cooperative employees and categorically placed labour alongside materials as a cost to be monitored and efficiently managed.

The concept of an engineer's duties was gradually specified to include the managerial function. The profession of mechanical engineer, for example, was described as embracing "the design, manufacture, and operation of all classes of machinery, of power plants and manufacturing plants, as well as the executive management of industries."

Further, the Economics course required for senior students studied the "economic and business problems of the engineer with regard to the organization, financing and management of engineering enterprises." This included a section on "the preparation and purpose of accounting and cost records", similar to the subject matter of Cost Accounting in the Commerce Department.

The purpose of this form of record keeping was described in a later calendar. That is, accounting and cost records were "analyzed and interpreted to show the extent to which they may be used as an aid to management." The framework provided for this discussion was that of the "general principles of industrial management."
Monitoring and managing efficiency was the central focus of the Industrial Management courses. Within the framework of scientific management, Industrial Management studied management of the factory and the inherent "labour problems" involved. Chart 5.2 lists the main courses in Industrial Management at Queen's and Toronto with their common subject areas. The number of engineering courses specifically teaching administrative techniques was not confined to the administrative courses. The existence of these courses influenced the remaining curriculum, adding important considerations to subject areas which at first seemed to be unrelated to management topics.

The question of management for the engineer as well as for the business student was increasingly focussed on maintaining peaceful labour relations. Even a specific course for those specializing in Mining and Metallurgy, Mine Cost Finding and Management, was described as paying "particular attention to labour relations" although it also covered important aspects of efficiency engineering, that is, methods of operation and organization and business procedures for mining. Courses teaching labour management grew in number and in specificity. By 1946-7 an additional Industrial Management course was offered, once again particularly emphasizing the study of labour relations.

Questions concerning the role of engineers and the uses and implications of technology vis-a-vis the impact on
## Chart 5.2

**Scientific Management at Toronto and Queen's: Industrial Management and Business Administration, Faculties of Applied Science, 1933 - 1948**

<table>
<thead>
<tr>
<th>University, Course &amp; Year</th>
<th>Theme</th>
<th>Common Subject Areas/Techniques</th>
</tr>
</thead>
</table>
| Toronto: Engineering of Shops & Factories, 1933-4 | scientific administration | - planning the workshop  
- factory construction  
- equipment, location, plant layout |
| Queen's: Engineering Relations, 1943-4 | labour relations & management, cost management | - business methods & engineering  
- legal implications  
- principles of contracts & specifications  
- cost analysis, cost keeping  
- ethical & personal relations |
| Queen's: Production Engineering, 1943-4 - 1946-7 | industrial organization & management | - factory planning & layout  
- physical plant--location, arrangement, construction, equipment  
- production design as affecting production, process routing, planning & scheduling  
- employment management, solutions to personnel matters  
- systems of compensating labour  
- methods of superintending; time & motion cost studies |
| Toronto: Industrial Management, 1941-2 | | |
### Chart 5.2

**Scientific Management at Toronto and Queen's: Industrial Management and Business Administration, Faculties of Applied Science, 1933 - 1948**

<table>
<thead>
<tr>
<th>University, Course &amp; Year</th>
<th>Theme</th>
<th>Common Subject Areas/Techniques</th>
</tr>
</thead>
<tbody>
<tr>
<td>Toronto: Industrial Management, 1946-7</td>
<td>industrial management &amp; labour</td>
<td>- time &amp; motion study - cost efficiency, wages - production planning &amp; standardization</td>
</tr>
<tr>
<td>Queen's: Industrial Management, 1947-8</td>
<td>relations</td>
<td></td>
</tr>
</tbody>
</table>

Sources: Queen's University, Calendar of the Faculty of Applied Science, 1943-44, (Kingston, 1943); Calendar of the Faculty of Applied Science, 1947-48, (Kingston, 1947).
University of Toronto, Calendar of the University of Toronto, 1933-34, (Toronto, 1933), p. 118; Calendar of the University of Toronto, 1941-42, (Toronto, 1941); Calendar of the University of Toronto, 1946-47, (Toronto, 1946), p. 75.
society and social responsibility were examined in Engineering and Society, a course required at Toronto for first year students beginning with the session of 1944-5. Discussions of this nature were continued in various upper level courses, especially Introduction to Political Economy for third year students, and Philosophy of Science and The Profession of Engineering for fourth year students. These studies provided justification for the fields of engineering and management by showing "the dynamic role of science and technology in the development of the modern world, and the slow adaptation of social institutions under the impact of rapid technological change." Such analyses enhanced the professional status of the engineer by pointing out the profession's main concern as social responsibility rather than technological efficiency.

In general at the University of Toronto the engineering curriculum gradually changed its focus from concentrating almost solely on science and technology to include management, labour relations and later, during the 1940's, a variety of broader issues involved with social problem solving and social responsibility. It was at this point when the engineering curriculum was as concerned with social issues as with technological and social problems that a new programme, Engineering and Business, was offered. This fourth year programme was intended for those Engineering students who "have no particular interest in any one branch of tech-
nology, but desire a broad general training, preponderantly engineering in character, that will fit them rather for executive or administrative positions, than for those of a purely technical or design nature. 49

The programme was, in fact, a form of management education, differing from that offered in the Faculty of Business only in its requirement of applied science courses. The course was specifically intended for those expecting to practice business or management rather than applied science and engineering. Management training of this sort for engineers, moreover, was deemed most appropriate. According to the Calendar:

... all engineers, whatever, their duties may be, must be able to handle men as well as machines and their duties tend to become more and more administrative in character as they assume positions of increasing responsibility. 50

As technology became more automated and perfectable, labour remained the major source of difficulty. Through further training in the use of scientific management and other techniques, managers were expected to find solutions to the source of the labour problem and manage the problem effectively.

Management education became a prominent feature of the Faculties of Applied Science and Engineering and through these faculties, the field of management gained status and respectability as a science and as a profession. The area of labour management and administration was a source of
increased status and mobility for the engineer. The association of management with science and engineering was similarly a source of satisfaction for the business manager. As science and technology were translated to the scientific management of men, the administrative professions and specifically the field of labour management were hence acknowledged as science and hence highly creditable.

ii) Scientific Management and the Business and Commerce Curriculum

Although Taylor's works enjoyed popularity during the decade following the widespread publication of The Principles of Scientific Management, this popularity was not immediately reflected in the business curriculum. This lack of response was not indicative of the relative importance of Taylor's principles vis-a-vis the existing business curricula at the time. The universities in general did not change quickly and the inclusion of Taylor's scientific management in the curriculum was no exception.

Courses in scientific management per se were not offered at any of the universities. However, scientific management was of central importance to both faculties of business administration as well as applied science and engineering. This prominence of scientific management was apparent after 1920 and continued with the development of the modern business curriculum. Given its importance, then, it
is curious that at no time through either applied science or business faculties was a specific course offered on the theory and practice of scientific management. However, the reason for this apparent omission is clear. As the basis of the organization of work and therefore the system of management, scientific management served as the foundation of all forms of management education. As such, a simple course in scientific management would not only be meaningless but more importantly, it would relegate scientific management to a position on par with other theories of work or production to be debated, analyzed, and eventually replaced. Although popular mention of the name of Taylor and his theory waned, the essence of his work formed the basis of "new" schools of managerial theory and their practice. The following sections will outline specific details regarding the teaching of scientific management at the various universities.

a) McMaster University

In McMaster's business curriculum, Labour Problems courses offered through the Department of Political Economy were based on the argument that social problems were rooted in deviant acts performed by either individuals or various types of groups and the aim was to remove, change, or carefully control the non-compliant elements in an attempt to create a harmonious and systematic social order. An early
course in Labour Problems, for example, listed the "problems" of labour as determination of wages, conditions of labour, and trade unionism,\textsuperscript{51} and presented the business student with an analysis of how to handle such problems as they occurred within the business organization. Significantly, the more practical problem-solving approach was not introduced until the 1914-5 session when various legal issues, factory inspection, and methods of remuneration were taught. Beginning in 1914-5, it was clear that the focus had shifted toward the identification of difficulties in the relationship between employers and employees and their possible dissolution. In addition a special section of the course was reserved for an examination of "the aims, essential principles and methods of modern trade unions",\textsuperscript{52} a fundamental and clearly marked "problem" with labour as identified by employers.

Along with the courses covering the more usual labour "problems", a special course was taught in the problem of socialism. First offered in 1908-9, Socialism was listed as a separate course at McMaster until the session of 1941-2. Drawing mainly on a textbook by O.D. Skelton, Socialism: A Critical Analysis, the course critically examined socialist thought, the socialistic indictment of capitalism, schemes of social reform, and the socialist movement in representative countries.\textsuperscript{53} The threat of socialism or workers' movements manifesting so-called socialist tendencies was considered perhaps the most serious of all existing or potential
labour problems and was thus awarded special consideration in the commercial curriculum.

Both in political economy as well as in sociology and psychology, the problem solving approach was more salient after 1915. Courses in political economy and sociology not only shared a common theoretical perspective but the disciplines also seemed to overlap in their examination of similar problem areas. In 1925-6, for example, the description of Modern Economic Problems, a new course in Political Economy, was similar to that of an existing sociology course. Essentially, the disciplines of political economy and sociology were predicated on the fundamental assumption underlying social science during this time that social problems were manageable if they were properly researched and analyzed using rigorous scientific methodology.

In the business curriculum, the trend toward more rigorous scientific methodology was also apparent. In 1920-1 the Labour Problems course, for example, was replaced by a two-part course, Industrial History and Labour Problems. Rather than investigating more general problems of labour as in previous years, the course was directed to the more specific issue of labour legislation and the question of trade unions and thus labour-management relations. In a similar fashion, in 1923-4 a course in Sociology studying trade unionism and industrial democracy was also offered.
The teaching of labour problems and legislation in the business curriculum was perhaps reflective of a more general concern with basic issues of management-worker relationships and the powers and rights of organized labour. Labour organization per se was identified by employers as a "problem" as union membership in Canada rose to 16% of all non-agricultural paid workers in 1921. Unionizing activities paralleled the dramatic growth in the manufacturing industry. The number of workers employed in manufacturing increased by 76% between 1901 and 1915. Significantly, during the period, organized workers more actively pursued their interests as the number of workers involved in strikes steadily rose.56

From a year by year examination of course descriptions in McMaster Faculty of Arts Calendars, the teaching of Taylor's principles of scientific management is not immediately apparent. In fact, it was not until 1946-7 that a course covering the principles of time and motion study was listed. This course, Industrial Organization and Management, was offered through the Department of Extension as part of the Registered Industrial Accountants degree programme.57 Several years later, in 1953-4, the Department of Extension in cooperation with the Department of Political Economy offered a special evening programme in accounting and business management. As Chart 5.3 indicates, programmes and courses offered through the extension department taught prac-
Chart 5.3

Scientific Management at McMaster:
Extension & Certificate Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>&quot;Problem&quot;</th>
<th>Subject Areas &amp; Techniques</th>
</tr>
</thead>
<tbody>
<tr>
<td>Industrial Organization &amp; Management 1946-7</td>
<td>management</td>
<td>- production&lt;br&gt;- time &amp; motion study</td>
</tr>
<tr>
<td>Accounting &amp; Business Management 1953-4</td>
<td>labour management &amp; costs</td>
<td>- industrial legislation&lt;br&gt;- industrial organization &amp; management&lt;br&gt;- executive development&lt;br&gt;- industrial engineering&lt;br&gt;- statistical quality control&lt;br&gt;- time &amp; motion study&lt;br&gt;- wage incentives&lt;br&gt;- applications to specific situations</td>
</tr>
<tr>
<td>Industrial Engineering 1954-5</td>
<td>operations &amp; labour management</td>
<td>- production organization&lt;br&gt;- wage standards &amp; operations analysis&lt;br&gt;- personnel problems&lt;br&gt;- accounting&lt;br&gt;- applications in the factory</td>
</tr>
<tr>
<td>R.I.A. Degree:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Industrial Management Legislation</td>
<td>labour management</td>
<td>- trade unions, collective agreements, labour relations&lt;br&gt;- industrial standards, fair wages, workmen's compensation, unemployment insurance</td>
</tr>
<tr>
<td>2. Industrial Administration &amp; Organization Management</td>
<td>administrative &amp; management</td>
<td>- plant/office organization&lt;br&gt;- department functions, standards&lt;br&gt;- industrial relations&lt;br&gt;- wage systems, standards</td>
</tr>
</tbody>
</table>
Chart 5.3

<table>
<thead>
<tr>
<th>Course</th>
<th>&quot;Problem&quot;</th>
<th>Subject Areas &amp; Techniques</th>
</tr>
</thead>
</table>

Foreman's Certificate:

1. Industrial Organization & Planning
   - procedures for production & materials control
   - product planning
   - quality control
   - industrial statistics

2. Industrial Relations
   - operational analysis
   - work measurement
   - incentive administration
   - job evaluation, time standards, work sampling
   - engineering expenses standards
   - training & selection of workers
   - wage payment
   - benefit programmes


tical solutions through scientific management for production and organization problems. The course in Industrial Engineering, for example, reflected the historical bond recognized by Taylor between the managerial and technical sciences. It was described as an "introductory course in principles and practices of industrial engineering." It was "designed for those intent on learning about and discussing problems related to production management." Students were taught the
"application of time and motion study, use of wage incentives for both indirect and direct labour, production planning, and industrial training." The following year, in 1954-5, the Industrial Engineering course was professionalized such that a certificate was granted upon completion of four specified courses.

During the early 1950's associations of professionals mainly in the technical and engineering fields sponsored courses for members through McMaster's Department of Extension. It seems that management training was often regarded as an important area of professional development rather than a serious career in its own right. For example, Business Management for the Electrical Contractor was sponsored by the Electrical Contractors Association and the Electric Service League of Ontario. A variety of courses was designed and offered by the National Office Management Association and one of the most popular degree programmes led to the Registered Industrial Accountants degree.

Gradually as the Department of University Extension was more specifically organized into non-credit and professional or certificate programmes, those offered with a managerial thrust were usually accredited. Non-credit courses were often skill building courses such as data processing. The problem-solving approach was more immediately apparent, it seems, in the mainstream as compared to the extension curriculum. Extension courses were designed for various
experienced professionals for use in their jobs and as supplemental to the "front line" learning they were accustomed to in their careers. The extension courses therefore would answer questions concerning how to successfully apply principles of scientific management in an industrial setting. Courses offered through the Department of Political Economy and Commerce were intended for the more inexperienced person who would additionally seek information regarding both justification and applicability of such theories.

The graduate business programme was concerned with teaching a broad approach to management which would be useful to future executives who would oversee one or more departments within an enterprise rather than manage a particular function within a department. A course in Production offered at the graduate level in 1956-7, for example, aimed to examine the "general scope of the production function in the business enterprise and the interdependence of this function on others." This included a study of the principles and methods of administration.

Although a programme of graduate business studies was offered beginning in 1952 through the Department of Political Economy, a separate Department of Commerce with responsibility for the Bachelor of Commerce undergraduate programme was not established until 1963. The School of Business was established a year later in 1964 for graduate work in business. Finally the Faculty of Business with responsibility
for both graduate and undergraduate programmes was established in 1968. This relatively late development left the jurisdiction of business and commerce curriculum and programming open for a great number of years to the various professional bodies which expressed their interest in furthering business and especially management education by developing a range of courses in conjunction with the Extension Department. While this interest in business and management education was widespread, a significant number of business students had backgrounds in engineering. Thus, during its first year of operation as a separate faculty, the School of Business reported that in the M.B.A. programme, 50% of the students had backgrounds in engineering, 35% were from humanities, social science and commerce, 10% were from the natural sciences, and 5% came from other disciplines. The course was "designed to develop the habit and skills, the attitudes and understanding essential for the management of business and administrative affairs, in today's complex setting."62

The influence of scientific management on the curriculum at McMaster was often invisible. Although it was many years after the first publication of Taylor's works that such material was presented verbatim at McMaster, it is important to recognize the impact of the work on a variety of later authors and practitioners in the field whose theories and practical approaches to production and labour problems were taught within departments of political economy,
commerce, and extension programmes. Moreover, an examination of course content reveals a growing concern for scientific accuracy in management decision-making, time and motion study, task analysis, work measurement, payment and incentive systems, and production/work scheduling. These topics eventually became standard features of the management curricula. It is through these topics that the fundamentals of scientific management permeated management education.

b) University of Western Ontario

At the University of Western Ontario, the theory and practical application of scientific management was introduced in the business curriculum during the 1920's. As compared with McMaster, the Western Ontario academicians generally responded more quickly to developments within the sphere of management and business practice, and in fact, led the other business schools in new directions.

The inclusion of principles and practices of scientific management in the curriculum began with the fundamental change in orientation from business skills to management education. At first the curriculum addressed the question of the management of labour by embracing the underlying philosophy of scientific management and its usefulness to the business manager. Later Taylor's system was more directly approached. Students were required to read various selec-
tions of Taylor's works and those of his followers.

Taylor's work was first listed as a required part of the Western business curriculum in the 1924-5 calendar. During that year, two courses in Industrial Management were offered. One of the courses was theoretical and required texts included Taylor's *Shop Management* and D.S. Kimball's *Principles of Industrial Organization*. The second course demonstrated practical aspects of management. Part of the course included lectures by local factory managers and "excursions to view methods at first hand." Additional courses that year were offered in Sales Management and Executive Problems. Both of these courses were also often led by executives and other visitors who presented real problems and directed discussion on possible solutions.

Before the actual introduction and use of Taylor's work in the classroom, earlier courses in management may have covered similar topics, yet lacked the specific focus of the later courses. With no further description available, a course in Efficiency, for example, was listed in the 1921-2 calendar, only one year after the establishment of the Department of Commerce in 1920-1. Two years later in 1923-4, the first Industrial Management course was developed. This course also included several trips to factories in order to view the various methods of management used in different types of industry. Students were required to submit a written report on one of the industries visited. The content and
focus of Industrial Management and Labour Problems courses at Western are presented in Chart 5.4. The growing pragmatic orientation and problem solving emphasis is clearly indicated.

Taylor's Shop Management was listed as one of the required textbooks for the Industrial Management course until and including the session of 1928-9. After that time Shop Management was dropped but Taylor Society Bulletins were added as reference sources until 1933-4. Additional reading materials for this and other courses were clearly supportive of Taylor's general approach although details of the practical applications often varied.

While Taylor's managerial techniques were taught in the Department of Commerce, problem solving courses in Labour Problems and Sociology were offered in the Department of Political Economy. Beginning in 1925-6, along with an undergraduate Labour Problems course, at the Master's level, courses in Sociology, five courses in Finance, and four Labour courses—trade unionism, socialism, immigration, and population—were offered. Whereas such problem solving courses were commonplace at McMaster, these courses rounded out the more pragmatic Western curriculum with a distinct theoretical orientation. The Political Economy programme was planned for students entering public administration or law and as such avoided topics such as salesmanship and marketing designed specifically and more appropriately for those intent upon
### Chart 5.4

**Scientific Management at Western: Industrial Management and Labour Problems**

<table>
<thead>
<tr>
<th>Course</th>
<th>&quot;Problem&quot;</th>
<th>Subject Areas &amp; Techniques</th>
</tr>
</thead>
<tbody>
<tr>
<td>Industrial Management I</td>
<td>theoretical background</td>
<td>- fundamental principles of management</td>
</tr>
<tr>
<td>1924-5</td>
<td></td>
<td>- history of industrial progress</td>
</tr>
<tr>
<td></td>
<td>practical application</td>
<td>- evolution of the modern plant</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- various types of organization</td>
</tr>
<tr>
<td>Industrial Management II</td>
<td></td>
<td>- factory visits</td>
</tr>
<tr>
<td>1924-5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Industrial Management 1</td>
<td>theoretical &amp; practical</td>
<td>- management of materials, equipment, &amp; personnel</td>
</tr>
<tr>
<td>923-4</td>
<td></td>
<td>- factory trips</td>
</tr>
<tr>
<td>Labour Problems</td>
<td>labour relations &amp; problem solving</td>
<td>- wages, hours of work</td>
</tr>
<tr>
<td>1925-6</td>
<td></td>
<td>- social insurance</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- immigration</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- labour legislation</td>
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<tr>
<td></td>
<td></td>
<td>- agencies of industrial peace</td>
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<tr>
<td></td>
<td></td>
<td>- trade unionism</td>
</tr>
<tr>
<td>Industrial Management 1</td>
<td>production efficiency,</td>
<td>- management of manufacturing operations</td>
</tr>
<tr>
<td>929-30</td>
<td>labour management,</td>
<td>- location of factories</td>
</tr>
<tr>
<td></td>
<td>administration</td>
<td>- design &amp; construction of buildings</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- selection &amp; arrangement of equipment</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- procurement of labour &amp; materials requirements</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- control of production--methods</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- executive organization</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- role of functional specialists</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- labour relations</td>
</tr>
<tr>
<td>Industrial Management,</td>
<td>production management</td>
<td>- principles of factory management</td>
</tr>
<tr>
<td>Graduate Level,</td>
<td>&amp; labour administration from executive point of view: coordination</td>
<td>- industrial relations</td>
</tr>
<tr>
<td>1932-3</td>
<td></td>
<td>- problems of industrial organization</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- coordination of production, distribution &amp; finance</td>
</tr>
</tbody>
</table>
pursuing commercial careers. The area of problem solving and management, however, was common to both Political Economy and Commerce Departments.

Taylor's lesson that management of labour was inefficient unless it was appropriately geared to the technological apparatus was incorporated into the business curriculum at Western during the late 1920's. In 1927-8, for example,
the introductory business course included sections on the "control of manufacturing" and "the manager's administration of manufacturing" as well as on the "background of personnel administration" and the "administration of personnel. 66 and in 1929-30 scientific management was listed in the course description. 67 A few years later, in 1932-3, the introductory course more clearly covered the production environment as the section of industrial management included problems of location, purchasing, inventories, and wages and labour. 68

As the concept of management began to evolve as a separate and distinct function within the industrial setting, the traditional domain of the production engineer, areas of knowledge previously considered relevant only to engineers, were gradually incorporated into the business curriculum. Thus, the 1929-30 Industrial Management course considered practical arrangements of the shop floor, factory location, and equipment design in relation to production efficiency and the management of labour. 69 As in previous years, students were given the opportunity to consider real problems involved in the use of scientific management techniques through required trips to local factories employing such methods. When a one-year certificate course for graduate students was offered in 1932-3 for the first time, this orientation was similarly maintained.

Between 1938-9 and 1943-4, studies in Industrial Management underwent several changes, each of which reflected
an increased tendency to address the principles of Taylor's theory. In 1939-40 in addition to two full courses in Industrial Management, a course in Factory Management was listed. Factory Management was replaced the next year with Manufacturing, a course on methods of controlling manufacturing operations. "Factory inspections" were a requirement of the course and significantly, the required textbook, *Industrial Engineering*, by Barnes highlighted the manager's concern with technology. In the same year a course on Production was developed for graduate students in the Department of Business Administration.  

A few years later in 1943-4 the Industrial Management course was replaced by one called Industrial Management and Engineering and this course along with another in Factory Industries constituted the core of industrial management studies in the business programme. During the later years, not only was the focus of the courses even more practical but the course materials integrated all facets of management study, thus highlighting the importance of coordination. Chart 5.5 lists the topic areas studied in the later production courses. These courses clarified the role of management and its relation to the engineering function. Managers were trained in the business programmes to oversee the production process, a job which had formerly belonged to the engineer. Along with the broad task of coordinating these elements of production, business trained managers were also more specifically
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<th>Course</th>
<th>&quot;Problem&quot;</th>
<th>Subject Areas &amp; Techniques</th>
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<tr>
<td>Industrial Management &amp; Engineering 1943-4</td>
<td>coordination &amp; scientific control</td>
<td>- modern industry's use of specialization, standardization, &amp; simplification</td>
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<td></td>
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<td>- organization of the means of production</td>
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<td></td>
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<td>- control of materials, equipment, plant &amp; personnel</td>
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<tr>
<td>Factory Industries 1943-4</td>
<td>operations control</td>
<td>- methods of factory management with specialization in personnel, methods, engineering, or purchasing</td>
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<td>Introduc-tory Production &amp; labour management 1948-9</td>
<td>operations &amp; management</td>
<td>- manufacturing processes &amp; control</td>
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<td>- blue print reading, machine tools, planning machine tool use</td>
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<td>- improvement of methods</td>
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<td>- worker instruction, time standards</td>
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<td>- job analysis &amp; rating, worker rating, setting wage rates</td>
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<tr>
<td>Advanced Production Management 1948-9</td>
<td>labour management</td>
<td>- wage administration</td>
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<td>- analysis &amp; organization of processes</td>
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<td>- planning of rates</td>
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<td>- control of manufacturing operations</td>
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<td>- organizational relationships</td>
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<tr>
<td>Production Management 1950-1</td>
<td>coordination &amp; control, labour management</td>
<td>- job training, methods work &amp; time study using motion pictures, demonstration equipment, stop watches</td>
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<td>- job rating, worker rating, wage administration</td>
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<td>- analysis &amp; organization of processes, organizing relationships</td>
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<td>- planning factory layouts</td>
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<td>- controlling operations</td>
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<td>- problems from top level management's viewpoint</td>
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assigned the role of directly managing workers and labour relations.

Business courses such as Production Management were aimed at minimizing the conflict between workers and management and since courses were presented "from the point of view of the business manager", the workers were assessed as the problem source. This was clearly stated in the 1950-1 Business Administration calendar. In describing the Introduction to Business course, the calendar read:

The internal organization of the business is ... examined with emphasis upon the determination of lines of authority within a company. ... Few, if any, problems are more important today than the relationship between management and workers. The course studies such questions as: the proper basis for wage payment, discipline of workers, lay-off procedure, and dealing with organized labour. 72

Significantly, the programmes aimed to problem-solve by increasing control through various disciplinary procedures, thereby reinforcing the prerogatives of employers vis-a-vis employees.

During the 1950's courses in Production Management were aimed at the creation of managerial expertise from the job function formerly designated as belonging to the engineer. According to the 1950-1 calendar, Production Management:

... gives the student a vocabulary and a grasp of techniques formerly considered the prerog-
ative of the industrial engineer and the plant-trained production man [sic]. The objective here is greater assurance and competence for the student in situations where production problems must be integrated with the overall policies of the enterprise. 73

The course was intended for those with "no previous engineering training." Students were cautioned that although the "engineer has a distinct advantage in the early stages of the course", this advantage would be equalized by the end. 74

During the same year business students at the senior levels were provided with an opportunity to "view the production function as an integrated whole" and to discuss "the interrelationship of factory operating problems" in a fourth level Production Management course. 75 Management education, it seems, tended to prepare the student with a broad view of the functioning of the organization although the manager's job was increasingly compartmentalized into various specializations and levels of expertise. With the ability to grasp the larger context of the organization's activities, however, the future manager would probably learn to recognize and accept the organizational goals more readily.

Maintaining accurate records of production operations and personnel factors was viewed as an essential and increasingly important task of the business manager. Following from Taylor's early experimentation with and absolute insistence upon detailed record keeping, courses in statistical analysis and quality control steadily gained popularity. In 1950-1 a
course in Management Statistics was offered at the University of Western Ontario. This course moved away from the more traditional topics of statistical control and business planning via statistics and examined various areas of manpower control. For example, students were taught use of charts, including personnel, machine record, lay-out, load, and progress charts. In addition, several classes were spent on the analysis of wage rates; specific topics in this area included statistical analysis of time, piece, and combination wage plans, and statistical appraisal of the various combinations of wage payment, sick benefits, and pension plans.  

The influence of scientific management on the curriculum was not always obvious. However, several mentions were made of the relationship of managerial theory and/or practice to the field of industrial engineering. In 1957-8, for example, one of the goals of a first year course in Production was to give the student "a vocabulary and knowledge of techniques that formerly were considered to be the property of the industrial engineer." In order to do this motion pictures were used to illustrate somewhat unfamiliar subjects such as machine tools as well as to illustrate classes on time and motion study and methods work. One of the more important sections of the course dealt with wage administration and the problems of establishing job and work ratings, and other topics included planning factory layouts, analyzing and organizing processes, controlling operations, and organizing relationships.
course was followed by others in Factory Management and Statistical Control.

As administration and systematic manpower management was removed from the job function of the industrial engineer, management education was developed and fundamentally based on the principles of scientific management. Upon examining developments in the business curriculum at the University of Western Ontario, this process was clear. Although management techniques and the educational process became more sophisticated, basic uses of such "tools" as time and motion studies remained unchanged.

c) Queen's University

Within two years after its establishment, the Queen's Commerce Department's programme was organized so that students could take a general business course or could choose to specialize in any one particular field such as banking and finance, accounting and auditing, foreign trade, public service, secretarial work or social service. Management was listed as a special subject for all of these options. The department, in fact, placed central importance upon the field of management and administration and as noted in Chapter Four, invited Dr. H.S. Person, Managing Director of the Taylor Society of New York, to deliver a series of lectures. It is not surprising that the required textbook for the first offer-
of a course in Industrial Management in 1922-3 was Taylor's Shop Management. The course aimed to "acquaint the student with some of the problems to be met with in industrial plants" and examined these problems generally in relation to the "machine shop type of factory" rather than specifically in terms of the selected industries. The student was trained to transfer a body of theories and skills, notably the principles of scientific management, to a variety of locations encountering similar problems.

Similar to the pattern in the Engineering Departments, within the Commerce Department students were trained not as economists or private businessmen but rather as managers and administrators. The management theories and skills were transferable to government bureaucracies, health services, and other settings although most graduates entered the field of business. The recognition of the transferability of business administration skills developed with the emphasis on maintaining peaceful employer-employee relations. For example, during the late 1930's, the Industrial Relations course examined labour problems arising from "human forces" and attitudes of the parties involved and in Industrial Management employer-employee relations were studied in relation to the application of management principles in industry. Similarly, Industrial Organization and Management, offered in 1957-8, dealt with "certain well-recognized principles followed by the competent industrial manager regardless of whether his [sic] company
is making pencils or building aeroplanes." Once problems were expressed as universal management problems rather than specific business problems, then lessons on management principles were regarded as scientific truths and therefore reliably transferable.

Compartmentalization and task analysis were products of the Taylor system. Using this system eventually led to record keeping of the minute details of tasks and information systems designed for the purposes of business decision-making. Management Accounting courses covered areas such as information useful to managers and uses of data in decisions and for planning. The "one best" management system—Taylor's scientific management—although not identified as such, remained part of the Queen's programmes in business and engineering, providing impetus for further experimentation with work and managerial efficiency in production and other business and government concerns.

d) University of Toronto

Business courses in the Department of Political Economy focussing on managing the work relationship were included in the early 1920's. In 1921-2, for example, employment management was one of the topics of Business Administration. In a more explicit study of the "problems of the industrial relationship" and work, Labour Problems involved an examination of "wages and other forms of payment in relation to pro-
Besides its general "intention ... to provide a training for business and commercial life", one of the objectives of the Bachelor of Commerce degree programme was "to prepare applicants" for careers in "employment management" and "employment service." Management of labour was gradually identified as a possible full-time occupation for business trained graduates rather than a limited part of a manager's job.

Theories on the management of labour were adopted from Taylor's principles. Taylor's work, *Scientific Management*, was listed as a required textbook in *Structure of Modern Industry* from 1927-8 to 1931-2. Studies in labour and especially the productivity of labour were popular issues and given the social problems and problem solving approach of the business administration courses at the University of Toronto, the concrete solutions offered by scientific management were attractive. Research testing the principles of scientific management accelerated. In one project conducted through the University of Toronto, Professor S.N.F. Chant of the Department of Psychology developed a rating scale for clerical staff. Conducted in cooperation with the personnel department of a Toronto firm, Chant's study examined "the use of a graphic rating scale as a means of observing and controlling the time losses due to interruption in office work." On a similar theme, one of the business courses offered in 1929-30, *Organization of Industry*, studied modern industrial society with
emphasis on large scale business enterprise, labour organization and employment. Significantly, one of the required textbooks was *The Engineer's Report on Waste in Industry.*

While most courses did not explicitly teach the efficacy of scientific management, the curriculum reflected the influences of the principles. Scientific management represented one of the first systematic attempts to elevate the practice of management to a science and consequently, questions raised using the principles or applying them to various circumstances were regarded as valid curricular materials. In particular questions of social control of business and the problem of control within the firm were popular in business courses during the 1930's. This concern was more clearly expressed during the 1940's when courses in Manufacturing Problems studied problems of industrial management such as specialization, standardization, production planning and control, plant location and layout, and labour relations. Hence, Taylor's work pointed to the elements of the production process which were necessary to consider in establishing efficiency within the corporation.

Economics, business principles, and theories of management were incorporated into the curriculum of many disciplines. One course, the Economic Basis of Social Life, aptly reflected the proliferation of the subject area of business as it affected various conditions of social life and especially income, status, standard of living, and the production
process.\textsuperscript{89} Economics courses were recommended and/or developed for studies in Household Science, Forestry, and Social Service.\textsuperscript{90} While courses in other disciplines, notably Applied Psychology, were recommended for commerce students,\textsuperscript{91} it was often the case that training in business principles and administration was suggested for non-business students. Business education, for example, was suggested for students in engineering and law "to result in maximum technical and industrial efficiency."\textsuperscript{92} This process, however, was slow. Business education endured a number of sweeping criticisms, most of which were related to the tenuous relationship of business principles and theory to scientific doctrine. Once business had become professionalized and its scientific base proven, then it was argued that:

The practical problems of all business concerns are capable of solution by the application or interpretation of certain fundamental laws, and the character or nature of individual enterprise has very little to do with the matter.\textsuperscript{93}

Principles of scientific management were among the "certain fundamental laws" of business, readily adaptable and transferable to a variety of work and administrative settings.

\textbf{Teaching Scientific Management: An Analysis of Textbooks for Management Education}

While a great number of volumes have been written and theories produced regarding decision-making, goal setting, and technology, it is the question of the work process which
has been attended to most fully. Historically, labour was identified as a problem source for organizations. Although many organization theorists wrote of the necessity of developing modes of managing the labour problem, there was great difficulty in translating that identified need for control into managerial techniques.

Once Taylor's principles of scientific management were proven efficient and were tested, used, and accepted in a variety of administrative settings, they were incorporated into the managerial curricula of the universities. By analyzing some of the key textbooks used in the business and engineering departments of the universities, it is apparent that Taylor's techniques were translated into lessons in the business curriculum.

i) General Perspectives: The Meaning of Management and the Fundamentals of Capitalism

While the Schools of Commerce and Business Administration gradually adjusted their curricula to include more theoretical and experiential courses on management, courses designed to provide the student with a solid grounding in economic doctrines and principles as well as the conduct of business constituted the basis of business education. Such courses in the history of economics, economic theory, the classical economists, introduction to business and the economies of Canada, United States, France, Germany, and the Western world
provided important lessons for future businessmen and managers. It is through these courses that students learned the philosophy, principles, workings, and most importantly, acceptance of the capitalist system. In short, the general, historical, and descriptive analyses provided the foundation on which management theories and practical issues were based. Management courses were thus developed with the assumption that students were already instilled with a desire to further corporate goals.

Whatever their intended specialization in the field, business students were provided with ample opportunity to acquaint themselves with "classical" economics. Various "classical" and theoretical courses were required at all the universities with little variation in the range of materials offered. Ricardo, Malthus, John Stuart Mill, Boehm-Bawerk, and Adam Smith were among the classical economists studied. Readings often included Adam Smith's *The Wealth of Nations*, Mill's *Principles of Political Economy*, Ricardo's *Principles of Political Economy*, Malthus' *Essay on Population*, Boehm-Bawerk's *Capital and Interest* as well as works by Locke, Rousseau, and Aristotle. In addition to these classics, several other historically important economists expounding theories of value, interest, rent, distribution, wages, and profits were studied. This latter group's works constituted the largest portion of readings at all universities. Predominant on required textbook lists were: A. Marshall's *Principles of*
Economics and Industry and Trade, F.W. Taussig's Principles of Economics, R. Ely's Outlines of Economics, J.B. Clark's The Distribution of Wealth, Henry Clay's Economics: An Introduction for the General Reader, Keynes' Scope and Method of Political Economy, Hobson's Economics of Distribution, J.K. Ingram's History of Political Economy, as well as works by W. Smart, E.S. Mead, C. Gide, and C.F. Bastable. The latter group of writers, the modern "classicists", for the most part, wrote in response to theories advanced by the earlier classicists, and their works became the basis of business and commerce education.

Many of the "modern classicists" wrote directly and primarily in response to Marx's Capital and other critical works. In their effort to criticize Marx, many of the writers specifically aimed to discredit the labour theory of value and thus described the free market system, the fairness of profits, and the determination of wages by laws of supply and demand as natural, inevitable phenomena. For example, in one of the most widely used textbooks, Henry Clay's Economics: An Introduction for the General Reader, profits were described in this way:

Profits are the share in the flow of wealth which goes to the owners of businesses, and are calculated by deducting the expenses from the receipts of businesses; interest is the share that goes to the owners of capital. ... The owner of a business works, he [sic] gets his [sic] wages in the form of profits. 95
The idea of free market forces and a predominantly fair economic structure similarly influenced Clay's consideration of the determination of wages.  

Analyses designed primarily to support the given economic conditions comprised the major emphasis of the business programmes. This does not mean that critical works were not included on textbook lists. Indeed, Marx's *Capital* and Marx and Engel's *Communist Manifesto* were listed, albeit rarely, at the University of Toronto. In addition, works such as Sidney and Beatrice Webb's *Industrial Democracy* and *History of Trade Unionism*, and G.D.H. Cole's *The World of Labour* were offered sporadically and primarily through Departments of Political and Economic Science or Political Economy.

Such a limited number of presentations of alternative systems and critiques of the capitalist system was merely a gesture of liberalism—a mark of the university tradition. Significantly, in courses requiring such readings the textbook lists were often balanced with works representing the "other side." Hence, O.D. Skelton's book, *Socialism: A Critical Analysis* was widely used in courses on Labour Problems and Socialism. Thus, students may have drawn the conclusion, as Skelton states that:

> The socialist indictment gives but grudging recognition or none to the proved and tried efficiency of the existing order.

Critical analyses, according to Skelton, have been unfair:
The socialist has painted existing conditions too black. He [sic] has grudged full of recognition of the immensely strong points of our industrial system. He [sic] directs his [sic] shafts against a mythical extreme individualism ...

Harsh critical analyses, claimed Skelton, have worked to discredit the beneficence of the system:

... We are given a harrowing picture of the present day wage-slave cowering under the lash of the tyrannical capitalist, forced to accept long hours, low wages, and unsanitary working and housing surroundings and condemned to lifelong monotony of toil ... It ignores the forces actively at work in our existing society to repress abuse of power on the part of the capitalist and to secure to the workingman his [sic] full share of the fruits of progress. 103

Thus, although some sources aimed to reveal both sides, the critical analyses were most often presented as unfavourable, essentially unscientific and therefore unfounded.

Within the business literature, the question of natural inclinations towards the profession of business often arose. The successful businessman was held in admiration; there even seemed to be a mystique surrounding the acquisition of such abilities and remarkable personality. The success of the businessman was, according to some writers, part of the "natural" ordering of things. Taussig wrote:

... in the business career, as compared with most others, inborn capacity counts more, training and environment less. 104

The idea that one reached positions of wealth and power due to superior abilities was dominant. While some, such as Ely, described the "average" as not "particularly
gifted", thus accounting for an inability to reach "the top shelf"; others acknowledged that some started with particular inherited advantages but nevertheless had special natural qualities for future success.

The key aspect of the manager's function was defined as control.

All the tactics of management should be planned to strengthen the 'common purpose' which unites men and women engaged together at the same work ...

In other words, "control implies management."

While the entrepreneur's role was presented as encompassing a far greater range of abilities and responsibilities than the manager's, this clarification of roles and responsibilities of owners and managers in no way underscored the importance of the managerial function and the managerial personality. For management, it was suggested:

... [one] must have some of the chief qualities that are required of the commander of an army. He [sic] is not a 'captain' of industry; he [sic] is a 'general' in control of several regiments.

This role was seen to be more important with the developing division of labour and consisted of many facets—quick decisions, prompt actions, inspiring and selecting subordinates, shrewdness, skill and general ability.

The question of the functioning of the economic system was presented in a rational, matter-of-fact manner and as an inevitably occurring, natural process of progress and
development. The matter of social change was deferred while questions of reform or improvement of the status quo were quite acceptable. According to the leading textbook sources, the strength of capitalism was that it was based upon competition.

Competition ... appears as the great regulator of the whole economic mechanism of modern society ... 113

The virtues of competition were regularly listed. Competition affected all components of the economic system and thus worked to ensure fairness. 114 According to Adams and Sumner the system allowed for the calculation of "fair profit"—an "amount of gain or recompense that under existing conditions is required to keep the employer in the business" and to replenish plant and capital as they are exhausted by time and use."115

Based on the survival of the fittest doctrine, laws of capitalism and competition were described as "natural laws." Inequality was therefore inevitable and was based on the natural process of supply and demand. Clark, for example, introduced his book, The Distribution of Wealth by writing:

It is the purpose of this work to show that the distribution of the income of society is controlled by a natural law, and that this law, if it worked without friction, would give to every agent of production the amount of wealth which that agent creates. 116

Implicit in this argument was the idea of fairness. This idea was rationalized in the functional theory of inequality
and wage structures. In its simplest form, the argument was stated by Douglas, Hitchcock, and Atkins as well as by Hamilton and May:

The wages of any person will depend upon how much his [sic] labour is desired. 117

The rate of wages is determined by the natural law of supply and demand. ... These harmonies between wages, the demand for labor, and the supply of it are maintained by a 'natural law' which works automatically. 118

Natural laws of supply and demand and scarcity affected all levels of the social structure, including as Cassel, Wicksteed, and Garver and Hansen pointed out, the work of managers and entrepreneurs whose work was well paid due to responsibilities accepted. 119

Although a wage system based on supply and demand may have been criticized by some as unfair, inequality was most often argued to be of functional necessity. 120 Inequality or a variable system of rewards provided incentives to work:

Men will not labor steadily and effectively except in their own behalf. Labor is irksome, the sense of common interest weak. Labor will not be exerted continuously and vigorously except for individual benefit. ... Inequality arises even under the simplest conditions, from the unequal endowments of men. It becomes accentuated with the growing complexity of the division of labour. ... Competition and self-interest thus promote not only the vigor of labor, but the effective organization of production. 121

Just as the determination of wages was argued to be a matter of free market forces, there was assumed to be some freedom of choice and equality of opportunity. Members of
the working class were described as unable to defer the gratification of early wages and were thus reluctant to undertake apprenticeship or training programmes which, in the long run, would guarantee higher wages.\textsuperscript{122} Although inequality would persist, the conditions for the most part were judged to be impartial.

While it was acknowledged that labour is extremely valuable to employers, the employer was justified in acquiring a fair profit because in the employment relationship, he/she assumed a great deal of risk. Wicksteed and Cassel, for example, argued that as a commodity labour was perishable.\textsuperscript{123} Wages, therefore, were directly dependent on the worker's productivity.\textsuperscript{124} To maintain some sense of equitability, however, Cassel notes that wages may be adjusted by various wage-rate systems.\textsuperscript{125}

That wages could not be adjusted to reflect in absolute terms the productivity of labour was predicated on the idea that labour in itself contained little value. The value of labour, it was argued, was based on the fact that it was part of a system. This system, based on cooperation and the organization of production, was more than the mere sum of its parts. On this point Taussig remarked:

\begin{quote}
Only in comparatively rare cases ... do the workers supply single-handed the utilities on which their pay rests.\textsuperscript{126}
\end{quote}

Moreover, as Cassel pointed out, wages and productivity were influenced by market forces and the laws of supply and demand.\textsuperscript{127}
Another popular form of error is that labor creates value. Labor (together with enterprise and waiting) produces goods,—that is, it puts material into usable form. But the same goods would have the same value even if they rained from the sky—provided only that they were equally scarce. 128

The analysis that labour, like any other commodity, is subject to particular economic laws and draws value on the basis of its relationship to the system rather than due to its intrinsic nature was predominant in business textbooks. Employers were characterized as risk-takers and as such organized the production process. Compensation for this risk in the form of profit was, then, logically justified. Given this stake in the system, it was seen as simply "sound business practice" for employers to attempt to minimize risk and control the factors of production. The development of the practice of management was therefore an attempt to balance the risks.

ii) Scientific Management: Theoretical Perspectives

Although the specific works of scientific management theorists were not used extensively in the business schools as textbooks, scientific management was in many respects, a fundamental part of the management curriculum. During the Scientific Management Phase, 1900-1930, the economists studied were generally favourably disposed to scientific management as an early attempt to rationalize the production process.
That is not to say that scientific management was not the target of a host of criticisms. Many acknowledged the system's shortcomings. However, the point of the criticisms was to improve the working of the system, not to condemn it.

The conception of management was, in fact, indistinguishable from scientific management as a particular form. Management was something that had evolved on the shop floor with the production process and the responsibilities of management were determined by engineers and industrialists. Management was deemed indispensable for the worker:

... it is the presence of the employer that helps to reveal what the product of labour is, and it is the action of employers that enables the laborers to get pay that approximates to that product. 129

and for the employer:

... we know with reasonable certainty that most wage-earners are capable of greater productive effort without injury to themselves. ... Our problem then lies in the discovery of means whereby this greater productive effort may be secured. 130

Moreover, management was necessary for productive efficiency; the managerial function became more vital as production became more complex. The most fundamental lesson regarding management was that without its concerted, scientific effort, efficiency of the enterprise was in jeopardy. Management was translated to mean efficiency; the efficiency of an organization was a direct reflection of its management system.

Scientific management was presented as rational, acceptable, and neutral:
The worker ... is assisted in attaining [a set standard] whether by means of instructions which enable him [sic] to eliminate wasteful motions, by surrounding him [sic] with better tools and equipment, by furnishing him [sic] with expert assistance, or by a general improvement of managerial efficiency enabling him [sic] more easily to reach his [sic] goal. 131

Moreover, the authors agreed that scientific management was of mutual benefit to both workers and employers.

Scientific management's contribution to efficiency was extended beyond profits and remuneration to the meaning of work itself. In line with Babbage, Marshall states:

The economy of production requires not only that each person should be employed constantly in a narrow range of work, but also that, when it is necessary for him [sic] to undertake different tasks, each of these tasks should be such as to call forth as much as possible of his [sic] skill and ability. 132

Scientific management was thought to facilitate the work process even more efficiently than proper education. 133

Like the laws governing the capitalist economic system, those governing efficiency were said to be natural laws as well. Scientific management, according to Hoxie, organized these natural laws into perspective by discovering and objectifying "the means by which the facts underlying these natural laws which govern production ... can be determined and established as objective, matter-of-fact data, quite apart and divorced from human judgment, opinion, or will." In other words, Hoxie argued, through science, "human will, judgment, and cunning cannot enter so as to affect the results" of the
efforts to maximize productivity. ¹³⁴  

Writers such as Hoxie and Jones endeavoured to give the scientific management movement "a favourable interpretation" by considering "not only past accomplishments but the ideals of the chief promoters." Thus, Jones reported:

In so far as exact knowledge displaces custom, guesswork and arbitrary exaction, it defends the worker against soldiering, and sloth, or over-speeding and fatigue. The high task standards characteristic of it automatically sorts workers to the levels of their best occupations; while at the same time all are educated and energized. By adherence to high standards of performance throughout, for management and men alike, it becomes a possible agency for raising wages, shortening hours, increasing profits and lessening prices to consumers. ¹³⁵  

Hoxie clarified this "global" advantage of scientific management:

Scientific management, therefore, not only holds out possibilities of substantial benefits to labor, but it points the way toward raising the standard of living of all classes of labor and of society at large. ¹³⁶  

Benefit to both society in general and labour specifically was based on increased levels of productivity. ¹³⁷ Given the increased productivity, Hamilton and May argued that "labour's attitude" has become "one of suspicion." "Suspicion" was these authors' way of characterizing workers' concern that intensifying and speeding up labour in a limited growth firm may lead to unemployment. ¹³⁸  

That scientific management would enjoy success was premised on particular characterizations of workers as unin-
telligent and driven by greed. Douglas, Hitchcock, and Atkins, for example, presented a chart showing relative levels of intelligence with labour at the lowest end of the scale and engineers at the highest. Echoing this sentiment as well were such writers as Garver and Hansen and Blum:

There is a tendency for the different income groups to be self-perpetuating. The children of labourers tend to remain labourers, because they inherit a relatively low capacity for anything but simple tasks ... This conception of workers as stupid was a feature of scientific management. Taylor believed that workers were primarily motivated by money and this sentiment was also shared in many of the business course readings:

The wage is the bait with which society tempts the labourer to engage in one of the processes of production which together make up our complex and gigantic industrial system. Though fear of dismissal and other non-wage inducements may sometimes be efficacious in evoking more productive energy, it is normally the case that men will not work harder except for a higher rate. With this general characterization of the worker, scientific management appeared to be a welcome element of paternalism—providing planning, coordination, and direction in order to achieve particular monetary goals.

The practice of scientific management necessitated an advanced division of labour, the separation of conception from execution, and the process of deskilling. These processes were examined in many of the textbooks and the majority of
authors concluded that these processes contributed to mutual
benefit and overall success. Although it resulted from the
process of mechanization, division of labour was, first
of all, conceptualized as naturally occurring:

Division of labour is simply the spontaneous
realization of a particular form of ... social
cooperation. ... Division of labour, by estab-
lishing the cooperation of all for the satis-
faction of the desires of each, becomes the truer
source of progress and of well-being. 144

Secondly, it was argued that division of labour was advanta-
geous:

The constant repetition of the same task gives
every man a truly marvellous amount of dexterity
... Division of labor increases the productive
power of labor to an extent that surpasses
imagination. 145

The separation of conception from execution and the
deskilling process were also construed as positive features
of the system. Hobson, for example, noted that particular
qualities were still required of machine tenders:

The ordinary machine-tender, save in a very few
instances, e.g. watchmaking, has no general under-
standing of the work of a whole department. ... The work of machine-tending is never of course
absolutely automatic or without spontaneity and
skill. To a certain limited extent the 'tender'
of machinery rules as well as serves the machine;
in seeing that his portion of the machine works
in accurate adjustment to the rest, the qualities
of care, judgment, and responsibility are evolved. 146

The position presented in the textbooks was clearly from the
perspective of management. A passage from Hoxie points to the
advantages to be gained by the "break-up of old established
crafts." "Relatively unskilled workers can be taught in a
short time to do efficiently a very great part of the work
which only skilled craftsmen could be trusted with formerly."147

In listing the advantages of scientific management,
the economists did not consciously entertain a bias toward the
side of management but rather wrote as scientists and as such
commented on the system's rationality and fairness. Task
analysis, for example, was regarded as a neutral process due
to its methodology:

... when used for task-setting purposes, it is not
designed to discover and set the minimum time
or the maximum task, but the scientific time or
task, i.e., the reasonable or just task ... 148

The process of scientific management was designed to
enable management to exactly determine the output of labour.
This process, Fish noted, would reduce the number of indepen-
dent variables affecting the workman's output.149 Through
testing and analysis, the work environment would be adapted
and work conditions, according to Jones, be greatly improved.150
Scientific management was posed as a problem solving device
to improve "productive efficiency in the shop." It was expect-
ed to help ensure "the full cooperative activity of the work-
ers."151

Under the rubric of efficiency was hidden the pro-
cess of the intensification of labour. Prices may have decreased
due to this intensification and through the deskilling process
and the successful operation of the Babbage principle. In
this process, Jones writes:

... the employer gains by rapid performance
from the fact that the factory burden to be charged to each piece or job is decreased. 152

The intensification of labour was not, however, analyzed as an element of scientific management, but rather was attributed to the worker's own desire for increased wages:

Piece rates intensify the workman's motive to exertion by keeping the reward always in sight, and employers are surprised to find that the output is increased beyond what they thought was possible. 153

Labour's opposition to scientific management was held to be shortsighted since, most argued, scientific management provided mutual benefits. The worker, it was held, was compensated for any losses due to "overspeeding and pace setting." 154

The increased wages and generally cooperative conditions brought by scientific management and other managerial forms played a most important role in "cooling out" labour. This was Watkins' observation:

The more enlightened employers have recognized that cheap labor is expensive labor ... underpaid labor is undesirable and uneconomical. ... Socialism, communism, syndicalism, anarchism, and other forms of radicalism have never achieved the results in the U.S. that they have in Europe, chiefly because American labor has been much better off. Adequate wages not only conduce to industrial efficiency under normal conditions, and preclude the development of serious social problems, but also tend to diminish the power and influence of revolutionary philosophy. 155

Theoretically, scientific management was presented to business students as a sound management practice. From management's viewpoint, it created efficiency, improved productivity, and contributed generally to a harmonious, coopera-
tive industrial environment. According to these same writers, the system offered a number of advantages to workers as well. It catered to their sense of greed, it was fair, and it simplified difficult tasks and complex craft skills. Critical statements centered on scientific management's need for continual improvement and refinement. To these writers, scientific management was perhaps industry's panacea.

iii) Justifying the Scientific Management Approach: The Problem Solving Perspective

Although labour was considered by many to be a serious social problem, by 1910 adequate methods of social control were yet to be developed. Labour protection, or as management saw it--protection against labour--"seemed to run counter to ... [the] prime purposes of our people." These "purposes" according to Blum were "the rapid settlement of the land and the intensive cultivation of business enterprise." Nevertheless, writers such as Jevons argued the necessity of legislation to protect workers, especially from themselves. Scientific management was characterized as a measure of protection:

... it substitutes in the shop the government of fact and law for the rule of force and opinion, i.e., substitutes the democracy of science for the autocratic role of employers or workmen, and removes the rough, arbitrary and often unjust discipline of foremen and superintendents. 158

Protecting the workers with the "democracy of science" was not
only necessary, but it was deemed a humanitarian effort. It was a common assumption that workers were characteristically weak. Moreover, workers were said to "lack self discipline." Scientific management promised in particular to address three related labour problems: restriction of output, unionism, and the labour strike. Because scientific management supposedly guaranteed scientific and therefore fair measurement of the performance of all tasks, any attempt by the worker to adjust this process was declared to be unreasonable. Taylor argued that scientific management "democratizes industry" and therefore, Hoxie states it removes "the higgling for advantage" in the workplace. Attempts by workers to regain some control over the work process were criticized for their "injurious effects upon the efficiency of industry." On the question of the restriction of output, for example, writers noted that this measure is one of "positive hostility toward the welfare of the enterprise with which ... [the worker] is associated." Unions were charged with creating unnecessary disturbances and fostering unwarranted hostilities between employers and employees. Catlin was convinced, for example, that unions interfered with managerial prerogatives and the efficient conduct of business. Brooks argued that the only fair unions are those that admit "that the employer must have absolute and instant control over all that strictly concerns him [sic] as managing director." In contrast to the image of business and managerial
personnel presented, union leaders were described as overbear-
ing "natural born politicians." Unionism was described as "obstructive" and incompatible with interests of society.

Further "evils" of unionism were listed:

... interferences at every point with the right of the employer to run his [sic] busi-
ness to suit himself [sic] ...
.. ethical standards, through the building up by trade unions of standards in conflict with those commonly held; class loyalty as against individualism; minimizing property rights; setting up life as against property ...

Unions were further charged with not meeting their primary objective--to protect workers. By fixing standard wages through collective bargaining, unions were said to limit the employer's "liberty to pay as much more to deserving indi-
viduals as he [sic] wishes." This minimum, Catlin writes:

... is often so high that the employer feels that many of the men [sic] whom he [sic] is constrained to hire are not really worth it; hence he [sic] must recoup himself [sic] by refusing any extra compensation to the better workmen in his [sic] employ. 168

Unions were thus compared to monopolies. In contrast to the ideological nature of unions, scientific management was presented as a rational alternative.

The existence of scientific management, Hoxie instructs, "thwarts the formation of shop groups, and weakens the solidi-
darity of those which exist." It instills, Jones adds, within the worker a sense of obligation--obligation and loyalty to plant management.

By giving wages higher than the union rate,
and fixing hours shorter than the union schedule, and providing working conditions better than the union standards, scientific management cancels the sense of obligation in its employees to the union. 172

While it was generally acknowledged that workers were often successful in obtaining wage increases through strikes,173 most writers presented strikes as disadvantageous and "dangerous" to society at large.

There are certain cases, ... in which a strike seems to involve so much danger to public security that the question arises whether it should not still be regarded, exceptionally, as a crime and be punished accordingly ... 174

Moreover, Brooks detailed the strikers' loss under the "tyranny and compulsion" of union democracy. 176

In contrast to this conceptualization of the union, its power to restrict production and its weapon of the labour strike, the textbook authors presented efficiency in management as a possible solution. The alternative presented to what was pictured as hostile aggression was harmony and cooperation.

Indeed efficiency of a system of industrial organization must be judged largely by whether or not it evokes a willing spirit of cooperation. 177

Scientific management facilitated this "spirit of cooperation" by solving workers' specific problems of fatigue:

It makes possible the assignment of each worker to the task for which he [sic] is best fitted, and the safeguarding of him [sic] against over-fatigue and over-exhaustion; 178

and by facilitating the process of promotion:
It is one of the services of scientific management that, in its functional foremanizing, and its elaboration of the planning room and other service departments, it has created many new positions in the lower ranks of administration close to operatives. This facilitates promotion of men [sic] from the ranks. \(^{179}\)

Moreover, with efficiency of machine production, as facilitated by scientific management, the worker supposedly enjoyed happiness, relaxation, and freedom. \(^{180}\)

Scientific management was presented as progressive. Jones writes:

> Under scientific management the attention of the workman is sharply drawn to his [sic] task. He [sic] entertains a new respect for it, by learning that it is a worthy object of study, and that it is possible to bring out of it an unsuspected fine art. The standards under scientific management are not static but progressive. \(^{181}\)

During the early twentieth century, scientific management was presented as a problem solving device. It was indeed a systematic attempt to smooth over industry's more serious production problems. Through experiment, "open-mindedness and impartiality", it attempted to analyze conditions underlying efficiency in production, formulate laws, and govern industry accordingly. \(^{182}\) For scientific management, "the basis of improvement is not guesswork but accurate knowledge reached by thorough study."\(^ {183}\) Thus, scientific management was not merely presented as a problem solving possibility but rather, was characterized as the definite solution.
iv) Scientific Management: Techniques for the Manager and the Engineer

Although business education was fundamentally pragmatic and appeared to many as an advanced training programme, the incorporation of scientific management into the curriculum turned the focus from business to management skills. The managerial focus required extensive use of social, psychological and other social science materials and practical testing sites in shops and factories. The technique of management was of particular and immediate concern to the engineer. Although the problem solving focus of management education was prevalent in both departments of business and commerce and applied science, it seems that the engineering approach was most pragmatic since it focussed primarily on actual shop floor arrangements and the experimental approach to design while maintaining an interest in theoretical questions. Two of the most widely used textbooks in the management courses of the Departments of Applied Science at Queen's and Toronto, Fish's Engineering Economics and Jones' The Administration of Industrial Enterprises provide direct practical examples of the application of principles of management.

Even though economic considerations had always affected the engineer's principles of design, Fish attributes the development of the "economic side of engineering" to men such as H.P. Gillette and F.W. Taylor. Jones argued that it was the engineers who developed what was most needed in indus-
try and it was, he wrote, through "their knowledge of science, their respect for fact and law, their thoroughness in investigation, their objective temper, and their professional pride --pride not so much in profits as in the fine art of the method"--that engineers demonstrated the art of successful management to business executives.

The engineer's most fundamental problem was "the problem of investment", that is the determination of the most desirable use or employment of capital. From the perspective of the technical and "non-engineering work" of the enterprise, the engineer, Fish instructed, may "convert ... professional knowledge into public benefit." From the engineering function and its accurate measurements, the "public's welfare" would be guarded against the misuse of labour power. This argument had been advanced earlier by Hobson who observed the "regularity" and "economy of measurement" with which machinery "registered and regulated the expenditure of human power."

Scientific management was described simply as sound business practice. "Scientific methods in business administration were pioneered by studies of cost-accounts." Cost keeping was a matter of charting workers' hourly, daily, weekly output, "the direct labor cost of each detail of feature of each feature of each job ... [to] give the management the relative efficiencies of the several workmen and of the several machines." This function, according to Fish, would not necessarily have to belong to management "if all employees were
sufficiently intelligent, educated, and reliable ... Fish thus provides explicit instructions to students on how to chart the work process.

Scientific management enabled a worker to perform "an operation which, at first seemed difficult, to be done after a time with comparatively little exertion, and yet much better than before." Job analysis and standardization pacified workers:

After a job had been standardized, Taylor desired a man [sic] who was at first not good enough for the position, with the expectation that he [sic] would develop to it and would remain permanently contented in it. 191

The workers' contentment, most of the authors agreed, was tied not only to the work process itself but to the fair payment of wages under the Taylor system. Taylorism operated mainly on the basis of a piece-rate wage system. This system had a powerful reinforcement effect:

Frederick W. Taylor found, in dealing with manual laborers of limited intelligence, that the full force of the impulse to do good work was only preserved when they were told of the results of a day's work not later than the morning of the next day. ... With men of higher intelligence, this span is longer. 192

It operated as a means of social control:

Piece wages ... have taken the place of the whip under slavery and of the loud voice and domineering personality of the boss under the old driving system. 193

The operation of the Taylor system went beyond the fair use of the piece-rate system and combined it with a pre-
mium or bonus plan. Premiums were combined with a minimum wage to encourage the more efficient workers to exceed the minimum level of production required. The system was described as equitable and practicable and a "decided improvement over old methods." On the practical side, the system's drawback was its need for an elaborate system of administration. Given this cost, Jones cautioned the critics of scientific management's wage payment system who felt the increase in wages did not sufficiently correspond to the increase in profits that not only is a corresponding increase not necessarily indicated, but that scientific management was not meant to be a profit-sharing system. Overall, management determined "rates of pay which will be satisfactory to the worker."195

The essential feature of scientific management was its system of control and its elaborate use of planning departments. Scientific management required an accurate conception of the production process. Fish, for example, instructed engineers on how to estimate labour costs:

Occasionally the number of man-hours per unit of achievement is unknown to the estimator, and unobtainable from his [sic] records or associates. In such an event his [sic] only course is to form a mental moving picture of the work involved, from start to finish, and act as time-keeper to find how many man-hours will be required, for example, to unload by hand a car of 2-foot cast iron pipe in 12-foot lengths, the estimator will visualize the job--the number of men [sic] required, the manner in which they will carry on the work--time the operations as well as he [sic] can, and so form an estimate of the total man-hours required to unload the car. 197
For this scale of planning, the shop layout was a matter of precision. Layout determined efficiency, sequencing, and coordination with other departments or planning units.¹⁹⁸

The technique of "putting science into industry" using "capitalist or roundout methods of production" enhanced productivity, it was argued, and more importantly, improved the form of business organization.¹⁹⁹ Through this process, Jones noted:

The work of the administrator is beginning to be separate enough from that of the capitalist so that it is possible to perceive that the true art of administration is a thing which is in many ways distinct from the current process of acquiring a private fortune. ²⁰⁰

The "true art of administration" was the maintenance of control. By drawing on Taylor's personal experiences, Jones has demonstrated how intricately connected the question of supervision was in Taylor's scheme:

Frederick W. Taylor, himself a strict disciplinarian, very positively expressed his view as to the attitude which should be taken by a subordinate. Illustrating from his own experience, ... as foreman of the machine shop of the Midvale Steel Co., one of his functions was to keep the machines of the establishment going with as little lost time as possible. His mind, however, became filled with projects for devising new machines ... So much of his energy did these projects absorb that the other work suffered. He was finally brought back to his proper functions by the most severe reprimands from his superintendent who finally, as he, said, 'beat it into my dumb head that I was there to serve him, and not to work in the interests of the company according to my own ideas, when these conflicted with his.' On the basis of this experience, Mr. Taylor told an audience of
Harvard University students: 'every day, year in and year out, each man [sic] should ask himself [sic] over and over again, two questions. First, what is the name of the man [sic] I am now working for? and having answered this definitely, what does this man [sic] want me to do right now?' 201

Scientific management proponents have stressed the importance of orders and have experimented with ratios of superiors to subordinates for the most efficient accomplishment of orders. 202

To extract the discipline to follow orders, once again scientific management leaders turned to various systems of reinforcement. One such system was Frank Gilbreth's promotion formula. This scheme, Catlin noted, was particularly successful.

Promotions may not be frequent but the consciousness that they are possible and are made upon the basis of merit only, will help to 'leaven the whole lump.' 203

The elaborate planning and organization of the work process under scientific management heralded a new phase of bureaucratization. Yet business management students were instructed that this extraordinary form of organization was ultimately a democratic and even libertarian force:

... under scientific management organized planning is done in the open and made prominent by series of 'instruction cards'; ... Thus, though it be true that scientific management diminishes the need of the operative for resource and judgment in scientific management matters, it may help him [sic] at first a very little, and afterwards a good deal more, to estimate the characters of those who bear large responsibilities. Unless and until he [sic] can do that, democratic control of industry will be full of hazards. 204

Hence, the ultimate lesson on scientific management was its
primary concern with the technology of control.

Scientific Management and The Educational Process in Perspective

When F.W. Taylor's principles of scientific management were widely popularized during the 1910's and 1920's, academics were searching for a curriculum package for their fledgling business departments. In their search for appropriate business curricula, the need for management courses emerged once the business skill subjects were developed and functioning. Gradually the theoretical basis and method of scientific management were incorporated into the curriculum and thus management education grounded in theory and practicality was born.

Developed by Taylor on the shop floor, scientific management evolved out of the production process as a method of control. The approach was consistent with the framework of the engineering function and hence inquiries into the practicability of scientific management fostered collaboration and cooperation between departments of business and engineering. While engineering departments contributed knowledge about the production process and methods of determining efficiency, business examined human behaviours and methods of adapting human behaviours to the requirements of efficiency engineering. Hence, both engineers and businessmen were educated within a similar framework. Their schooling provided both justification
for the necessity of management and proof of the manageability of labour.

While the mention of scientific management and the use of Taylor's works were notably absent for the most part from the university course compendia, examination of both course descriptions and required textbooks has revealed the dominance of Taylorism within the management curriculum. Scientific management is not presented simply as a theory of management. It has in fact become synonymous with management and underlies later and modern approaches to the managerial and administrative process. Thus, scientific management did not move in and out of the curriculum in fashionable waves, but rather remained as an ideology and pragmatic method of labour management.

The next chapter will study the modification of scientific management and the introduction of the "softer" human relations approach to management in the curriculum.
Footnotes


4 The sociologist's task as Sumner saw it, for example, was to provide knowledge and facts for the development of "laws" to reinforce the basic principles of laissez faire, survival of the fittest, laws of diminishing returns, and of Protestant ethics and work values. See Smith, 1970, Ibid., pp. 86-7.

5 Ibid., p. 251.


7 Ibid.

8 Baritz, op. cit., p. 224, p. 74, and p. 126.


10 The most detailed account of Taylor's early life and career is Frank B. Copley, Frederick W. Taylor, 2 Volumes, (New York: 1923).

11 Frederick W. Taylor, The Principles of Scientific Manage-

12 Raymond E. Callahan, Education and the Cult of Efficiency, (Chicago: University of Chicago Press, 1962), p. 23. A strong case was made in favour of the use of scientific management principles in classrooms and for the general administration of schools.

13 In his work, Taylor often referred to workers as simple-minded or in a derogatory fashion. For example, in The Principles of Scientific Management, he referred to the "natural laziness of men", (p. 20), the "attempt" by workers "to mislead and deceive" employers (p. 23), and workers' "insufficient mental capacity" (p. 26). Further, he said that "the man suited to handling pig iron is too stupid properly to train himself." (p. 63).


15 See Ibid., pp. 142-3.


17 Taylor, op. cit., p. 37. Taylor rationalized the process of deskilling by arguing that instead of "dwarfing men" it enabled them to "rise to a higher plane of efficiency." (Cited in Braverman, op. cit., p. 129.) Instead of digging ditches, he reasoned, a man could "rise" to the "making" of shoes on the production line.

18 Ibid., p. 10.


20 Taylor, op. cit., p. 29.

21 The adoption of principles of scientific management, according to Edwards, directly undercut the intent of workers' welfare programmes focussing on housing, plant safety, sanitation, and medical services and as a result provoked conflict between management and workers. See Richard Edwards, Contested Terrain: The Transformation of the Workplace in the Twentieth Century, (New York: Basic Books, 1979), p. 102.

23 Braverman, op. cit., p. 87.
This argument regarding the domination of scientific management in the field of management was supported by George Soule and Peter Drucker. Soule has argued that the theory has become so broadly accepted that it supersedes the necessity of a separate and reinforcing school to promote its practice. Further, Dan Clawson has corroborated with Braverman's argument regarding the primacy of scientific management.


29 Queen's University, Calendar of the School of Mining and Agriculture, 1894-95, (Kingston: British Whig, 1894), p. 12.
Queen's University will be referred to as Q.U. from here on.

30 Q.U., Calendar of the School of Mining, 1903-04, (Kingston: British Whig, 1903).

31 Ibid., p. 73.
32 University of Toronto, Calendar of the University of Toronto, 1915-16, (Toronto, 1915), p. 396. University of Toronto will be referred to as U. of T. from here on.

33 Ibid., p. 389.


35 Q.U., Calendar of the School of Mining, 1907-08, (Kingston: British Whig, 1907), p. 40 and p. 96.

36 Q.U., Calendar of the Faculty of Science, 1916-17, (Kingston: Jackson Press, 1916).

37 Q.U., Calendar of Queen's College and University, 1911-12, (Kingston, 1911), p. 102 and Calendar of the Faculty of Arts, 1915-16, (Kingston, 1915), p. 132.

38 Q.U., Courses in Commerce and Administration, 1919-1920, (Kingston, 1919), p. 4.

39 Toronto Calendar, 1920-21, op. cit., p. 464.

40 Ibid.

41 Ibid., p. 465.


50 Ibid.

51 McMaster University, Arts & Theology Calendar, 1930-1, (Whitby: Mundy-Goodfellow Printing Co., 1930), p. 69. McMaster University will be referred to as McM. U. from here on.


53 Ibid.

54 McM. U., Arts, Theology Calendar, 1925-26, (Whitby: C.A. Goodfellow & Son, 1925), p. 75.


57 McM. U., Department of University Extension Calendar, 1946-7, (Hamilton, 1946), p. 23.


60 McM. U., Calendar of the Department of University Extension, 1953-4, op. cit., p. 9.

61 McM. U., Department of University Extension Evening Classes, 1956-57, (Hamilton, 1956), p. 7. This course was offered through the Department of Extension. The Faculty of Business at McMaster was not established until July, 1968.


63 University of Western Ontario, Calendar of the Colleges of Arts, 1924-25, (London, 1924), pp. 82-3. University of Western Ontario will be referred to as U.W.O. from here on.
64 U.W.O., Calendar of the Colleges of Arts, 1923-24, 

65 U.W.O., Calendar of the Faculty of Arts, 1925-26,  

66 See, for example, U.W.O., Calendar of the Faculty of  

67 U.W.O., Calendar of the Faculty of Arts, 1929-30,  

68 U.W.O., Calendar of the Faculty of Arts, 1932-33,  

Significantly, as noted above, the Taylor Society Bulletins  
were listed as references for this course.

70 U.W.O., Calendar of the Faculty of Arts, 1939-40,  
(London, 1939), pp. 94-6 and U.W.O., Calendar of the  
Faculty of Arts, 1940-41, (London, 1940), pp. 90-1.

71 U.W.O., Calendar of the School of Business Administration,  

72 Ibid.

73 Ibid., p. 35.

74 Ibid.

75 Ibid., p. 39.

76 Ibid., p. 40.

77 U.W.O., Calendar of the School of Business Administration,  

78 Q.U., Courses in Commerce and Administration, 1921-22,  
(Kingston, 1921), pp. 13-23.

79 Ibid., pp. 10-11.

80 Q.U., Calendar of the Faculty of Arts, 1922-23, (Kingston,  


82 Q.U., School of Commerce and Administration Calendar,


86 U. of T., President's Report for the Year Ending June 30, 1926, (Toronto, 1926), p. 44.


91 U. of T. Calendar, 1926-27, op. cit.


94 Required, prerequisite, and supplementary books used in various courses were listed in the calendars until the 1950's. All textbooks listed were placed on file cards with the university name(s), year(s), and course(s) using the book. Books were then selected for the analysis on the basis of frequency of use, or were classified as "classics." For a detailed explanation of methodology, classification of books, and textbook selection, refer to Chapter One.


96 Ibid., p. 333.

97 Sidney and Beatrice Webb's Industrial Democracy was listed at McMaster sporadically between 1906-07 and 1923-24,
at Western between 1926-27 to 1928-29, and Toronto between 1914-15 and 1932-33.

98 The Webbs' History of Trade Unionism was listed at McMaster in 1907-08 to 1923-24 and Toronto in most years between 1900-01 and 1933-34.

99 G.D.H. Cole's The World of Labour was offered primarily between 1919-20 and 1923-24 at Western and 1922-23 to 1930-31 at U. of T. and his Introduction to Trade Unionism was listed for U. of T.'s Labour Problems course between 1923-24 and 1930-31.

100 Socialism was listed at McMaster between 1920-21 and 1938-39, at Western between 1917-18 and 1923-24, and at Queen's from 1911-12 to the 1950's.


102 Ibid., p. 41.

103 Ibid., p. 52.


109 This notion was presented in Ibid., Marshall, 1948, op. cit., and Taussig, op. cit.


121 Taussig, *op. cit.*, p. 252.


126 Taussig, *op. cit.*, p. 150.


129 Clark, *op. cit.*, p. 83.


136 Hoxie, op. cit., p. 319; Clark, op. cit., p. 394.


138 Hamilton and May, op. cit., p. 150.

139 Douglas, Hitchcock, and Atkins, op. cit., p. 49.

140 Garver and Hansen, op. cit., p. 413; Blum, op. cit., pp. 188-9.

141 Hamilton and May, op. cit., p. 13; Gide, op. cit., p. 95; Blum, op. cit., p. 411.


143 This was argued by Douglas, Hitchcock, and Atkins, op. cit., p. 229; also W.S. Jevons, The State in Relation to Labour, (London: Macmillan & Co., 1882), p. 117.


145 Gide, op. cit., p. 155, p. 157; also Ely and Hess, op.
cit., p. 119.


147 Hoxie, op. cit., p. 346.

148 Ibid., p. 306.


150 Jones, op. cit., pp. 257-8; also p. 75.

151 Hoxie, op. cit., p. 297.

152 Jones, op. cit., p. 460.


154 Catlin, op. cit., p. 168.


156 Blum, op. cit., p. 76.

157 Jevons, op. cit., p. 16.

158 Hoxie, op. cit., p. 327.

159 Ely, op. cit., p. 323; Gide, op. cit., p. 478.


161 Hoxie, op. cit., p. 303.

162 Furniss, op. cit., p. 533; Catlin, op. cit., pp. 475-6.

163 Catlin, Ibid., p. 476.


166 Blum, op. cit., pp. 369-70.

167 Hoxie, op. cit., p. 4.
168 Catlin, op. cit., pp. 480-1.

169 Ely and Hess, op. cit., p. 783. Also, Taussig, op. cit., p. 266.

170 Catlin, op. cit., p. 498.

171 Hoxie, op. cit., p. 348.

172 Jones, op. cit., p. 287.

173 Gide, op. cit., p. 444; Adams and Sumner, op. cit., p. 208; Jevons, op. cit., p. 117.

174 Gide, Ibid., p. 443; Furniss, op. cit., p. 423; Ely and Hess, op. cit., p. 786.

175 Adams and Sumner, op. cit., p. 208.


177 Catlin, op. cit., p. 501.

178 Hoxie, op. cit., p. 303.


180 Gide, op. cit., p. 157; Ely and Hess, op. cit., p. 121.


184 Fish, op. cit., p. viii. Gillette's works were required readings in the applied science departments.

185 Jones, op. cit., p. 6.

186 Fish, op. cit., p. 5 and p. 4.


189 Fish, op. cit., pp. 155-6 and p. 154.

192 Ibid., p. 175; also Gide, op. cit., p. 434.
193 Catlin, op. cit., p. 8.
194 Catlin, op. cit., p. 168; Gide, op. cit., p. 435; Daugherty, op. cit., p. 708.
195 Jones, op. cit., p. 278.
197 Fish, op. cit., pp. 79-80.
198 Jones, op. cit., p. 70 and 73-4.
199 Ely and Hess, op. cit., p. 128.
200 Jones, op. cit., p. 9.
201 Ibid., pp. 193-4.
202 Ibid., p. 167.
Chapter Six

The Human Relations Approach and Management Education: Incorporating a Psycho-Social Perspective into Business Practice and Organizational Design

The establishment of university courses in commerce and administration is simply one of the latest manifestations of the adjustment of education to life. 1

After the introduction of Taylor's principles of scientific management, experimentation with managerial techniques followed in a definite direction. Using scientific management and its framework, early managerial theorists identified the importance of cooperation in the work environment as primary to efficient functioning. To understand the technique of gaining cooperation at the worksite was to understand a further step in the rationalization of the work process.

Following Taylor's rather crude formula for management, researchers, primarily from the fields of industrial psychology, industrial sociology, and business administration began to search for ways in which to refine management techniques. The new focus investigated ways in which workers would be psychologically adjusted to the work process. Experi-
mentation was aimed at creating or maintaining harmony within the organization's internal atmosphere as well as within the general social order. Thus, industrial psychology, sociology, and human relations were to provide new avenues of hope for those searching for the panacea.

The use of psychology in industry and the human relations approach contributed to the development of the personnel function within organizations. The study of the personnel function and related issues was of central importance in the business curriculum. This area in business departments grew enormously during the 1930's and 1940's. Along with the business departments' courses, departments of sociology and psychology, offering valuable supportive curricula also grew. Graduates of such programmes were eligible for the growing number of jobs within personnel departments of public and private bureaucracies.

This chapter examines the historical importance of the fields of industrial psychology and industrial sociology and their incorporation into the business curriculum. In particular the use of human relations and softer management techniques as presented to students are studied through an analysis of course descriptions and textbooks used by the various business departments. Finally, the curricula and supportive subject areas will be examined in order to understand how the new social psychology focus in business education provided further justification for the general search for solutions to social
problems.

From the Science of Industry to the Psychology of the Worker: Using Industrial Psychology for More Effective Cooperation

Under scientific management, the manager or foreman's stop watch was an obvious obstacle for workers and was the source of common criticism from both workers' groups as well as academics and other social reformers. Taylor's format lost some of its appeal during the 1920's. Industrial managers sought new techniques and began to recognize the work of industrial psychology started a decade earlier by men such as Hugo Munsterberg and Walter Dill Scott. Industrial psychology shared the purpose of scientific management but unlike the latter relied on covert methods to accomplish its ends. By focussing on the worker and his/her adjustment to the work process, industrial psychology was simply more acceptable due to its seemingly paternalistic approach. This approach quelled some of the hostility toward the rigid techniques of scientific management, voiced strongly by workers' organizations.

A key problem for social scientists was to foster cooperation within the industrial organization. The social scientists' insistence on the need for cooperation together with the obvious paternalistic thrust of newly forming personnel departments created a vague uncertainty for many people about the nature and role of such scientific endeavours. For
some, cooperation represented images of fairness and equality, of cooperative associations in which employees voluntarily and willingly worked with others in order to achieve common advantages for the group members. However, within the framework of the industrial social scientists, cooperation referred to a process whereby workers would, through covert means, submit to the rules of the organization and thereby concur with the employer. In this sense, cooperation meant obedience.

i) The First Promise: Organizing Individual Happiness

For industrial psychologists and sociologists, the main question of inquiry was that of the adaptability and perfectability of behaviour. In addition to ensuring that individuals performed satisfactorily and therefore efficiently on the job, industrial psychology recognized the importance of the individual's own feeling of satisfaction with his/her performance. Happy workers were simply more malleable and thus social science sought the scientific mechanisms by which to organize happiness.

A scientific and practicable psychology was symbolic of modern society's approach to problem solving. In Ordway Tead's words, "the promise it holds is almost infinite in range." That the major rallying point of industrial psychology became the organization of the "happy society" is not surprising, given the fact that this discipline developed
during a period of labour and general social unrest. The scientific "promise" was that if given the proper funding and "sufficient" time, industrial psychologists could remove the tensions obstructing societal happiness.

Although industrial psychologists were sincere in their efforts to forge a new bond of human happiness and well-being, however, this concern for the "human element" was not motivated by idealistic, humanitarian affection for the "human condition" alone. Instead, industrial psychologists argued that attention to the human element would pay off in increased efficiency. The profit incentive inherent in the goals of industrial psychology placed "constraints" on the manner in which happiness could be organized. For example, trade unions and strikes were definitely not included as examples of how to "organize happiness." Strikes were defined as "illnesses", "dysfunctions", or as one author suggested, "strikes are the most dramatic episodes in industrial psychology." Labour unrest required an "adjustment" and this adjustment, of course, was to be made by the workers. The industrial system was primarily viewed as a just and equitable arrangement. The "problem" was the human reaction to this structure. Hence, the root of all industrial conflict was deemed to be human behaviour and industrial psychology sought to alter this behaviour. If the human "weakness of will" and habit was the "root" of all evil, then industrial psychology's task was to "unlock the key" to human behaviour and supply
the "right" actions. The labour "problem" was thus defined as a composite of individual "personal maladjustments" and was often not viewed as a "social issue." The solution to the organization of happiness, therefore, was to change the individual worker's attitudes.

The search for happiness through "correct thinking" was carried out in two ways. On the one hand, industrial psychologists attempted to "fit" the attitudes of workers into the most appropriate "slots" for those attitudes. This was accomplished through psychological testing and employment psychology. The basic premise was to "fit a square peg in a square hole and a round peg in a round hole." On the other hand, the scientists endeavoured to manage behaviour and to channel activities into the most profitable direction and this was attended to by means of motivation and morale studies. Once workers were appropriately assigned to jobs, the task was to foster conditions to keep them happy and working at maximum efficiency while demonstrating a "willing work spirit."

ii) The Second Promise: Organizing Social Happiness

Industrial psychology was actually preceded by a long history of social reform which was focussed more globally on a wide variety of social problems resulting from the industrial system and urban growth. What emerged as social science and more specifically as sociology during the late nineteenth
and early twentieth centuries was the end product of a number of concerted attempts to scientifically explain the problematic relationships that had developed among people and between people and organizations. These explanations were thought to be essential. The social scientists were, in fact, attributed with the power to save the social system from its own self destruction. These new sages provided answers regarding social problems and novel social occurrences which were unexplainable by the common sense and folklore employed by elders, politicians, churchmen, and professionals, who previously had been respected for their insights and remedies. The rise of professional social science created a demand for expert advice on human affairs by discrediting traditional systems of belief. In this demand for expert advice was an advancing obsession for exactness. 8

Advances in social science were supported by businessmen who realized the value of social reform. In industry social science was concerned with orchestrating unity of purpose, harmonious work relations, and efficient performance. This role was often described as a coordinating function. Coordination, however, suggests a synchronization of function based on mutual agreement, equality, and harmony. Early production units were based on the coordination of activities performed by various craftsmen, their apprentices, and perhaps the owner of the enterprise. This type of coordination in industry was lost due to four interrelated factors. The
first was the growth in the size of the corporate entity, the production units, and the number involved in work groups designed to accomplish any one goal. Secondly, with the separation of the capitalist owner from the point of production, there was an increased tendency to maintain control in upper levels and to discourage spontaneous decisions at the point of production regarding the operation and work efforts. Third, with the development of the managerial function this task of coordination was assigned to management as a primary responsibility. In this process the task of coordination was substituted for or sometimes disguised and confused with cooperation. Managers, while paying lip service to the task of coordination, were primarily concerned with cooperation—gaining workers' obedience to organizational demands. In this task they were guided by social science research which aimed to promote esprit de corps. Fourth, the ease with which management effectively substituted cooperation for coordination as its primary task was facilitated by the process of deskilling. As knowledge of production techniques and skill were removed from the shop floor and were invested in various levels of management or through machinery, managers invoked managerial authority to engage workers' allegiances. This action was rationalized as a managerial privilege and even justified as a right especially with a deskilled work force.

The spirit of cooperation or collective action was studied by Edward A. Ross, who in time became most famous for
his work, Social Control. Ross' studies of social control revealed the meaning of cooperation as social control and the historical significance of the concept of cooperation as a mechanism of social control. Ross and other sociologists provided ample justification for the form of cooperation hence elicited through the corporate enterprise. Studies of sociology and social control echoed the "promise"--the organization of social happiness through various management techniques.

It is with these lessons regarding the question of social control that a psychology of organizations can be developed. In a corporation where the goal is profit maximization, for example, Ross suggested that "the ascendancy of the commercial motive deadens the spirit of real efficiency" and therefore it may be appropriate to employ covert means of obtaining cooperation by "substituting ... service for profit as the motivating force behind the organization."

It is at this point that industrial psychology and sociology merge to regulate behaviour. The question for social science was to determine the methods by which compliant social behaviour could be guaranteed by individuals acting in coordination with others as part of a work group. The task was not merely to organize happiness but with respect to workers in organizations, the task grew to encompass the organization of group happiness. Thus, industrial psychology by necessity evolved as social psychology--a field of inquiry based on the group process rather than individual behaviour patterns.
Drawing on knowledge bases in both psychology and sociology, the study of the group process in the workplace became known as the human relations approach. The most important research in this area was conducted at the Hawthorne Works plant of the Western Electric Company in Chicago between 1924 and 1927. The results of this experiment profoundly affected management henceforth by providing data on the formation of social groups within the work situation. The problem faced by social scientists intent on maximizing the work group's efficiency was to inculcate within the workers a sense of loyalty to the organization and an obedience to general social laws governing behaviour while eliminating feelings of allegiance to the work group, yet maintaining a sense of harmony and a feeling of camaraderie.

The development of social science in industry was premised on the idea that industrial organizations as microcosms of society were more than the sum of their individual parts but rather were built upon specific rules necessitating specific behaviours, ideals, such as cooperation, and rights, such as that of managerial authority. Within the confines of the organization, individuals were expected to forego their own aspirations and sentiments and to adopt those determined by the organizational body.

During the first three decades of the twentieth century, social scientists recognized the importance of social adjustment to the organization's goals as primary and perhaps
as necessarily preceding individual adjustment to the specific job requirements. The Hawthorne experiment exposed the delicate balance between individual and social adjustment and the necessity of securing cooperation within both frameworks. Lessons from this magnum opus in the social sciences provided the springboard for research questions and experimentation in the field of management. Post Hawthorne experimenters were driven by the incentive that answers to the question of management were close at hand.

Softening Taylor's Techniques: The Human Relations Approach

By the 1930's human engineering came into vogue as the new human relations experts used principles not unlike those of scientific management to more fully adjust the worker to the work establishment. This new approach, however, did not supersede Taylorism. While sociology and psychology were developed independently unlike scientific management outside of the industrial arena, practical applications to industrial settings were attempted once it was obvious that the workplace provided a lucrative setting for the study of human behaviour. Social science began by examining interactions in the work setting and then determined how that behaviour could be adjusted to achieve an ideal industrial format. By focussing on the worker's attitudes and behaviour, social scientists soon realized that satisfaction and produc-
tivity were somehow linked. They sought cues as to how they could facilitate positive feelings within the worker toward work and the work environment.

Social scientists generally criticized the use of force. Social psychology promised to develop the "willing acceptance of the led." Authority and manipulation were to replace power and coercion. The development of social science's "softer" techniques of maintaining control at the workplace overlapped with the broad experimentation and adaptation of Taylor's principles. While scientific management, as stated earlier, formed the basis of all subsequent forms of management, proponents of both frameworks debated the uniqueness of their theoretical orientations and claimed maximum utility for their favourite technique. This "debate" seemed to artificially separate these management techniques and imply that their differences outweighed their similarities. While Taylorism, especially in its earliest forms, was primarily directed at physiologically adapting the worker through scientific and detailed motion plans, the social sciences broadened these plans to include methods of psychologically and socially adapting the worker to the work environment and creating feelings of attachment to the employer. In this respect the social science approach operated within the framework of the workplace as a social system and then extended the realm of managerial responsibility.

Scientific management's primary concern with the pro-
duction process contributed only indirectly to the development of the managerial function as a key feature in organizational design. Underlying the work of the engineers was a belief in the perfectability of the system. The work of the industrial social scientists, however, was developed as an ongoing feature and to this end, personnel departments, school guidance programmes, and university management education programmes were established as permanent facilities. While the techniques of behavioural control were subject to improvement and perhaps a degree of perfectability, it was not possible to guarantee a properly behaved and loyal workforce without close supervision, constant socialization, and incentive programmes.

While scientific management clarified and expanded the role of the manager especially with regard to the measurement and monitoring of machinery movements and workers' actions, the human relations approach essentially enlarged the managers' span of control to include questions previously undefined as workplace issues. Personnel departments were developed as reservoirs of managerial talent. From these departments, workers' financial, health, social, and sometimes special individual needs were met and the conception of the workplace as a safe environment was substituted for earlier conceptions of the workplace as a hostile environment. A friendly, paternalistic ambience was thus perpetuated by the very department established to report on, monitor the
performance of, and perhaps fire workers at all levels. Within the personnel function the purpose of social control and the "rhetoric of permissiveness" began to blend. This was perhaps part of the process Erich Fromm referred to in his statement that "the change from the overt authority of the nineteenth century to the anonymous authority of the twentieth century was determined by the organizational needs of our modern industrial society."

The human relations approach characterized the organization as a social system with clearly delineated boundaries. In assessing worker-management cooperation, then, the social scientists observed activities of work groups within this social system and argued that output depended largely on various characteristics of the work group as well as those of the physical environment. These characteristics served as motivating factors. Management was motivated by its own distinctive set of factors including costs, efficiency, and productivity. Although both workers and management as members of the same social system were attributed with similar overall goals, the human relations approach analyzed labour and management as separate, hierarchically arranged components within the organization. The assumption was that hierarchy within the plant structure was necessary to achieve the plant's goals and in addition, it guaranteed overall equilibrium.

While scientific management techniques were intro-
duced in large part in order to manage specific "pathological" activities on the shop floor, such as "soldiering", and to increase levels of productivity, the social science approach was introduced more generally on an industry wide basis and therefore promised more broadly to eliminate industrial conflict. Research was aimed at eliminating dysfunctions or in replacing conflictual elements with cooperative ones. Behavioural studies indicated the degree to which scientifically controlled "soft" measures such as participation in decision-making, contributed to the workers' satisfaction and then in turn to the willingness to cooperate and increase productivity. What these studies determined was the extent to which management could loosen control on the one hand while tighten its reins on the other. Thus, experimentation aimed to find the formula for this delicate balance. The effects were far-reaching. Significantly, "softer" techniques and various welfare schemes were regarded as workers' victories won from an increasingly sympathetic management. Yet these measures were often actually introduced by management as disciplinary tactics.

The Human Relations Approach and Management Education

Industrial social science provided necessary directions for business students on how to operationalize the managerial function. With developments in psychology and
sociology, theories of behaviour and workers' control became more prominent features of management education. Management education became less technical, further removed from the shop floor and more reliant on the burgeoning social sciences as well as the general arts.

With the development of the human relations approach and the proliferation of managerial occupations, the business curriculum was extended to include a wider variety of liberal arts studies. Eventually educators agreed that even pragmatic forms of education were expected primarily to "inculcate a state of mind" rather than to impart specific technical skills. A business education with a solid foundation in the liberal arts satisfied educators and businessmen alike. A broadly based university education was essential for business, since as the Chairman of the Board of U.S. Steel pointed out: "The most difficult problems American enterprise faces today are neither scientific nor technical but lie chiefly in the realm of what is embraced in a liberal arts education." This sentiment was similarly echoed by such prominent figures as the presidents of Gulf Oil, DuPont, Imperial Oil, and Shawinigan Water and Power Company, and the vice-president of the Bank of America.

Although discussion regarding the importance of a broadly based liberal education versus specific skill training for businessmen had begun with the development of business education, the importance of social science's relation to
human problems in the work situation was not obvious until the Hawthorne studies had been published. The Hawthorne results clarified for many the uses of social science in industry and hence its necessity in management education. Social science training in fact, was regarded in some respects as a "preventative" measure. According to the Financial Post, for example, "the epidemic of strikes" is a manifestation of our deficiencies of social or human skills, our difficulties in obtaining cooperation for mutual benefit between groups—in this case, worker and management." The urgent need for managers skilled in personnel matters accelerated during the 1940's and 1950's as corporate ownership increasingly fell into fewer hands and the separation of ownership and control increased.

With the development of the human relations school, management education incorporated psychology, sociology, and elements of political science. Significantly, the curriculum examined the concept of the formal organization as the archetype of private and public enterprise. Case studies of formal organizations provided data and insight into the maintenance of stability and control at various managerial levels. Through organizational studies, lessons in management provided further understanding of possible solutions to more general social problems. In this respect, management education maintained the image of pragmatic education as the obvious panacea.
1) Queen's University

Prior to the 1930's the behavioural science courses offered at Queen's examined broad concepts involved in problem solving through behavioural change but were not specifically applied to the question of labour and industrial problems nor were these courses required for the commerce degree. The scope of these disciplines grew dramatically during the late 1910's and 1920's and lessons from these social sciences appeared more often as essential elements in a number of elective and required courses.

Introduction to Sociology along with separate courses in National Problems and Labour Problems were offered by Professor O.D. Skelton in the Department of Political and Economic science starting in the early 1910's. Until Sociology was established as a separate department, "problems" courses usually dwelled on population and immigration questions. A class in Social and Charitable Work presenting principles and methods of social betterment activities was developed in 1914-5 and perhaps as theoretical background another specific course, entitled The Social Theories of Veblen, was listed in 1919-20. While such courses offered through the Political and Economic Science Department were mainly theoretical in nature, in 1926-7 the Social Problems course examined implications for social policy and was therefore appropriate for those intent upon entering the public service after graduation.
When the School of Business was established in 1919, besides the standard specializations offered in Accounting, Banking and Finance, General Business, or Foreign Trade, students were also provided with the option of specializing in Public Service or Social Service through the Commerce Programme. According to the commerce calendar, a degree in commerce was most suitable for "a large and increasing number of positions, especially in such departments as those dealing with Labour, Trade and Commerce, Finance, Railways, Agriculture, and Natural Resources." Moreover, with this degree students were promised a greater possibility of "entrance and promotion" in the Public Service. For this option special subjects were provided in municipal and federal governments, law, national and labour problems, office management, socialism, and the relation of the state to industry.

The Social Service specialization in the Commerce Programme was "designed as a foundation for work in philanthropic and community service." Socialism and the Relation of the State to Industry were also recommended for this programme along with special courses in Economic Theory of Distribution, Labour Problems, National Problems, Social Problems, Psychology and Supervised Field Work, Office Management, Personnel Management, Methods of Social Amelioration, and Methods of Social Investigation. Social and community service work had historically been viewed by many as "dangerously" close to the practice of socialism. Offering such
a programme in the newly formed Commerce Department dispelled this myth. A Commerce training would strengthen the ability of the social service workers to establish social harmony and maintain a social environment conducive to profitable business practice.

While the problem solving courses were primarily based on sociological theory, academics in education and economics began to turn their attention toward the theory and practical application of psychology. In 1921-2 prospective students for the Economic Department's Social Problems course were cautioned "though not prerequisite, Biology ... and Philosophy ... (Psychology) should, if possible, be taken before this course."\(^25\) That same year the Labour Problems course examined attempted solutions to problems arising out of the wage system by means of internal management\(^26\) and an economic theory course on production and price problems examined large-scale production and large-scale management. As the question of management became a more prominent feature of the business curriculum, the behavioural sciences were more clearly indicated as important sources of theory and background information.

Separate courses in Psychology were first offered at the undergraduate level in 1918-9 under the Department of Mental and Moral Philosophy. Munsterberg's *Psychology, General and Applied* was used as one of the required textbooks. The approach to psychology at Queen's was pragmatic
and the subject matter was useful for students of various disciplines. In 1928-9, the Economics Department offered a course in Population Problems which studied immigration, migration, and eugenics, and as one of the texts listed Allport's *Social Psychology*, one of the most popularly chosen readings in the Psychology Department.

Gradually the focus of psychology became more involved with testing procedures. Books on mental tests, and educational, abnormal, and experimental psychology were all required during the 1933-4 session. A course in Applied Psychology with Morris Viteles' *Industrial Psychology* as text was offered in 1934-5. The next year, in 1935-6, Watson's *Behaviorism* and *Psychology from the Standpoint of a Behaviorist* were both required in a course entitled Contemporary Schools of Psychology. Books by Watson, Viteles, McDougall, and Allport were popularly assigned. The central theme of the psychology courses was practicality and even more significantly, improvement. In addition to the readings by Viteles and others, Burtt's *Principles of Employment Psychology* was added to the list for the Applied Psychology reading course in 1946-7.

Although the School of Commerce did not offer any specific courses in theories and practice of human relations in industry, industrial social science and particularly lessons from Hawthorne heavily influenced the curriculum. Principles of psychology and sociology were, for example, used in marketing courses which taught the psychology of advertising, pat-
terns of consumer behaviour, and methods of salesmanship. Students in such courses were made aware of the "contributions made by the social sciences (such as psychology and sociology) towards the understanding of human behaviour in a marketing sense." Using this knowledge, marketing students practised as "the marketing manager" by learning "to understand the significance of retailers, wholesalers, the role played by manufacturers ... and the whims of the consumer as they affect the firm's operations."  

Specialization in management and the predominance of personnel management was evident in the Faculty of Applied Science as well as in the School of Commerce. In 1932-3, for example, engineers were offered a one-year graduate programme in commerce and one of the five courses was Industrial Management and Personnel Administration with Labour Problems as an option. This focus on labour and personnel issues was intensified with the establishment of the Industrial Relations Department in 1937. After that time economics courses and discussions in the Faculty of Applied Science were under the direction of J.C. Cameron, Head of the Department of Industrial Relations. 

Reflecting changes in management theory and in an attempt to address post-Taylor ideas especially at the shop floor level, even in the required economics courses offered in the Engineering Departments, according to the calendars, "the main emphasis ... [was] on personnel management."
Later this was broadened to include industrial relations as well. While earlier lessons from the Taylor era were not overlooked, a more rounded analysis of human factors in production was presented as was evident in Engineering Relations, developed in 1943-4 and described in Chart 6.1. Gradually, specific personnel matters were introduced as topics of concern as, for example, in the Industrial Management course. After the late 1930's management was concerned with recruiting obedient and efficient employees and with the external forces affecting the organization and its members. This pattern may be identified by examining "problem" and subject areas covered by the courses listed in Chart 6.1.

Industrial Management courses first incorporated the idea of personnel administration in 1932-3 when Tead and Metcalf's *Personnel Administration*, was listed as required reading. The concept of personnel management as a separate task developed as managerial occupations were specialized. While previously students graduated with a general education in management, starting in the 1930's graduates were specialists in the application of managerial principles to a particular organizational function. Graduates were no longer viewed as "all purpose managers" but were advised to choose as many courses as possible within an area in order to develop expertise. Along with elective courses in psychology and sociology, for example, business students in 1944-5, choosing a labour management specialization were able to select two Labour Prob-
### Chart 6.1

**Human Relations at Queen's: Industrial Management in Engineering and Commerce**

<table>
<thead>
<tr>
<th>Course</th>
<th>&quot;Problem&quot;</th>
<th>Subject Areas &amp; Techniques</th>
</tr>
</thead>
<tbody>
<tr>
<td>Engineering Relations 1943-4 (Applied Science)</td>
<td>labour &amp; general cost management</td>
<td>- legal relations &amp; business methods</td>
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<td></td>
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<td>- contracts &amp; specifications</td>
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<td></td>
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<td>- cost analysis, valuation, cost keeping</td>
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<tr>
<td></td>
<td></td>
<td>- ethical &amp; personal relations</td>
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<tr>
<td>Industrial Management 1958-9 (Applied Science)</td>
<td>personnel management</td>
<td>- employer-employee relationships</td>
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<td>- wages</td>
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<td>- safety</td>
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<td>- statistical quality control</td>
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<td></td>
<td>- job evaluation</td>
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<td></td>
<td></td>
<td>- job instructor training</td>
</tr>
<tr>
<td>Industrial Relations 1938-9-1943-4, Labour Problems 1944-5</td>
<td>labour management in theory</td>
<td>- economic &amp; social forces giving rise to labour problems</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- attitudes of employers, employees, &amp; the public</td>
</tr>
<tr>
<td>Personnel Administration 1944-5</td>
<td>labour management in practice</td>
<td>- labour problems &amp; solutions</td>
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<tr>
<td></td>
<td></td>
<td>- policies, procedures from the viewpoint of business enterprise</td>
</tr>
<tr>
<td>Industrial Organization &amp; Management 1957-8</td>
<td>principles of management &amp; applications</td>
<td>- problems in recruiting efficient, cooperative workers</td>
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<tr>
<td></td>
<td></td>
<td>- selection, training, &amp; placement of workers</td>
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<td>- maintenance of morale</td>
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<tr>
<td></td>
<td></td>
<td>- job evaluation</td>
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<tr>
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<td></td>
<td>- wages &amp; salary administration</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- collective bargaining</td>
</tr>
<tr>
<td>General Management &amp; Accounting 1959-60</td>
<td>cost effective &amp; general management</td>
<td>- effective management</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- building morale &amp; cooperation</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- action steps for technical, financial &amp; human problems</td>
</tr>
</tbody>
</table>
Chart 6.1

Sources: Queen's University, Calendar of the School of Commerce and Administration, 1938-39, (Kingston, 1938), p. 25; Calendar of the Faculty of Applied Science, 1943-44, (Kingston, 1943); Calendar of the School of Commerce and Administration, 1944-45, (Kingston, 1944); Calendar of the School of Commerce and Administration, 1949-50, (Kingston, 1949), p. 27; School of Commerce and Administration Calendar, 1957-58, (Kingston, 1957), p. 33; School of Commerce and Administration Calendar, 1959-60, (Kingston, 1959).

lems courses, described in Chart 6.1.

The promise of commerce education to contribute to the efficiency of corporate organization and hence to national economies was strengthened with the development of the Industrial Relations Institute. Significantly established in a world economy of stagnation and depression, this institute was rapidly accorded a high profile and under its function, the area of personnel relations and management assumed a new importance. The Institute's first director was former Queen's graduate, James C. Cameron, an executive of Canada Packers. Learning in this area held promise for corporate and state sectors. Only a few years after its inception, Deputy Minister of Labour for Canada contributed to its scholarship fund. This was supplemented over the next years by professional bodies, the Central Ontario Industrial Relations Institute, and corporations such as Price, Waterhouse, and Company.
McMaster's involvement with the behavioural sciences began at the turn of the century when sociology readings were assigned in Political Economy. While McMaster's early business programme was more theoretical than those offered at the other universities at the time, the programme seemed to emphasize the importance of supportive curricula, especially sociology, urban studies, history, and later psychology. Solving social problems thus appeared to be the raison d'être for the development of the political economy programmes.

A separate course in Sociology was first listed for the session of 1906-7. Concern with normalizing the wayward classes was evident throughout the 1910's and 1920's but the focus was eventually centered on population problems with the introduction of a new Political Economy course, Modern Economic Problems, in 1925-6 and a sociology course on Social Pathology in 1929-30. By 1942-3 such "modern social problems" as poverty, unemployment, transient labour, mobility of population, broken families, neglect, disease, and crime were analyzed in terms of "social disorganization in state and family" and solutions were aimed at disentangling this disorganization.

Along with the analysis of "modern social problems" offered through the sociology courses, students were introduced to the area of labour problems through the Political Economy Department. While the internal corporate environment was usually the primary concern in such courses, at McMaster
these courses focussed on the larger social issues involved in labour unrest. Courses critical of socialism and alternative economic arrangements were featured each year. In 1934-5 McMaster added a sociologist to its staff to study the source and nature of community problems. By 1955-6, four sociology courses were offered—Introductory Sociology, Industrial Sociology, the Community and Its Problems, and Social Institutions. Community and Its Problems focussed on the diversified population and industrialization as key sources of unrest. Enrolment increased in sociology by 10.5% in one year alone between 1955-6 and 1956-7. To continue investigation of the population question, another sociologist who had formerly been chief of research, Department of Citizenship and Immigration, was hired in 1957. During the same year a special course in the Sociology of Work was adopted. Significantly, this was a first attempt to understand labour problems and work related activities within the framework of the individual's relationship to the social and occupational structure.

In 1918-9 McDougall's Introduction to Social Psychology was listed as required reading for one of the sociology courses. Another one examined "principles of individual and social development" from an interdisciplinary perspective. McMaster's approach to the social sciences first began with an examination of social forces and relationships through sociological inquiry and then gradually adopted psychology in order
to analyze individual behaviour vis-a-vis group relations.

While sociology courses were more global in their orientation, psychology courses seemed to provide direct applications to employment or individual situations. Psychology courses provided the basis for a variety of certificate and degree extension programmes. These programmes were often described as appropriate for professionals and were intended to update or teach new skills. Following the success of a course in Personnel Administration conducted in collaboration with University of Toronto for the federal Department of Labour in 1942-3, this and several programmes with similar themes of interest to various managers and administrators were offered in succeeding years. Chart 6.2 describes the content of Psychology courses introduced at McMaster during the 1940's and 1950's.

In the regular degree programmes, psychology gained prominence as a major link to the harmonious society. The number of psychology courses listed grew during the 1940's. The major emphasis was on "normalcy", the creation of conditions to foster normalcy, and the elimination of abnormal behaviour patterns. With its pragmatic focus, in 1961 it was announced that psychology was removed from the Arts and Social Science Division and made part of the Natural Science College. Significantly, in the previous year the Psychology Department received a number of grants--from the Defence Research Board, Imperial Oil, Department of Health, and the
### Chart 6.2

**Human Relations at McMaster: Courses in Psychology**

<table>
<thead>
<tr>
<th>Course</th>
<th>&quot;Problem&quot;</th>
<th>Subject Areas &amp; Techniques</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vocational Psychology</td>
<td>practical personnel</td>
<td>- theory &amp; technique of vocational guidance</td>
</tr>
<tr>
<td>1943-4</td>
<td>guidance</td>
<td>- intelligence &amp; aptitude testing</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- rating scales</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- mental clinics &amp; other aspects of applied psychology</td>
</tr>
<tr>
<td>Vocational Guidance &amp; Career</td>
<td>applied psychology</td>
<td>- occupational information</td>
</tr>
<tr>
<td>Planning 1944 (diploma course)</td>
<td></td>
<td>- job analysis</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- personnel procedures</td>
</tr>
<tr>
<td>Vocational Psychology</td>
<td>applied personnel</td>
<td>- assessment of personality for training, education, employment, &amp; promotion</td>
</tr>
<tr>
<td>1950's</td>
<td>management</td>
<td>- nature of individual differences</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- quantitative description of interests, aptitudes, achievements, &amp; attitudes</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- use, content, &amp; interpretation of tests, ratings, &amp; inventories</td>
</tr>
<tr>
<td>Occupational Psychology</td>
<td>applied personnel</td>
<td>- methods of obtaining occupational training &amp; educational information</td>
</tr>
<tr>
<td>1950's</td>
<td>management</td>
<td>- organization &amp; interpretation of information for use in counselling</td>
</tr>
<tr>
<td>Mental Hygiene</td>
<td>problem solving</td>
<td>- psychology of adjustment</td>
</tr>
<tr>
<td>Counselling Techniques</td>
<td>problem solving</td>
<td>- standardized tests</td>
</tr>
<tr>
<td></td>
<td>technique</td>
<td>- interviewing techniques</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- records</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- follow-up procedures</td>
</tr>
</tbody>
</table>
### Chart 6.2

<table>
<thead>
<tr>
<th>Course</th>
<th>&quot;Problem&quot;</th>
<th>Subject Areas &amp; Techniques</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social Psychology</td>
<td>behavioural &amp; social problems</td>
<td>group behaviour, group pressures, morale, communication &amp; structure of groups, case methods approach</td>
</tr>
<tr>
<td>1954</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Advanced Social</td>
<td>behavioural</td>
<td>individual behaviour in groups, group behaviour patterns</td>
</tr>
<tr>
<td>Psychology 1954-5</td>
<td>problems</td>
<td></td>
</tr>
<tr>
<td>Industrial Psychology</td>
<td>personnel management &amp; human relations</td>
<td>personnel selection &amp; training, engineering psychology, consumer behaviour, human relations</td>
</tr>
<tr>
<td>1957-8</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>


U.S. Public Health Service\(^{42}\)--an occurrence more characteristic of natural and applied science than of the arts.

The discipline of psychology with its historical link to industrial purposes, was developed in the university with the approval of the corporate sphere. When the new honours programme in Psychology was announced in 1956-7, for example, the President's Report for that year recorded that this development was possible due to the "receipt of a grant of $21,000 five years ago from Carnegie Corporation of
New York." Part of this grant was apportioned for the development of an Honours Sociology course which was deemed to be "especially appropriate in a large industrial community." Consequently, in 1957-8 Industrial Psychology was added to the curriculum and described as a "study of the application of psychological knowledge and research methods to problems of business and industry." 

In the commercial curriculum itself, various aspects of the human relations approach were presented in courses such as Business Management and Internal Control and Administrative Problems. Business extension courses moved from the realm of the technical subject areas to include lectures on human relations. The Executive Department course was expected "to broaden the outlook of the participants by studies which encourage men [sic] with executive ability to think along managerial lines." In addition, degree and extension courses in retail administration covered various personnel and store management matters as well as the psychology of advertising, consumer habits, and the "art" of salesmanship. Programmes in Office Management were similarly designed during the 1950's, including problems in supervision of office staff and disciplining workers.

As education in personnel matters was more efficiently organized, more and more courses were developed on specific aspects of the work relationship. This was a particular feature of the Extension Department. The utility of such
courses was obvious to managers and in the case of extension students, their sponsoring companies. Hence dramatic increases in enrolment in the Department of Extension were recorded. The enrolment in extension programmes increased by 45.7% between 1952-3 and 1959-60 and a further 15.8% between 1959-60 and 1960-1. While increases in the number of extension degree students were not quite as dramatic as those in certificate programmes, the data are indicative of the pragmatic nature of the extension department and its direct utility for those in business and industrial occupations.

Along with the growth and development of management education in degree and extension departments, during the late 1950's the scope of commercial education was examined and the possibility of establishing a broader based Industrial Relations studies was indicated. According to the President's Report, this was now a "more realistic" idea "with the development of sociology, psychology and social science in general" since such a curriculum would necessitate an "interdisciplinary approach along with help from management and trade unionists." The purpose was to develop understanding of business relations vis-a-vis social forces and constraints in order to promote more effective internal management.

By 1960 McMaster's commerce programme had been modified from its early philosophical approach to acquire a pragmatic character. Many of the most successful courses or programmes were experimented with through the Department of Uni-
versity Extension. The university would then gauge the utility or profitability of programmes by whether or not practitioners in the field were drawn in sufficient numbers. Management courses in particular were increasingly concerned with behaviourism. Behaviour principles were used primarily at first in the curriculum to teach personnel issues and were then more generally applied to marketing, consumer studies, and later to the field of industrial relations. The work of industrial social sciences had proven to be very useful to a wide range of professionals. Building upon foundations in management theory and practice established through scientific management, the business curriculum taught managers how to achieve efficiency through techniques seemingly characterized by neutrality and a hint of philanthropy.

iii) University of Toronto

University of Toronto's approach to management education was somewhat more similar to that of McMaster than the more technical approach adopted at both Queen's and the University of Western Ontario. Toronto's Department of Political Economy seemed to be dominated by its Law and Jurisprudence division for some time and even after a separate Faculty of Law was established, the courses mainly encompassed theoretical and historical analyses. Gradually, the Department as well as other arts programmes became more pragmatic
in nature. This pragmatism evolved through the social service and psychology departments.

As early as 1906-7 the Philosophy Department offered five psychology courses. Three of these—Experimental, Advanced Experimental, and Laboratory Work—were scientifically oriented and relied heavily on the work of Wendl Wundt for background readings. Additional courses of this practical nature were listed in the curriculum. In 1920-1, for example, both pass and honours options in Psychology were available and new courses in applied psychology were offered. To lend insight into the practice of psychology for those involved in the field of social work, two courses, Introduction to Psychological Investigation and Mental Testing, described in Chart 6.3, were offered to Department of Social Service students.

During the previous year, in 1919, a similar social problems perspective was employed in the Department of Extension. As a preliminary step in the development of personnel management education programmes, the Department organized a course in Employment Management which was "given by experts in this field." The "experts" came from "large firms and factories, some from public utilities, and others from government employment bureaux." As a result of the course, it was noted that an employment managers' association had been formed. Not only was there a general thrust toward developing both general and specific management education programmes, but
Chart 6.3

Human Relations at Toronto: Psychology Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>&quot;Problem&quot;</th>
<th>Subject Areas &amp; Techniques</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction to Psychological Investigation</td>
<td>theoretical psychology</td>
<td>- normal &amp; abnormal behaviour</td>
</tr>
<tr>
<td>1920-1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Applied Psychology 1920's</td>
<td>scientific</td>
<td>- methods of social psychology</td>
</tr>
<tr>
<td></td>
<td>problem solving</td>
<td>- methods of psychophysical correlations</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- social measurement</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- social applications of psychology</td>
</tr>
<tr>
<td>Mental Testing 1920's</td>
<td>applied psychology</td>
<td>- methods of psychology for solving social problems</td>
</tr>
<tr>
<td>Applied Psychology 1925-6</td>
<td>practical</td>
<td>- applications of psychology to specific practical problems</td>
</tr>
<tr>
<td></td>
<td>problem solving</td>
<td></td>
</tr>
<tr>
<td>Industrial Psychology 1925-6</td>
<td>practical</td>
<td>- psychological studies of problems related to economics &amp; industry</td>
</tr>
<tr>
<td></td>
<td>problem solving</td>
<td></td>
</tr>
<tr>
<td>Industrial Psychology 1934-5</td>
<td>personnel management</td>
<td>- principles &amp; methods of personnel work in business &amp; industry</td>
</tr>
</tbody>
</table>

Sources: University of Toronto, Calendar of the University of Toronto, 1920-21, (Toronto, 1920), p. 196; Calendar of the University of Toronto, 1925-26, (Toronto, 1925), p. 245; Calendar of the University of Toronto, 1934-35, (Toronto, 1934), p. 136

there was also a tendency for managerial or professional
groups to request continuing education programmes. Many of these groups' requests were met by the Department of University Extension which served as the liaison between the practitioners and the men of science.

The movement to solve social problems was not solely the concern of practitioners. Academics and researchers were often heavily supported for engaging in pragmatic inquiries. Regardless of their sources of support, however, social science researchers in particular were more concerned with the applicability of their work. Although methodological and even ethical questions regularly arose, as the work appeared to be scientific it also seemed more acceptable and unbiased. Master's level courses in Psychology on such topics as Immigration and Mental Defectives, for example, when studied, listed with, or placed in the context of "value free" sessions of Critical Study of Intelligence Tests and their Utility, Psychology as a Factor in the Historical Development of Science, Experimental Studies in Sense and Perception, Memory Investigations, and Problems in Applied Psychology seemed to lose the emotional impact of the intended field of study.50

While psychologists rigorously examined human adjustment to business and industrial situations in their effort to contribute to the organization of happiness, those with a more global orientation sought to develop a "scientific school for the training of social workers" and hence to organize the promise for social happiness. The Department of
Social Service was established in 1914. It began with a broad pragmatic focus. Its curriculum overlapped considerably with that offered in Psychology and Political Economy. For example, in 1916-7 its curriculum included Social Economics, Social Psychology, and Immigration and Labour Problems; in 1918-9 Evolution of Modern Industry, Social Treatment of Poverty, Labour Problems and Social Psychology were added; and in 1919-20 a course in Industrial Problems was offered. The Department grew as a response to "the sense of social obligation and interdependence" and the university's need to respond to that duty. Outlining its mandate, the Department's statement read:

> The more social conditions have been studied the more apparent has it become that many of our worst evils are due to the lack of the science which should direct and stimulate the sense of our solidarity.

For this important task students who were "desirous of acquiring that intimate knowledge of social conditions and problems, principles and developments" were urged to apply and were given the promise that the course would "enable them to understand more fully, and to take more intelligent and effective part in, the social life and work of to-day."

The Social Service Department was organized as a link to the Departments of Philosophy and Political Economy. In particular certain courses were indicated as especially appropriate for students in these departments. For Political Economy students specifically recommended Year One courses includ-
ed Evolution of Modern Industry, Social Economics, Introductory Psychology, and Social Ethics. The psychology courses lent scientific legitimacy to the programme. Year Two courses for Political Economy majors were: Social Evolution, Social Economics, Social Psychology, and Statistics and Social Research. From the descriptions in Chart 6.4, it is apparent that through such training programmes, the social services, disguised as promoting social welfare, entered industry to perform tasks of social control.

Training potential managers in the social service field was advantageous. Social service techniques were geared to the management of conflict and the maximization of human efficiency. For example, Industrial Rehabilitation of the Handicapped studied "the adjustment of the handicapped to industrial conditions within the community." This included "the study of capabilities and disabilities, the technique of job analysis, placement, and follow-up work" as well as a variety of employment problems of the handicapped such as "mental defects", "lack of training", and "unbalance in the personality."55 Although the point of such a programme may have been to provide opportunities for those in society otherwise denied equal chances, the opportunities provided were interpreted from the point of view of social scientific definitions of "normalcy" and the need for adjustment. These concepts had largely been determined by the needs of industry.

By the 1930's the Department of Social Service was
### Chart 6.4

#### Human Relations at Toronto: Social Service Department Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>&quot;Problem&quot;</th>
<th>Subject Areas &amp; Techniques</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Introduction to Psychology</td>
<td>general issues &amp; theoretical problems</td>
<td>- perception, imagination &amp; memory</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- relation of instinct &amp; emotion to behaviour</td>
</tr>
<tr>
<td>1920-1</td>
<td></td>
<td>- reasoning, volition &amp; motive in everyday life</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- mental attitudes &amp; psychological reactions of social significance</td>
</tr>
<tr>
<td>Mental Testing</td>
<td>practical psychology</td>
<td>- experimental psychology &amp; intelligence measurement</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- history of mental tests</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- problems of standardization</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- norms &amp; variations</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Binet-Simon scale with revisions</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- application of methods to juvenile &amp; adult intelligence</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- correlation of mental abnormality with moral delinquency</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- social problems</td>
</tr>
<tr>
<td>Social Psychology</td>
<td>practical psychology &amp; problem solving</td>
<td>- methods of social psychology</td>
</tr>
<tr>
<td>1920-1</td>
<td></td>
<td>- investigation of individuals in social relations</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- social &amp; anti-social acts</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- norms &amp; variations</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- psychopathy, feeblemindedness, insanity</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- clinical methods of investigating abnormals</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- intelligence testing</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- tests of efficiency &amp; their application to industrial management</td>
</tr>
<tr>
<td>Psychological Aspects of Personnel</td>
<td>personnel management &amp; administration</td>
<td>- employment: personal characteristics important in job adjustment; mental tests, interviews</td>
</tr>
<tr>
<td>Administration</td>
<td></td>
<td>&amp; other methods of appraising applicants for employment</td>
</tr>
<tr>
<td>1939-40</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## Problems of Personnel Administration 1939-40

<table>
<thead>
<tr>
<th>Course</th>
<th>&quot;Problem&quot;</th>
<th>Subject Areas &amp; Techniques</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>- training: organizing a training programme, determining the content, methods of instruction, appraising workers' progress</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- fatigue: methods of investigation, reduction through job planning; influence of work, rest pauses, rate of work, ventilation, illumination &amp; noise</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- job attitudes: effects of workers' activities; methods of investigation; factors affecting attitudes such as supervision &amp; repetitive nature of work; developing favourable attitudes</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- safety: training employees in safe practices; planning work methods &amp; equipment for safety; treatment of accident prone workers</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- maladjusted workers: understanding &amp; dealing with disinterested, inefficient, &amp; temperamentally difficult employees</td>
</tr>
</tbody>
</table>

### Subject Areas & Techniques
- training: organizing a training programme, determining the content, methods of instruction, appraising workers' progress
- fatigue: methods of investigation, reduction through job planning; influence of work, rest pauses, rate of work, ventilation, illumination & noise
- job attitudes: effects of workers' activities; methods of investigation; factors affecting attitudes such as supervision & repetitive nature of work; developing favourable attitudes
- safety: training employees in safe practices; planning work methods & equipment for safety; treatment of accident prone workers
- maladjusted workers: understanding & dealing with disinterested, inefficient, & temperamentally difficult employees
- topics as listed above
- practical applications in personnel management & administration

### Sources
- University of Toronto, Calendar of the University of Toronto, 1920-21, (Toronto, 1920), p. 643, 648;
- Dept. of Social Service Calendar, 1939-40, (Toronto, 1939), pp. 23-5.

referred to as the Department of Social Science. Curiously, the description of one of the courses, Industry and Human Welfare, was similar to that provided for the Economics Department's Labour Problems course. Courses sought ways to rectify the relationship between employers and employees.
by examining "workmen's attempts to overcome problems through unionizing, consumers' cooperation, political action and social revolutionary programmes" and "employers' attempts to meet labour's demands." This two-sided approach was deemed necessary for management students. Personnel managers were often perceived as arbitrators who weighed the "evidence" or consequences of action and mediated appropriately between management and labour.

While the Business Administration course offered in the Political Economy Department examined personnel administration, the most comprehensive training in personnel management was available through the Department of Social Services. This may be attributed to the Political Economy Department's theoretical nature and social service's practicality and not to the nature of the subject matter. At the University of Toronto, management education--specifically the personnel specialization--was developed outside of the mainstream curriculum and was heavily influenced by the disciplines of psychology, sociology, and the social services. In addition education in personnel matters was offered to engineering students beginning in the 1930's. While this practice was also established at Queen's, at Toronto the focus was primarily on the social welfare issues covered by social services and sociology courses. The course for engineers, Industry and Human Welfare, analyzed work and working conditions in industry, wage systems, and industrial problems. By 1943-4,
the "social service" approach to engineering problems was evident. As both manager and scientist/technician, the engineer would at least have to account for, if not deal with, labour problems as a factor of the production process. Even a course as technical as Mine Cost Finding and Management paid "particular attention to labour relations." To provide an opportunity to examine labour and sociological issues generally, rather than only specifically in terms of a specialization such as mining and metallurgy, a new course, Engineering and Society was developed in 1944-5. With this type of problem solving and analytical perspective in the engineering curriculum, it was evident that engineers were trained as administrators rather than solely as technologists. Most importantly, this process illustrates the historical development of management from social and technological sciences.

In distinguishing the manager trained on the shop floor or in the social service department from those with backgrounds in the business curriculum, it is important to note that within the various disciplines the primary purpose for teaching and learning management theory and technique differed. Engineers required an adjusted workforce in order to carry out production efficiently. Social services focused on the group process, psychological adjustment through testing, and fair matching between the employee and the job. This manager's purpose was often a global one--to maintain order by disentangling confusing life events. The business trained
manager began with corporate goals—profit maximization and production efficiency—and managed personnel vis-a-vis these goals. These required analysis not only of internal affairs of the corporate organization but also of the effects of the external situation on the organization's position. To provide a framework for analysis, an Industrial Relations course was developed in 1946-7. This course examined industrial relations from the viewpoints of management, union, and government, the interaction of management and union in a collective bargaining process, techniques of labour-management cooperation and legislation and conciliation. An Institute of Industrial Relations was developed to provide such analysis on an ongoing basis.

Generally the role and function of business education was expanded and clarified during the 1950's. In 1950 the Institute of Business Administration was established with Vincent W. Bladen as director and about "a dozen men of achievement and prestige in the business world" were appointed as staff. The stated purposes of this Institute were to research in business, production, marketing, finance, personnel administration and industrial relations, to develop close contacts among business, government, industry, union and educational personnel, and to cooperate with the university's Department of Extension. Informally, the purpose was closely aligned with the concept of professional control.

Although University of Toronto's programme was often
theoretical in nature, contributing little new knowledge to business skill and expertise, it contributed more directly to the development of the profession per se and the definition of the profession as a social science involved in administering human relations theory for human adjustment and organization efficiency.

iv) University of Western Ontario

The University of Western Ontario's business curriculum, like that offered at Queen's, generally appeared to concentrate in the technical areas of business management and skills rather than in broader aspects of social problem solving. This, however, may be misleading. The University of Western Ontario programme was the most advanced in the field of management education and thus quickly incorporated changes in theoretical orientation and practice in the curriculum. Using mainly the case method approach, the curriculum updated itself. That is, subject matter was directly based on modern day corporate problems and solutions to these problems were sought within the frameworks of the theories provided. Hence, as the practice of management within the corporate sphere relied more heavily on the human relations approach, University of Western Ontario students would seek solutions to case problems by adapting that approach in creative or innovative ways to the diverse needs of the corporate entities under study.
While the business curriculum was rather pragmatic from its beginning, the Department of Political Science offered appropriate background in theory and the more general analysis of industry and society. Perhaps in a more technical perspective than at McMaster or Toronto, social science at Western was mainly taught through courses in psychology. As early as 1905-6 a course in Psychology on sensation, thought, emotion, and volition was made compulsory in the general undergraduate course. In 1915-6 Psychology was required for second year Political Science students. Significantly, that same year a course covering labour conditions and problems, socialism, syndicalism, and economic theories in relation to wages, capital, interest, and international trade and tariff systems was also required. In the business curriculum, in 1930-1 many psychology courses were offered, including Applied, Abnormal, Experimental and Physiological Psychology, Personality, Character and Temperament, and Experimental Investigation.

While the business programmes offered at Queen's, Toronto, and McMaster essentially prepared students for management of industrial enterprises, Western's focus was on preparation for commercial and financial corporations. This was perhaps due to Western's location in London, a major financial centre and insurance capital of Ontario. The industrial approach at Queen's, Toronto, and later McMaster was strengthened by the existence of engineering programmes at those universities. That is not to say that Western's School of Busi-
ness Administration did not prepare students for industry. Western's School was the most highly respected in Canada and for the most part trained an elite corps of businessmen and managers. However, the nature of the problem solving perspective differed. Hence, rather than the traditional Industrial Psychology, a Business Psychology was developed and offered in 1932-3.

By 1940 a wide variety of psychology courses was available on all aspects of the discipline. Most courses were practically oriented. Three courses in Experimental were offered along with Educational, Clinical, Abnormal, Social, Systematic Psychologies, and Mental Tests. All were based on behavioural principles, their applications, and testing procedures. Noted as "of particular interest to students of Business Administration", was the Applied Psychology course. The approach at Western was for the most part from the point of view of adjusting the individual's behaviour through the application of practical techniques of psychology. A more general social problem solving focus was not evident and even after the introduction of sociology courses, this point of view was not dominant. Chart 6.5 highlights the major emphases in Psychology and Sociology courses as they were introduced at Western.

The promise of the business programme in promoting industrial peace and social harmony was tied to its responsibility in properly socializing future businessmen. By
Chart 6.5

Human Relations at Western: Psychology, Sociology & the Social Problems Perspective

<table>
<thead>
<tr>
<th>Course</th>
<th>&quot;Problem&quot;</th>
<th>Subject Areas &amp; Techniques</th>
</tr>
</thead>
<tbody>
<tr>
<td>Applied Psychology</td>
<td>labour management, motivation &amp; behaviour management</td>
<td>personnel work, vocational selection &amp; guidance, training of workers, labour relations, advertising, salesmanship, problems of human adjustment</td>
</tr>
<tr>
<td>1940-1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sociology</td>
<td>social problems: description &amp; analysis</td>
<td>defectsives, delinquency &amp; crime, poverty, dependency</td>
</tr>
<tr>
<td>1934-5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Introduction to</td>
<td>social problem solving</td>
<td>group life &amp; mental interaction, conflict &amp; accommodation of persons, races, nations, &amp; classes, assimilation, change &amp; its maladjustments, social institutions, nature of social control, community as an exhibit of forces working for control, community organization</td>
</tr>
<tr>
<td>Sociology</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1930-1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Introduction to</td>
<td>modern social problems &amp; problem solving</td>
<td>applied sociology, group life, collective behaviour &amp; social control, individual &amp; group disorganization, ameliorative institutions, social case work, social reconstruction</td>
</tr>
<tr>
<td>Sociology</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1945-6</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Sources: University of Western Ontario, Calendar of the University of Western Ontario, 1940-41, (London, 1940), p. 136; Calendar of the University of Western Ontario, 1930-1, (London, 1930), p. 113; Calendar of the University of Western Ontario, 1945-46, (London, 1945), p. 111.
educating the students broadly in liberal arts training, academics argued that this ensured competence in all-round problem solving abilities. In an address to the Toronto Chapter of the Institute of Internal Auditors in 1948, Professor R.B. Taylor reiterated this promise. The purpose of the business course, Taylor said, was:

... first to educate [the student] to assume his [sic] responsibilities as a citizen. This the University has tried to do by giving him [sic] a fairly broad liberal arts training, by giving him [sic] some competence in one field of endeavour (business), and at all times by providing an environment conducive to the development of a questioning spirit, a logical mind, a sternness of purpose in meeting life's problems and an ethical and sympathetic approach to his [sic] fellow citizens. 66

Thus, the promise of business education was to inculcate a sense of fairness and neutrality along with general skills of problem solving and business management.

At Western the question of personnel management was considered to be an integral part of the general managerial training process. The 1929-30 calendar description of the Introduction to Business Organization course pointed out that the student would be introduced to the "main functions of present day industry" and included personnel in the list of these essential management activities. 67 As an essential activity personnel and the management of labour problems were integrated as regular features of a variety of courses. For example, Production Management emphasized "human relationships in the critical labour-management area [which] underline the
importance of communications throughout the organization."  

A specific course, Personnel Administration, taught by Clarence Fraser, was introduced during the 1940's. This course was "designed to aid the student ... to understand the historical development of principles and techniques of modern personnel administration both as a specialized function of modern business and as a coordinating function in general administration." Once this theoretical material was provided, the student was required to use "these principles and techniques ... to diagnose actual business situations." Key areas managed by personnel departments were studied. These included issues around hiring and firing, hours and conditions of work, benefit packages and health and safety programmes, record keeping, and public relations. In meeting the general objective of the undergraduate programme, "to concentrate training on general administrative and executive skills applicable to all businesses" due to the tendency for the "demand for specific skills ... to shift", the Department concentrated on personnel policy applicable within a wide range of organizations and specifically provided analysis of delegation of responsibility and supervisory practices in a personnel department.

In 1950-1 a course in Management Statistics was offered in response to the perceived need that business administrators required statistical skills for reporting purposes. For personnel managers, the course examined the area of per-
sonnel control. This included statistical factors in employee selection, predicting worker efficiency, and statistical appraisal of the effectiveness of job training.71 The statistical control of accidents, statistics in production planning, statistical appraisal of the effectiveness of advertising, and a variety of other topics covered in the course highlighted the scientific character of management and hence the predictability of business activity vis-a-vis production, spending, investment, and the scientific determination of profit.

Despite this scientific predictability in business, however, executives expressed the constant difficulty of engaging the "cooperation of the people." Human relations courses were developed in the M.B.A. programme to deal specifically with the "challenges of human behaviour." Human relations was viewed as a skill building course; the aim was to consciously develop, communicate, and teach behavioural skills as well as to help students cultivate their own personal skills. The course examined the communication process in superior-subordinate, staff-line relationships as well as between individuals, between individuals and groups, and between groups in an effort to facilitate understanding and cooperation among people and to provide insight into conflict resolution.72 The purpose was to substitute the individual's and group's values with those of the organization so that they "appear in their natural organic togetherness" and therefore "confound the achievements of effective administration."73
Thus, the goal of this course was similar to the general purpose and underlying framework of social science.

All graduate courses dealt with some aspect of managing employees. For example, Production stressed "human relations in the management labour field." Students were required to select electives from a list of various social science courses, including Sociology and Applied Psychology. In the graduate programme, the cultivation of effective human relations technique was emphasized. All courses were required to "give the student a 'feel' for administrative situations." Described as a "'human relations' course in a very real sense", it was expected that this programme would provide the student "with a greater capacity to work effectively with people in an organization." 

Administrative Practices was essentially aimed at developing appropriate attitudes in the student as a prerequisite to becoming "an effective member of a business organization." Such training was a necessary part of the socialization of businessmen. Justification for this training read:

The administrator must not only work with other people but must encourage and persuade them to work with him [sic] harmoniously and with each other towards a common goal. He [sic] has no manual or set of roles to guide him [sic] but must consider each situation by itself as it affects personalities and therefore the future effectiveness of each of the persons in his [sic] organization. The student is not expected to come out of the course with a set of general principles but rather with an understanding and appreciation of ethical values that will assist him [sic] in developing administrative skill. 76
The principles guiding the future executive were based on a model of industrial society characterized by harmonious social relationships and commonality of goals.

Once courses in personnel and general administration steeped in the principles of social science were well established as part of the business curriculum, a number of courses in industrial relations were offered. In Industrial Relations "prime emphasis is placed on the structure of labour-management relations and the human behavioural aspects of the labour problem" but the analysis was placed in the context of the broader political and economic factors affecting the situations. The specific issue of negotiating a contract was studied and principles were applied to various organizational settings from the shop floor to the "broader institutional relationships." 

In general, at Western the meaning of management was broadened to include skillful administration of public and private enterprises. Using principles of behaviourism, the school demonstrated the importance of proper administration of human relations policies and programmes to engage cooperation and loyalty for effective functioning. Hence, Western's School of Business Administration used the lessons of industrial social science to teach subtle techniques of management.
Preventing and curing social problems was a central theme in many of the business textbooks during the Human Relations Phase. Two specific problems—unemployment and the threat of socialism—were examined in some detail especially in books listed between 1925 and 1933. Unemployment, for example, was studied in a wide variety of textbooks with W.H. Beveridge's *Unemployment: A Problem of Industry* and P.H. Douglas and A. Director's *The Problem of Unemployment* as specific books on the subject. Analyses of socialism and its inappropriateness for the Western world were presented in books by O.D. Skelton, A.C. Pigou, T. Kirkup, W.E. Walling, and M. Hillquit. These books were required in courses examining the specific "problem" of socialism and in the context of a commerce curriculum designed to find solutions within the present socioeconomic framework. Thus, while books presenting both sides and analyses critical of capitalism also formed part of the students' reading materials, such works were important only as topics of academic discussion.

In presenting the formula for social harmony and industrial efficiency, the curriculum and reading materials started with scientific management and generalized these principles for use in various areas of the organization. The new human relations school represented a continuation of the scientific management approach. Directions and justification
were provided for the future manager to create an atmosphere of harmony and mutual agreement between employer and employee. Disharmonies were presented as unproductive for both management and labour and therefore were to be avoided. With the development of the human relations school, the key managerial issue of maintaining control was presented in a rather subtle and sophisticated fashion.

i) General Issues for Human Relations Managers

While a larger number of courses were available and there was a greater range of reading materials required, "classics" and "modern classics", such as those listed in Chapter Five, still provided the basic reading materials for introductory and theoretical courses and overall constituted the major portion of readings at all universities. Beginning in the 1920's, students were introduced to a more broadly defined field of business and course textbooks were selected to reflect growing fields of specialization and the need for a wider range of background material. Gradually, theoretical works of famous social scientists such as Edward A. Ross, Franklin Giddings, Thorstein Veblen, and William McDougall, were required along with the classical economists' works as the importance of the social sciences was recognized.

The predominant feature of the business textbooks was the tendency to justify capitalism by presenting alternative
arrangements as largely fanatical visions of badly planned societies. Such arrangements would reportedly halt or reverse social progress and were thus seen as inappropriate. Often the assumption was made that capitalism represented progress and that it was therefore a predetermined stage of economic and social development. Works criticizing the "critics" of capitalism were more apparent as the threat of socialism, union organization, workers' activities, and the problems of unemployment, immigration, poverty, and race relations became more pronounced. While earlier works critical of socialism and social change aimed primarily to discredit the theories of Karl Marx, those listed during the 1920's and 1930's were generally concerned with workers' associations, cooperative societies, and labour unions.

Theories and theorists critical of capitalism were presented as unrealistic. In The Development of Economic Doctrine, Gray, for example, described Marx's work as characterized by "a good deal of unnecessary mystification." The authors' choice of descriptive words regarding socialism were often most poignant. Gray's, for example, read:

Marx remains and probably always will remain, one of the riddles of the nineteenth century. He set out to be 'scientific', to produce what the reviewers would call a cogent piece of reasoning; and undoubtedly, the whole system is extraordinarily closely knit together; the various points are admirably dove-tailed. Yet no system of thought has suffered such complete bankruptcy as the Marxian.
With this introduction Gray analyzed the "peculiarity of the Marxian demonstration." According to Gray, social events were determined by consciousness:

The far-fetched illustrations of the materialistic conception of history ... were at one time put forward ... in its original form the doctrine was untenable ... Man does not wholly or exclusively crawl on his belly; ... the action of mind on mind which, with its remoter consequences, is one of the greatest of all influences in the world, eludes economic explanations. The definition of class, "whatever a class may be" was also called to question. While most authors argued that inequalities were essential in order to motivate people to compete, they often denied the existence of class inequalities. Todd, for example, argued:

... Classes are just as normal and essential to social life as is the web to the spider. But the hitch occurs in declaring that any one type of class is any more persistent and dominant than any other. Another difficulty lies in the fact that classes are not watertight; they interpenetrate because a given individual is at one and the same time member of a dozen or a hundred classes, because he pursued a dozen or a hundred interests. This conception eliminated the possibility of the existence of class struggle and set the stage for a functional analysis of society. Moreover, according to Ross, "social grades exist not so much because some assume superiority as because others acknowledge such superiority." Class differences, just like wage differences, were argued to be beneficial to
society due to the competition they foster.

While the majority of textbooks\textsuperscript{91} were written in defense of capitalism, a number of books providing various "solutions" or more moderate positions were listed as required readings. Among these were Thorstein Veblen's *The Instinct of Workmanship*, *The Theory of the Leisure Class*, and *The Theory of Business Enterprise*, C.R. Fay's *Cooperation at Home and Abroad* and *Life and Labour in the Nineteenth Century*, G. D.H. Cole's *Self Government in Industry*, *Introduction to Trade Unionism*, and *The World of Labour*, J.R. Commons' *History of Labour in the U.S.* and *Labour and Administration*, N.S.B. Gras' *Introduction to Economic History*, and H.A. Logan's *Trade Union Organization in Canada*. Generally, the solutions proposed to problems of labour, unions, and social organization did not impose any radical transformation in the organization of the socioeconomic system. Rather, solutions were intended to create a more smoothly functioning system.\textsuperscript{92} Strikes were indicative not as evidence of class struggle but rather were disharmonies--expected products of industrialism.\textsuperscript{93} Employee interests, many of the "critics" maintained would be protected by the state. Cole suggested that "the state ... will step in and extend factory supervision by the prevention of unhealthy devices for speeding-up."\textsuperscript{94} Employers pursued their interests through scientific management and various "profit-earning devices", employees unionized, and the state was regarded as the paternal and neutral overseer.\textsuperscript{95}
recommended were employers' associations. Hence, the system was presented as providing its own checks and balances.

In general, course textbooks offered a functional analysis of modern industrial society. The social structure and its institutions were portrayed as a well-oiled machine, essentially free from serious opposition and subject only to "natural" minor disturbances. Sound organization was thus defined:

A sound organization structure creates an atmosphere in which both personal and group satisfactions may be realized, cooperation is encouraged, morale and the 'will to do' are substituted for detailed orders, and the group moves smoothly and resolutely toward its goal.

Organization was considered to be a product of consensus, thus guaranteeing satisfaction.

Sociologists and social psychologists strongly disputed Marx's claim that there is interaction between the individual and society. They argued essentially that society determines consciousness:

The function of society is to develop conscious life and to create human personality; to that end it now exists. It is conscious association with his fellows that develops man's moral nature.

The "moral nature" was concretely determined in an age of efficiency.

In modern industrial society, lessons in "morality" "must emanate from the machine." These lessons--"order, exactitude, persistence, conformity to untending law"--are
essential to progress and development. "Standards" according to Ross, are "the most important things in society." Standards contribute to the homeostatic condition of society and only in this condition can progress be achieved. Smooth functioning was guaranteed with proper management of individual performances, according to social standards.

Beginning in the 1920's students were repeatedly instructed on the contributions of social science to efficient organization. Social science was proving to employers, for example, that "definite relations exist between the health of workers and efficiency in production." Social science methodology was viewed as a panacea since it led in a "most direct path to the discovery of the law, the principles of explanation and the principles of regulation and progress." This creation of standards eliminated "cut throat competition of businessmen and manufacturers who either through lack of capital or lack of knowledge have not been able to standardize their methods" and protected employers from "rack-renting labour" and other such "devices."

Most of the authors clearly defined the use of social science for business. Gerstenberg argued that while social science was not a panacea, it was a method of reform "to be called into action to modify existing conditions." Therefore, "its true function must be to bring about the desirable ends of increased production and just distribution of the social income." Social science methodology had been proven effec-
tive. It was "comprehensive, thorough, and impartial investigation."\textsuperscript{107} For these reasons, Gerstenberg noted, "the social sciences, indeed, are generally regarded as the base upon which the business student must rear his [sic] specialized knowledge of the science of business \textit{per se}.\textsuperscript{108}

Both sociology and psychology were necessary for the modern business manager:

Sociology is indispensable for economics and economics is indispensable for sociology, if both are to attain the character of positive science. \textsuperscript{109}

Drawing from Giddings' earlier assertions, Gerstenberg specified sociology's use to businessmen:

Sociology is the science which treats of man's behaviour in groups. Sociology, like other social sciences, does not concern itself with providing a means of modifying human conduct. It is content to explain human content. \textsuperscript{110}

Properly conducted, sociological observation elevated business to the status of a science.

Providing the most direct appeal for businessmen was the science of psychology. Through psychology not only were the principles of behaviour established, but methods for attitude and behavioural change were made available. Tead and Metcalf define the uses of psychology:

Psychology is the science ... which supplies important clues as to what human well-being means ... The major objective which we seek is one of a new attitude toward the corporation, the management, and the job on the part of all members of the organization. Executives should appreciate that they are not getting full value
from workers until their attitude is one of willing enthusiasm and intelligent application. 111

Proper use of psychology by managers, students were instructed, was more effective than lowering wage rates for reducing overall labour costs. "Under proper direction a willing and efficient application to work is assured." 112

This definition of the use of psychology assumes that it is the right of management to control labour by whatever subtle means are necessary. It further suggests that with careful scientific observation, it is possible to discover means to maximize control. Some authors argued the necessity of first meeting human needs. 113 Many others warned that it was essential to gratify certain instincts to avoid "minor perversions of labour inefficiency, business breakdowns, dishonesty, violence." 114 Whatever the method, these analyses promoted a primarily static view of society and provided a rather simple explanation of behaviour in relation to industry and society. The purpose, however, was stated in the true spirit of social reform. According to Ellis:

Sociological observations and speculation, including economics, are intimately connected with the efforts of social reform to attain a broad, sound, and truly democratic basis. 115

Thus, management's purpose was clouded with an air of social beneficence.

The idea of the beneficence of management was presented in a variety of ways. Slichter simply stated:

Managements are constantly endeavoring to lower
the cost of production. But the costs which they are striving to reduce are money, not human, costs. 116

Sound management was defined simply as pursuing the profit motive while ensuring positive results for labour as well.117

Neutrality and fairness in the practice of management were attributed to the separation of ownership and control. Since modern managers were salaried employees rather than owners themselves, they would manage the operations with professional conduct. Adequate training through schools of commerce not only provided equality of opportunity to enter the management sphere but, more importantly, guaranteed proper moral conduct.118

Opening schools of business and commerce, however, was "not enough to bar out unworthy persons." It was necessary in Ross' words, "that the calling attract to itself men [sic] of good breeding and high spirit" and for this to be guaranteed the field of management was to adopt "the professional spirit." As a professional the business manager would learn to subordinate the "pursuit of gain ... to the aim of service" and provide only "one grade of work, namely, his [sic] best."119

Moreover, the salaried manager would:

... adopt an attitude of responsible concern for the needs and welfare of the business, and to govern his [sic] work accordingly.
... collective bargaining or strikes are beneath his [sic] dignity. 120

Specifically within the field of management the personnel director was to be most responsible for maintaining
overall and effective control of the workforce. The personnel department was described as "an outgrowth of Taylor's functional foreman who was in charge of discipline." Personnel work was said to be "very necessary" and when personnel devices "are used intelligently and in conjunction with other sound operating methods, they are very powerful aids for effective management." Personnel management was effective because it operated "to prevent friction by hiring men [sic] who are adapted to the work of the business and who by disposition are fitted to cooperate with the management" and by solving problems of inefficiency. Guided by ideas of social reform and beneficence and the goal of maximizing efficiency, the personnel department came to be viewed as a central focus of the organization. According to Tead and Metcalf:

> The department of personnel is indeed ... the department of personality. It is the department devised to assure that working and living come into real identity. Profoundly viewed, it is the department charged with the high duty of helping to restore and keep restored in all minds a right perspective on a basic purpose of economic effort and on the best ways and means of objectifying that purpose.

Engineering controls over access to and behaviour of employees, the personnel department was characterized as the department of social reform. By using the right techniques tested by social scientists, the personnel department minimized the risks involved in any corporate organization and set the tone of harmony and complacency in the employer-employee relation-
ii) The Human Relations Approach: Theoretical Perspectives

Although the works of Elton Mayo, the post-Taylor psychologists, and the Hawthorne experimenters were not used in the business schools as textbooks, the human relations approach was a prominent feature of the curriculum. As courses in personnel management, sociology, and psychology were popularized in the 1930's, the central tendency was to instruct students on how to maximize production efficiency through subtle means of cooptation. The students were introduced to methods of "softening" Taylor's techniques and promoting a harmonious work arrangement. It was viewed as the manager's job to promote and maintain the spirit of harmonious cooperation and to re-establish it when disharmonies developed. With its softer techniques and aura of peace and congruity, this approach was not subjected to critical evaluation as was scientific management. It thus became synonymous with the definition of management and the focus of management education.

Even the definition of personnel management fostered the image of harmonious relations and mutual benefit. According to Tead and Metcalf:

Personnel administration is the planning, supervision, direction, and coordination of those activities of an organization which contribute to realizing the defined purposes of that organization with a minimum of human effort and friction, with an animating spirit of cooperation,
and with proper regard for the genuine well-being of all means of the organization. 125

It was regarded as a general and natural phenomenon that power differentials must exist between employer and employees. As Atkins et al. wrote:

In the internal administration of a profit-making enterprise the businessman's position is that of a master. The very nature of the administrative process by which a group of people are brought together into an operating organization requires that someone commands and someone obeys. ... In a business enterprise the power to lead and to command is not only a function, but is also the legal right, of the businessman. 126

Furthermore, the manager was charged with concrete responsibilities of selecting personnel, subdividing tasks into job descriptions, writing detailed work specifications, but was always expected to "motivate people, learn to delegate responsibility, and ... encourage innovation and foster creativity." 127 Bethel, Atwater, Smith and Stackman argued that this approach "can go a long way toward preventing risks centering around the worker and his [sic] operations", 128 thus ensuring smooth functioning. In the task of promoting harmony, Tead and Metcalf compared the personnel administrator to the "morale officer in the army" whose responsibility was to foster "an animating spirit of friendliness and goodwill in which animosity cannot thrive." 129

Even with this preventive thrust, the primary task of management, regardless of the approach, was to maximize production efficiency. The lesson of human relations was
that this task was simplified by the use of psychology.

Hamilton and May, for example, note that:

Probably the problem of the use of labour will never be adequately solved by 'efficiency men' who seek to get the most out of the human stuff they handle.

Rather, they suggest:

It may be solved by the cooperation of labourers who are determined that the parts of themselves which they give to production shall be so used as to give them adequate returns. 130

Sociology and psychology generally taught "the sense of self" and thus indicated "how the self may be controlled, molded, colored, and adopted for human welfare and progress." For management the lessons, however, were more specific. As Marshall saw it, psychology had become the "handmaid of the new administration." 132

Among the most important lessons in psychology for the future manager were principles of group behaviour. Analyses in social dynamics of work groups were seen as necessary for successful management. 133 The first task of group psychology was "to establish the general principles of group life." Every group, McDougall warned, is "capable of becoming a psychological crowd and of enjoying collective life." 134 Lessons in group psychology were important for the employment manager, according to McDougall, since there was also a "strong tendency" toward the formation of occupational groups displaying many of the same characteristics--"a narrowness of outlook, a lack of stability and internal cohesion, and a tendency to ignore the
Sociologists and psychologists strongly agreed that "the social mind is a concrete thing" which seems to "dominate every individual will."  

It is the herd feeling which is the cementing agency responsible for labour solidarity; and it is because the tendency to impulsive and unthinking group action is strongest among those who feel that they most need protection that Taylor and his less discriminating followers of the early scientific movement were wrong in ignoring it or trying to break it down when it took the form of unionism.  

It was essential according to many of the business authors that the group will be carefully scrutinized. Within the organization this was to take the form of dispersing informal groups and forms of collective action through a variety of management means. Within the larger society more deliberate and concerted attempts were to be made to suppress "troublesome varieties of conduct."  

While the course textbooks demonstrated the worth and practicality of the human relations approach, the authors clearly recognized the value of scientific management. What was generally agreed upon was that Taylor's methods were harsh and not easily accepted by labour. Human relations transformed the technique of management, not its purpose nor substance. Although authors noted that scientific management had "failed", they were convinced that personnel administration as a solution to labour problems would be successful. As Watkins noted:
Personnel administration has been defined as the direction and coordination of human relations of any organization with a view to getting the maximum necessary production with a minimum of effort and friction, and with proper regard for the genuine well-being of workers. The new science of management, or human engineering in industry, is built on a full appreciation of the relationship that exists between maximum production on the one hand, and the satisfaction of basic instincts of self-preservation, self-expression, self-respect, loyalty, love of homemaking, worship, and play on the other. 140

The first task of any system of organization and management was to break down the group process and specifically destroy the old basis of craft production. 141 This, however, did not mean removing the worker's source of satisfaction. The authors suggested that "satisfaction" would be gained through a "good wage payment system" such as Gantt's task and bonus plan which "stressed the worker's individuality and pride of achievement." 142

The "danger" of scientific management was its tendency to remove "opportunities for the exercise of initiative" with the result that the "capacity for initiative may be destroyed, and the quality of the labouring force may in this way be subtly lowered." According to Pigou, "unless the State or philanthropy intervenes" to soften Taylor's techniques, the "more general interests of society" may be lost sight of. 143 Thus the human relations approach was more appropriately seen to address the general good.

The development of industrial social science and human
relations was seen as an integral part of a more general "prac-
tical social reform" movement and as "indispensable to the
progress of civilized social reform." Social reform was
a process to be planned or engineered. It was not a process
of development by chance. Tead and Metcalf, for example, note:

> It is being more and more appreciated by exe­
cutives that supervisory and directive work
which fosters a sense of esprit de corps does
not occur by chance. The building of a whole­some morale in any organization is a matter
of conscious planning and effort. 145

Within the larger society, this meant the development of
social learning principles and the elimination of influences
of "foreign" tendencies. Similar principles of socializa-
tion were to be applied to the internal organizational environ-
ment. Bethel, Atwater, Smith and Stackman argue that knowledge
of instincts, social behaviour and social sciences must be
used to "get results through people." Employing techniques
of industrial psychology, planning must be done covertly in
order to be most effective. 148

One of the most important tasks for management is to
develop within the worker a sense of loyalty to the organiza-
tion's purposes. While the company's primary purpose of
profit making would not "enlist the workers" successfully,
wages or incentives alone have also "shown ... to be psycho-
logically inadequate as a motivating and cohesive force."
The company must, according to Tead and Metcalf, "justif[y]
itself fundamentally by its service to society" to secure
"genuine adherence to its purpose." Developing and main-
taining loyalty, authors agreed, were essential for enhancing productivity and efficiency as well as for thwarting union organizing attempts. Rewards were essential for reliable workers.\textsuperscript{150} However, rewarding the industrious was not enough to ensure fine workmanship and loyalty. At all times it may be necessary, instructed Pigou, to employ "the weapon of instant dismissal" especially "among the rougher class of unskilled" workers.\textsuperscript{151} Instilling the fear of punishment in the worker was, however, a delicate task. McDougall warns that it is important not to stimulate "an angry resentment" but rather to satisfy "the impulse of submission."\textsuperscript{152}

Various disciplinary procedures were outlined for different types of workers. Ross pointed out that more intelligent workers required less severe methods of social control. These workers he instructed "must be reached through esprit de corps or conscience."\textsuperscript{153} Creating an esprit de corps is an essential disciplining technique but it is also the raison d'etre of the personnel department.\textsuperscript{154} Bethel, Atwater, Smith and Stackman provide concrete justification for the concern with harmonious relations:

When workers are happy, obey the rules, and want to work, output is high; when workers are grumpy, resentful and suspicious of management, output is low no matter what the product or what the wage.\textsuperscript{155}

Fostering happiness in the workplace, according to Daugherty, may solve the labour problem since unhappiness or disharmony may simply be attributed to lack of adjustment:
It arises from a lack of adjustment among the individuals or groups of individuals who are thrown together in the economic process or from a lack of adjustment of the individual to the process itself. 156

Making these adjustments may be costly. However, as Ross notes, "science is providing precise means of making them and the results in greater efficiency, good will and happiness prove that they are worth all they cost." 157

Improperly executed efforts of management to build morale may have a "worse effect" than if no efforts at all were made. Bethel, Atwater, Smith and Stackman warn of common mistakes by management in such efforts in fostering paternalism or using inappropriate, ill-adapted "canned programmes." Both tendencies may have "disasterous" effects. 158 Harmonious relations may be guaranteed by capitalizing on the key motivating factors for the particular workforce:

A recognition of responsibility with full knowledge on the part of the recipient that he [sic] has concurrent authority, is a strong motivating force. ... This recognition of interdependence within the organization fosters a spirit of cooperation, which characterizes a group possessing a high degree of morale. 159

Happiness and cooperation among workers contribute to the smooth functioning of the organization and the ultimate attainment of its goals.

Although the spirit of harmony and cooperation was to be maintained within the workplace, it was often suggested that competition among workers be maintained to "stimulate" quality work. 160 According to the business literature, the
important way in which to elicit quality work was to rely on scientific techniques of selection and job placement and correctly fit the right worker to the right job.¹⁶¹

For proper scientific selection and placement, scientific experts may be employed. According to Ross, "the difficulty of getting the round peg into the round hole and the square peg into the square hole is so great that some organizations, in adding to their personnel, call in the experimental psychologist or the character expert."¹⁶² Benefits of fitting the right worker to job far outweighed any costs involved. The authors detailed these benefits—the reduction of "skill required of the workers", cost saving, efficiency, increased morale, lower turnover, increased loyalty by "rectifying maladjustments", detection of defects (especially in immigrants) through the use of mental tests, and the elimination of favoritism in hiring and job placement.¹⁶³ If scientific placement techniques were used along with the human relations approach to management, Tead and Metcalf promised, "the conditions of basic efficiency and contentment will have been developed to a new and unprecedented degree."¹⁶⁴

The business textbook authors cautioned readers that the process of scientific selection and adjusting workers to their jobs was both difficult and ongoing. For example, Tead and Metcalf wrote of the "unfortunate" environmental influences on manual workers whom they said have been "unconsciously warped and stultified by a childhood spent under the repres-
sive influence either of the slums of our larger cities or of our desolate mine and mill company towns." That these people may respond with disinterest to their jobs, Tead and Metcalf attribute to their "subnormal" or "abnormal conditioning process." For managers the lesson was clear:

People endowed with an average amount of emotional and intellectual energy do want to be interested in what they do; and the practical problem is to release this energy by discovering or creating in the work and in the work relationship some appeal which will catch the attention and then hold it by the strength of the interest aroused. 165

Arousing interest may require the elimination of monotony in work but it most often would require a degree of cooptation.

According to Gerstenberg, bonuses often serve to:

... secure the workman's good-will, so that he [sic] will bring to this task not only diligence and intelligence, but also a certain elan, in the spirit of which he [sic] will feel himself [sic] to be not merely an employee but a part of the business itself. 166

Even when the management techniques necessitated further costs, it was clearly demonstrated that such means would certainly justify the ends.

iii) Justifying the Human Relations Approach: Proper Management as Panacea

Throughout the business literature there was an attempt to justify the need for management. The need for management was related to workers' inability to practise self restraint and social control. Gerstenberg argued:
However intelligent and however conscientious a workman may be, it is impossible for him [sic] to develop the best methods of working. Instinct will not avail; reason and judgment cannot even approximate perfection. 167

The existence of management would remind workers of their proper roles. Under "modern" conditions since the managerial task was a professional one, and the manager was a salaried employee as well, methods of dealing with employees were "humane." 168 Management activities, the business authors promised, not only improved the organization of labour but moreover, promised "a transformed society" and a degree of social progress. 169

If management principles were properly employed using techniques of the behavioural sciences, disharmonies within the workplace as well as in society at large would gradually disappear. "Labour problems" were not regarded as instances of class antagonism but rather were attributed to a simple breakdown in the mutually agreed upon situation between employer and employee. In Daugherty's words:

Labour problems ... arise because of the failure of employers and employees to agree over their respective shares of the product of industry. 170

Disharmonies of this nature were attributed largely to the "maladjusted" worker. Maladjustment was caused either by the failure of the individual to adapt properly to the system or by the breakdown of the system itself and its mechanisms of socialization. 171

The major responsibility of management was discipline.
That this task would occupy the greatest proportion of the manager's time was not, according to the authors, related to the nature of the worker's job as dull, repetitive, and monotonous, therefore requiring a regular reminder to maintain a constant speed. Instead it was assumed that workers had inherent weaknesses, thus requiring constant disciplining. This was clear in examining statements on unemployment, immigration, strikes, unionizing activities, and movements for social change. Such "social maladjustment" was regarded as even "more difficult" and bewildering in the case of immigrants. 172 Solutions were sought through behavioural modification, adaptation, naturalization, socialization, and cooperation. 173

With respect to unionizing and workers' activities, Hoxie set out a clear task for management:

The ultimate problem which the student of unionism is fitting himself [sic] to solve is evidently that of control—what ought to and can be done to control unionism in the interest of social welfare and of the purposes and welfare of each individual. 174

Reports on the destructive nature of strikes, 175 and sympathetic strikes 176 for the community and for labour itself 177 were numerous. Even more "destructive", however, according to the reports, were the unions and the "means used in prosecuting their ends"—hostility to strike-breakers, persecution, belligerent picketing, bodily violence, and injury to property. 178 Unions were regarded as unfair in their practices. The idea of union organization destroyed the ultimate purpose of most
work organizations in maintaining harmonious relations between employer and employee and introduced an "unnecessary" element of antagonism.179 Most of the authors openly criticized union activities. Unions were said to hurt consumers by raising wages by "deliberately" restricting output, to lower overall quality of workmanship by keeping unfit workmen in their jobs,180 and to prejudice workers on non-industrial as well as industrial matters.181

Moreover the labour movement was discredited by several authors in an attack on union leadership. Union leaders were characterized as corrupt, and often using tactics such as bribery to force satisfactory arrangements.182 Furthermore, it was argued that labour leaders were unclear about the goals of the labour movement and this contributed to further distrust and criticism from "a substantial number of citizens who oppose not only particular aims of organized labour, but also the basic idea that wage workers should band themselves together to promote their group interests."183

Unions were often regarded as social problems or as disharmonious elements in a generally harmonious social organization. Viewed as such, several solutions were proposed. Catlin argued that unions should be met "head on" and forced to acquire business methods.184 Fitch argued that employers are "not necessarily hostile to unions."185 Askwith warned employers not to continue to neglect youth but to aim to improve their life chances and develop better understanding
and in this way, "class hatred" will be eliminated.\textsuperscript{186} Clear and carefully set job standards solved the problem for Spriegel and Lansburgh\textsuperscript{187} while Atkins et al. argued that instilling fear of discharge or discrimination treatment discourages unionizing.\textsuperscript{188} Slichter clarified the prerequisites of unionism and instructed future managers on how to avoid these situations:

\begin{quote}
... unions [are unlikely] to develop among wage earners who have a good chance of becoming independent business men. As long as this chance exists, the wage earner is interested in getting ahead as an individual. Only when he [sic] sees little or no prospect of rising out of his [sic] class, does he [sic] feel that his [sic] welfare depends upon the welfare of the class and does he [sic] become interested in organizations for improving the conditions of the class.\textsuperscript{189}
\end{quote}

The most serious problem was the logical extension of the labour movement into action for social change and the development of socialism. Socialism was regarded as a "malady" of society—as a "deep seated social disease."\textsuperscript{190} According to Kirkup, "socialistic speculation":

\begin{quote}
... tended not to reform and humanize, but to subvert the family, on the soundness of which social health above all things depends.\textsuperscript{191}
\end{quote}

Tendencies toward socialism were caused, Ellwood suggested, by the "breakdown of social habit" and revolutions are "disturbances in the social order due to the sudden breakdown of social habits under conditions which make difficult the reconstruction of those habits."\textsuperscript{192}

Cooperation and a division of labour were fundamental,
indisputable requirements of the modern social order. Friction was an unintended consequence of an essentially cooperative effort. For cooperation to be assured, a measure of social control or social motivation was required. As Ross saw it:

Nearly every community has its blockheads who 'see no use' in joint efforts which the intelligent know are vital to the common safety or welfare, its slackers who hang back because they count on the rest going ahead. Hence, cooperation for common ends a little dim or remote cannot be effected without some compulsion.

While cooperation was elicited through various managerial techniques noted by Gerstenberg, it was guaranteed through the state. On this point, Giddings wrote: "The primary purpose of the state is to perfect social integration." This role of the state, Ross warned, was not to be regarded as a coercive function. The state, he wrote, "is thought of as an agency for promoting the happiness of the people."

The most fundamental lesson for management was the need to elicit cooperation with minimal or "invisible" managerial control. As long as workers were given enough accurate information about wage payments, methods of compensation and job requirements, management could then work to secure interest, loyalty, and "enthusiastic cooperation" from employees. Tead and Metcalf suggested that its first "duty" in this was to create "regularization consciousness." However, the most essential task for the modern manager was to elicit cooperation from the worker anonymously. For this, Tead and
Metcalf said the emphasis must shift "from authority to responsibility." The ultimate form of modern management relied on principles of the social sciences to move from overt to covert forms of social cooperation. In this form the management process was more acceptable and hence it would prove to be a possible panacea.

iv) Human Relations: Techniques and Experiences

The pragmatic character of the business curriculum was largely reflected in the teaching style used by the universities. Students were provided with as many practical experiences as possible through factory inspection trips, observations, direct experience, and the case method approach to teaching. The readings were also characterized by pragmatism—offering direct suggestions on how to manage, how to carry out interviews or other aspects of employee selection, and how to increase productivity. These directions were issued from the point of view of maintaining harmony and cooperation within the organization. It was the manager's role to quiet the dysfunctioning elements and maintain efficient production levels.

A variety of carefully planned personnel procedures was prerequisite to industrial peace and harmony. The business authors agreed that management was no longer a haphazard function, but rather it was a scientifically organized department within the organization. Ross attributed the need for
a more deliberate personnel plan to the growing sophistication of workers who "can read and write, have votes, unions, rising standards of living, and ambitions for their children." As a result, he suggests:

Industrial democracy is as out-of-date as a hauberk. The time is ripe for limited constitutional monarchy in the factory. Yet owners who inherit their ideas of property from the handicraft stage imagine that their autocratic control rests on Divine right. 200

The most effective modern management was to carry out its functions covertly through the workers themselves. Watkins thus points out:

Self-imposed discipline is more effective than discipline imposed from above. If the workers make or help to make shop rules, ... an extremely efficient administration of these matters is likely to result. 201

If the manager is successful in "directing change in workers", there will result "constant worker improvement: increased ability of workers, greater physical stamina, greater skill, better mental attitude, and improved mental stability." 202

The process of managing using lessons from the industrial social sciences eliminated the "mistake of overemphasizing objective, material facts to the almost total exclusion of human considerations involved in the performance of the task." This was the gravest mistake of the "old scientific management." 203 The new procedures were to begin by promoting a sense of well-being in the employment relationship from the beginning. Thus, business students were cautioned not to dismiss too lightly the importance of such matters as providing
a comfortable, attractive office for the personnel manager for purposes of employee selection and confidential interviewing.204

Practices of the human relations manager were characterized by paternalism, beneficence, and harmony. All aspects of the personnel function were to be carried out in this manner. Even the most historically contentious point in negotiations between management and labour--determination of wages--was to be considered in the spirit of continuing cooperation.205 If management took the time to voluntarily adjust wages, Watkins suggested, it would strengthen "the workers' faith in the watchfulness of the management over the conditions that affect their interests, and demonstrate ... the fact that it is possible to settle grievances in an amicable manner."206 While this sometimes required a rise in wages in absolute terms in the short run, over time, the returns for the employer in both increased productivity and discipline were well worth the risks of the investment.

The human relations approach incorporated a concern for the individual workman into a scientific framework of personnel opportunities--opportunities for advancement,207 the feeling of belonging to a team through team work and group payment plans,208 and the satisfaction of a fair payment for a job well done. Management practices were to be guided by fairness and a scientific exactness. One method suggested was that of merit rating--a method beneficial for the company
and apparently as well as for the worker. Modern personnel practices, Ross suggests, relied on more imaginative personnel managers:

Incentive has to be carefully considered. The appeal to fear is the first recourse of the dull, unimaginative manager. ... Graduated reward lures one to do his [sic] utmost. 210

Thus, the art of management in the "modern" sense was based on subtlety.

Lessons on speed of work, lighting, atmosphere, fatigue, and hours of labour were drawn directly from the Hawthorne and other industrial social science experiments. According to Commons:

The psychology of the workman is analyzed and experimented upon as accurately as the chemistry for the different kinds of coal. ... Workmen now can be compared with each other and metered up like dynamos. 211

Accurate industrial experimentation, the authors instructed, proved the importance of adequate lighting, heating and ventilation for increased productivity and improved morale. 212 Jones, for example, translated this "accuracy" into dollars and cents savings:

If a workman loses 10 per cent of his [sic] efficiency during working hours because of poor light, the wage loss would keep six lamps going during the entire day. 213

Further lessons were learned from fatigue studies.

... it is the later hours that burden the labourer and test his [sic] willingness to continue in the shop. He [sic] may work for two hours with pleasure, for four with cheerfulness,
for eight with submission, and for ten with incipient rebellion. 214

While it was important to bear in mind the "disasterous" effects of fatigue, however, Folts argued, with proper supervision, problems of overtime, shift work, or from other changes introduced in the hours of work may be overcome. 215

Securing cooperation and loyalty to the organization's goals was the most difficult challenge for the modern manager. This task required sophisticated techniques designed to coopt the worker into agreement with managerial practices. One of the most popular schemes designed to secure loyalty was profit sharing. It was often viewed as a panacea for labour problems. 216 The advantages of profit sharing were clearly outlined--increased industrial efficiency, reduction of labour turnover, elimination of disputes and strikes, encouragement of thrift, wise use of time and materials, and the development of a sense of loyalty. 217 Along with these tangible results, profit sharing promoted the sense of cooperation and harmony managers had long worked for. According to Taussig:

Profit sharing is a device for binding together the employer and the employees engaged in a given enterprise. Trade-unionism looks to a horizontal division: all the employees in a trade, scattered in various establishments, are to be united in common action against all the employers. Profit sharing looks to a vertical division; the employer and the employees of the single establishment are to be united, working together for the common welfare of their compact group, sharing the gains and perhaps the losses. ... Those employers who enter on
profit sharing are averse to participation by their workmen in trade-unions and indeed sometimes adopt profit sharing with the design of counteracting the union movement. 218

Furthermore, Furniss notes, profit sharing and other such policies represent management's understanding of the labour problem and its willingness to adjust to "the social forces which have produced the labour problem." From this point of view, then it could work to "counteract the effects of these forces." 219

Instituting plans of stock ownership, profit sharing, shop committees, or industrial democracy were to be undertaken with "extreme caution." According to Tead and Metcalf, "all such methods of supplementary reward as profit sharing and employee stock ownership are not the first, most immediate, or most direct phases of a personnel policy which should be inaugurated." Warning readers that these techniques are not a panacea for "indifferent workmanship, uncooperative employee attitudes, or sluggish morale", Tead and Metcalf argue that such techniques are but "a safety valve and.... tangible evidence of management's good faith." 220 While industrial democracy, fair grievance procedures and other avenues of limited "control" for the worker were necessary to lessen the impact of some of the more fundamental labour problems—soldiering, trade unionism, efficiency, and morale, 221 more importantly, encouraging suggestions from below not only produced tangible results in terms of production efficiency, but created an
image of good will for the organization. 222

Rather than risking the possible dangers of industrial democracy and workers' control, a safer way to secure employees to the needs and goals of the organization was said to be through company sponsored welfare and social insurance programmes. Along with data presented on long term cost savings through such schemes, 223 on the suppression of strikes, 224 and on the increased manageability of the worker, 225 Commons and Andrews point out that:

... by means of an insurance programme, there is consciously promoted a system of individual care aimed at the scientific promotion of the worker's efficiency. 226

The programmes, of course, were expected to be designed for the "deserving" members and not for those "parasitic classes" who would quickly exhaust the system and create a "ruinous increase of burden on the better classes." 227

Welfare schemes were thus described as ways of rewarding deserving workers. The schemes were profitable but required a degree of management education:

... the large majority of employers and their officers are still apt to keep philanthropy and business in different compartments of their minds. ... care for employees ... is commercially profitable. 228

The schemes removed important psychological barriers to adequate work performance. In Tead and Metcalf's words: "the removal of the workers' fear and anxiety over possible exposure to ... hazards is a wise business procedure." 229
important point was to strike a delicate balance between the employee's feeling of security and fear of disciplinary action. The good manager would work to remove the employee's most serious source of anxiety while leaving intact the incentives to efficient work performance. With too much at risk, the employee would have no option but to obey.

Much of managerial theory and practice addressed the issue of fear. While some argued that a degree of punishment and fear of it were required for motivation, discipline, however, was not to be carried out "unintelligently" because it may affect shop morale. The most effective discipline was described as "quality supervision":

Better than all mechanical devices, incentive payment methods, and all the other innovations as an aid to stimulating output was found to be the kindly, considerate, personally helpful quality of the supervision. The foreman's leadership and training abilities were clearly the most significant factor in the working success of the group.

Using principles of behaviourism, the "quality" supervisor worked to shape work performance to meet pre-determined production goals and acceptable levels of employee misdemeanors. Through human relations and industrial social science, management had been transformed from a technical task to a complex method of discipline.

Industrial Social Science and the Business Curriculum: Entertaining the Prospect of "Happiness"

As industrial social science was developed, academics
were searching for a more general focus for the business curriculum. With the incorporation of scientific management, business education and the practice of management were regarded as respectable. The scientific procedure promised solutions to industrial problems. With the development of human relations approach, management and management education claimed to address the question of social responsibility. Not only did this create a more favourable impression for the business curriculum, but it also raised the general profile of the university in its claim to meet the needs of the wider society. Based on the underlying premise of the social sciences, the approach assumed that under the apparent confusion of any social situation, lay a stable and harmonious social order. The task of human relations managers was to re-establish this stability and re-create "social happiness."

This general promise of social science became in fact, the specific promise of business education and the managerial profession. While this did not negate earlier work in promoting scientific management and efficiency engineering, it was regarded more favourably due to its use of "softer" techniques of management. Hence, Canadian managers and academics maintained the promise of social harmony through an agreeable package of cooperation and efficiency at the workplace and in society at large.

The next chapter will study further modifications to the business curriculum with the introduction of specific orga-
nizational theories, forms of administration, and profiles of required leadership characteristics.
Footnotes


9 Edward A. Ross, The Outlines of Sociology, (New York: The Century Co., 1923), pp. 195-6. Note that this volume was used as a textbook in the business curriculum during the period under study. Reference will be made to this work in a subsequent section of textbook analysis.


12 Tead, op. cit., p. 149.


20 Queen's University, Calendar of the Faculty of Arts, 1914-15, (Kingston, 1914), p. 133. Queen's University will be referred to as Q.U. from here on.


22 Q.U., Calendar of the Faculty of Arts, 1926-27, (Kingston, 1926).


24 Ibid., p. 21.

25 Q.U., Calendar of the Faculty of Arts, 1921-22, (Kingston, 1921), pp. 115-6.

26 Ibid., p. 113.
27 Q.U., Calendar of the Faculty of Arts, 1928-29, (Kingston, 1928), p. 22.


29 Q.U., Calendar of the Faculty of Arts, 1946-47, (Kingston, 1946).

30 Q.U., School of Commerce and Administration Calendar, 1957-58, (Kingston, 1957), p. 34.

31 Q.U., Calendar of the Faculty of Applied Science, 1932-33, (Kingston: Hanson & Edgar, 1932).


34 Q.U., Calendar of the Faculty of Arts, 1941-42, (Kingston, 1941).

35 Q.U., Calendar of the Faculty of Arts, 1945-46, (Kingston, 1945).

36 McM.U., Calendar of the Faculty of Arts and Science, 1942-43, (Hamilton, 1942), p. 95.


40 McM.U., "Courses in Personnel Administration, 1942-43", (Hamilton: Department of University Extension, 1942).


47 President's Report, 1956-57, op. cit., p. 50.

48 University of Toronto, Calendar of the University of Toronto, 1906-07, (Toronto: University of Toronto Press, 1906), pp. 144-5. University of Toronto will be referred to as U. of T. from here on.


These were all Master's level psychology courses.


53 Ibid.

54 Ibid.


Topics covered by Industry and Human Welfare included: work and working conditions, wage system, unemployment, industrial accident and disease; woman and child labour; overstrain; superannuation, monotony; industrial and social status of workers, and group efforts to improve conditions.


61 See, for example, Sidney Smith's statement, Financial Post, 44, May 20, 1950, p. 8.

62 University of Western Ontario, Calendar of the Arts, 1905-06, (London, 1905), p. 22. University of Western Ontario will be referred to as U.W.O. from here on.


69 U.W.O., Calendar of the U.W.O., 1945-46, (London, 1945), p. 38. Reference will subsequently be made to this course and Clarence Fraser's teaching activities at Western.


71 Ibid., p. 40.


77 U.W.O. Calendar, 1950-51, op. cit., p. 44.
81 See, for example, Edward Aveling, The Student's Marx, (London: Swan Sonnenschein & Co., 1892) and A.D. Lindsay, Karl Marx's Capital, (London: Oxford University Press, 1925).
83 Ibid., p. 326.
84 Ibid., p. 311.
88 Todd, op. cit., p. 230.
89 See for example, Kirkup, op. cit., p. 155. On this point, Cannan wrote: "Why does one worker get more and another less than the average? The chief cause of difference is obviously the difference in industry and capacity." Edwin Cannan, A History of the Theories of Production and Distribution in English Political Eco-


91 Estimated at over 88% of the sample under study.


93 Ross, op. cit., p. 159.


100 Giddings, op. cit., pp. 420-1; also Ginsberg, op. cit., p. 93.


102 Ross, op. cit., p. 382.


121 Lansburgh and Spriegel, *op. cit.*, 6.6; also Gerstenberg, *op. cit.*, p. 324.
122 Folts, op. cit., p. 462.
123 Blum, op. cit., p. 413, 415-6.
124 Tead and Metcalf, op. cit., p. 33.
125 Ibid., p. 2.
126 Atkins et al., op. cit., p. 69.
127 Folts, op. cit., pp. 24-6.
129 Tead and Metcalf, op. cit., p. 10.
130 Hamilton and May, op. cit., p. 50.
131 Todd, op. cit., p. 9.
133 Folts, op. cit., pp. 462-3.
135 Ibid., p. 131 & p. 64.
136 Giddings, op. cit., p. 134.
137 Douglas, Hitchcock, and Atkins, op. cit., p. 35.
138 Ross, op. cit., p. 299.
139 Bethel, Atwater, Smith, and Stackman, op. cit., p. 366. See also Gerstenberg, op. cit., p. 266. Bethel et al. praised the work of the Gilbreths who measured work units in winks—a measure of 1/2000 of a minute. (p. 35)
140 Watkins, op. cit., p. 477. These notions were supported by captains of industry. In J.D. Rockefeller Jr.'s words: "'The time is rapidly coming when the important qualifications for [chief executive] positions will be a man's ability to deal successfully and amicably with labor.'"
141 Gerstenberg, op. cit., p. 67.
142 Bethel, Atwater, Smith and Stackman, op. cit., p. 507. See also Gerstenberg, Ibid., p. 207.

143 Pigou, op. cit., p. 212.

144 Ellis, op. cit., pp. 10-1.

145 Tead and Metcalf, op. cit., p. 37.


147 Bethel, Atwater, Smith and Stackman, op. cit., p. 455.

148 Keezer, Cutler, and Garfield describe Henry Ford's success with managerial technique: "A man can't do much harm in the Ford plant, because Henry Ford prides himself that his system of production is fool proof, which means that a fool can do the job about as well as a better man, and he can't do any harm by quitting, because there are five men waiting to grab his job. ... The speed of ... [the] conveyors is not constant. If all the departments of the plant are working smoothly, and an increase in production is desired, their speed is slightly increased at the beginning of the day, unknown to the men, who at the end of the day are aware only of being a little more tired than usual." D.M. Keezer, A.T. Cutler, and F.R. Garfield, Problem Economics, (New York: Harper & Bros., 1928), pp. 63-4.

149 Tead and Metcalf, op. cit., p. 9.


152 McDougall, 1926, op. cit., p. 171.

153 Ross, op. cit., pp. 194-5. See also Bethel, Atwater, Smith and Stackman, op. cit., p. 461.

154 Lansburgh and Spriegel, op. cit., 4.1. See also Ginsberg, op. cit., p. 72.

155 Bethel, Atwater, Smith and Stackman, op. cit., p. 452.

157 Ross, op. cit., p. 446.


159 Lansburgh and Spriegel, op. cit., 6.5.

160 Ross, op. cit., p. 132; also p. 151, 147. Lansburgh and Spriegel, 10.11.

161 Blum, op. cit., p. 413. Also, Hamilton and May, op. cit., p. 53; Cannan, 1922, op. cit., p. 48; Folts, op. cit., p. 83; Gerstenberg, op. cit., p. 308, 239-40; Ross, op. cit., pp. 445-6.

162 Ross, Ibid., p. 200.


164 Tead and Metcalf, op. cit., p. 80.

165 Ibid., p. 185.

166 Gerstenberg, op. cit., p. 287.

167 Ibid., p. 308. See also Cassel, op. cit., p. 360.

168 Tead and Metcalf, op. cit., p. 2.


170 Daugherty, op. cit., p. 4.


173 Beveridge, op. cit., pp. 137-8; Ross, op. cit., p. 177; Fairchild, Ibid., p. 429 and pp. 221-2; and Hamilton, op. cit., p. 544.

175 Pigou, op. cit., p. 411.


177 Atkins et al., op. cit., p. 632.


179 Atkins et al., op. cit., pp. 585-6 describes unions as possibly un-American, incipient organizations with radical leaders trying to subvert American institutions.


181 Hamilton, op. cit., p. 651.

182 Atkins et al., op. cit., p. 592 and p. 604. The authors argue, for example, that: "Workers are attracted to unions because in the union halls there are dances, socials, or free beer." (pp. 584-5)


184 Catlin, op. cit., p. 449.


186 Askwith, op. cit., p. 69.

187 Lansburgh and Spriegel, op. cit., 18.1.

188 Atkins et al., op. cit., p. 587.

189 Slichter, op. cit., pp. 177-8. See also Blum, op. cit., pp. 361-2. Jones notes: "If the leader has himself risen from the ranks, the operatives will enjoy telling of his work as a messenger boy or a blacksmith's helper. These stories increase faith that the management understands their point of view." op. cit., p. 217.

190 Kirkup, op. cit., p. 2.

191 Ibid., pp. 405-6.

192 Ellwood, op. cit., p. 167 and pp. 164-5.


195 Ross, Ibid., p. 185. Also Gerstenberg, op. cit., pp. 342-3; Todd, op. cit., p. 182.

196 Gerstenberg, Ibid., p. 240.

197 Giddings, op. cit., p. 178.

198 Ross, op. cit., p. 312. He further wrote that the state preserves and defends each "citizen's individuality" and therefore performs a liberalizing function.


200 Ross, op. cit., p. 365.

201 Watkins, op. cit., p. 463.

202 Folts, op. cit., p. 359.


204 Ibid., pp. 478-9.

205 Tead and Metcalf, op. cit., p. 300.

206 Watkins, op. cit., p. 52.

207 Ross, op. cit., p. 200.

208 Folts, op. cit., p. 391.

209 Bethel, Atwater, Smith and Stackman, op. cit., p. 529.

210 Ross, op. cit., p. 201.


213 Jones, op. cit., p. 110.


216 Adams and Sumner, op. cit., p. 333.


221 Furniss, op. cit., p. 357; Bethel, Atwater, Smith and Stackman, op. cit., p. 475.


224 Commons, 1966, op. cit., p. 299.


228 Marshall, op. cit., p. 354.

229 Tead and Metcalf, op. cit., p. 334; also see Hamilton, op. cit., p. 557.


231 Folts, op. cit., p. 570.
Industry needs men of administrative ability and the universities have the educational framework to produce them. In partnership, they have the resources not only to develop our potentialities in Canada to the full, but to create a society where these potentialities are best administered for the good of all. 1

As management education and practice embraced the findings of social scientists and considered more efficient means of enhancing cooperation at the worksite, organization theorists discussed the nature and structure of modern organizations and unilaterally defined a theory of complex organizations. Earlier social scientists and human relations experts considered various means of developing workers' obedience and maintaining industrial peace through the development of cooptation devices. While maintaining the theme of cooperation and efficiency, organization theorists during the 1940's and 1950's presented a more general theory of modern
complex bureaucratic structures as a context within which worker characteristics and appropriate leadership styles were to be practised.

With the more comprehensive analysis of organizations, theories of management were refined. Following from earlier studies demonstrating the importance of selecting the right worker for the right job, emphasis was now placed on the psychology of organizations and management and desirable personality traits for managers and leaders. Such study was increasingly important as the profession of management was more clearly defined. In this process schools of business administration were charged with the duty of selecting capable future managers who acquired appropriate personality characteristics and generally adhered to the functional theory of organizations.

This chapter studies the conception of organizations and management presented in the business curriculum during the Structural Functionalist Phase. While a theoretical analysis of organizations and management formed the basis of all management curricula, specific studies of organization goals, leadership characteristics, and executive responsibility will be analyzed in an attempt to demonstrate the practical application of the general theory. Analysis of the curricula and course textbooks will be presented.
In their task of rectifying social problems, social scientists and reformers were aided by structural-functionalist sociology. Drawing on the Durkheimian conception of the organic nature of modern society, this sociology was mainly concerned with social order and equilibrium. Once again, the sentiment was echoed that under a perhaps confused surface of events lay the foundation of a smoothly functioning social structure. Moreover, the promise of social science—to solve society's social problems—was once again renewed.

Structural-functionalism acted as a positive force in mending the negative image of social institutions by positing their harmonious coexistence. According to Talcott Parsons, who is credited as being the father of structural functionalism in North America, the formal organization is an important part of the social system which he characterized as a large, systematic whole, the constituent parts of which are interconnected, bureaucratically arranged organizations expressing similarity in their end goals. Technological advances have necessitated an increasingly elaborate division of labour which in turn has required an "increasingly elaborate organization." This model seemed to imply that a formalized bureaucratic structure was an inevitable result of technological progress and therefore a regular feature of modern industrial society.
In this respect the analysis assumed the inevitability of the "iron cage." 4

Structural-functionalist sociology provided a framework within which the sociology of organizations and theories of management were developed. It explained how society functions in its "natural" state, located sources of disruptions, and through its logical, matter-of-fact presentation, offered solutions for disruptions and problematic behaviour. What structural functionalism offered was the promise of stability. While social scientists during the Human Relations Phase offered stability at the workplace, these later sociologists provided insight into the context in which harmonious work relations were to be re-established.

Parsons' form of "grand theory" provided a general explanation of the context within which particular organizational dysfunctions occurred. However, it was much too global to provide insights into any specific organizational problem or to allow for comparative analyses of organizational structures. To overcome problems of over-generalization, Robert King Merton developed his own version of functional analysis, the "theories of the middle range." Merton explained that earlier "machine theory" as it was called 5 was inadequate in its failure to account for dysfunctional and unanticipated or latent consequences of bureaucratic functioning. This would potentially have devastating consequences for the organization if unchecked, since participants' energies may be
directed away from the achievement of specified goals. Merton asserted that the bureaucratic structure determines the bureaucratic personality and cautioned that one may become overzealous in promoting organizational rules. Further, an esprit de corps, an "unanticipated consequence" may develop among organization members. Displaced loyalty from the organization or employer to co-workers may create a gap between employer and employees and moreover, may invite employees to adopt critical attitudes and potentially destructive behaviours. Merton, therefore, specified the importance of locating "sources of imbalance" or "dysfunctions" within an organization. The sociologist's purpose then is to re-establish or maintain intra-organizational balance.

Merton's work influenced the development of organization theory and hence the curriculum of business administration programmes, especially during the 1950's and 1960's. Merton's sociology and his criticism of Weber's concern with rationality was derived from the industrial sociology of the 1930's. As a reaction against the Weberians who viewed organizations as rationally arranged, efficient structures designed for specific purposes, the human relations school protested against this harsh approach. Krupp notes, in fact, that the research at Hawthorne sought theorems and policies of the "middle range." Elton Mayo apparently distrusted "grand theory." The human relations school examined work relations with respect to a conception of the organization as a whole, although it
stressed the study of workers and their psychology and solutions for problem behaviour. Earlier notions stressed the practice of good management through efficiency and engineering principles. The latter approach examined a behavioural framework for order, structure, and design. This theory assumed that disorder and "disease" were located wherever organizational goals were opposed. Therefore, Hawthorne theorists and their followers emphasized social stability through the acceptance of common goals by all individuals and groups within the entire organization. Wholeness became exaggerated in terms of maintaining equilibrium. Consequently, cooperation was stressed and conflict was ultimately removed.

During the late 1940's, 1950's and 1960's, studies in the management of organizations were undertaken on the organizational personality, goal displacement, leadership and management styles, and the maintenance of stability. Moreover, the perspective gave way to the widespread use of the case study approach, allowing social scientists to measure internal instances of disequilibrium, workers' disobedience and other difficulties in relation to goal displacement, leadership abilities, and organizational stability. This approach was most widely used to study corporate and state bureaucracies, to classify bureaucracies by their goals, their beneficiaries as in Blau and Scott's "cui bono?" typology, or by their methods of leadership and administration and general measured outcomes of efficiency.
Following the methodology and assumptions of the human relations school, organizational theory and analysis focused largely on two issues: harmony through members' performance of functions contributing to the organizational whole and cooperation through consensus, coordination, and control. Organizational analysis provided a solid foundation for the doctrine of management. Management essentially performed an internal regulating function. First management ensured that persons were correctly assigned to roles within the organization and once assigned functionally contributed to overall organizational effectiveness. Secondly, management fostered consensus and support within the organization. Through cooptation and other such mechanisms, management worked toward efficient goal attainment by breaking down informal group commitment and ensuring that any individual's or group's goals do not override the organization's central purposes. Thus within the general job description of promoting harmony and cooperation, management appeared within the analysis as a neutral force and as an essential regulator of the complex bureaucratic machinery.

Approaching the Panacea Through Quality Leadership: Toward a Psychology of Organizations

An outstanding contribution of organizational sociology to managerial doctrine was the idea that organizations are cooperative systems with agreed upon or socially beneficial
goals. It was the primary responsibility of management therefore to reverse dysfunctions, identify and deal with unintended consequences, and in general maintain cooperation and smooth functioning operations. Mid-century social scientists endeavoured to develop a profile of executive leadership characteristics required for such tasks and further inquired into types of administration and their effectiveness in facilitating goal attainment. Influenced largely by early century experiments in industrial psychology, the "modern" approach to organizations considered both workers' and management's behaviour and thus a psychology of organizations was developed.

Studies on leadership carefully considered types of organizations--their goals, client groups and members--and differentiated leadership styles for particular types. The basic assumption was that cooperation was generally desired by all participants but it must be elicited by adequately trained leaders. In complex organizations cooperation was not an automatic response to a given set of goals, but rather was something that was carefully engineered. Uncooperative behaviour it was argued, therefore, may simply be caused by ill-trained leaders or an ill-adapted administrative style. Thus while earlier behavioural scientists sought solutions to organization difficulties by examining inherent behavioural problems among lower level workers without questioning too closely any peculiarities in leadership styles and charac-
teristics, later organization theorists examined the relationship between leadership and membership. These theorists assumed that the potential for compliance existed, thus vesting organization managers with the serious task of motivating participants. The management function may therefore be described as the "engineering" of consent.

The modern approach to problems of complex organizations had profound impact on the management training process. Previously management education taught theories and techniques of eliciting efficient work performance and obedience from workers. The new approach implied that along with these techniques and theories, future managers' own characteristics and administrative styles would be carefully scrutinized. This would necessitate a continuing programme of executive education and development. With increased complexity and size of organizations, the modern manager would be placed at the helm of a particular department--production, marketing, personnel, research and development, or accounting--from which point he/she would functionally contribute through a place in the organizational hierarchy to the overall effectiveness of the organization's performance. Learning to coordinate with similarly placed managers was therefore a major responsibility of management and a major contribution of executive development programmes.

Following from the Human Relations Phase work, along with studies on work and work relations, organizational the-
orists were also concerned with individuals' relationship to the organization rather than specifically to the job. These studies analyzed leadership, administrative practices, informal group relations, cultures, environment, and technology. Since Hawthorne a plethora of studies in this area developed and the social psychological bases of organizational behavior were henceforth scientifically determined. While in the former set of studies effective work performance was defined, in the latter type effective leadership and administrative styles were examined. Both work performance and leadership were defined vis-a-vis the acquisition of characteristics necessary for efficiency within a bureaucracy and both subscribed to the major tenets of social psychology. For management organizational studies of both types provided valuable information: lessons on effective work performance and what levels of efficiency managers may expect from workers through the practice of various management techniques and lessons on effective leadership and what tactics and attitudes appeal to workers and therefore evoke compliance.

During the 1940's and 1950's studies on work and work performance often referred to the development of an organizational or bureaucratic personality. Applied to the field of management, these studies persuaded practitioners that the appearance of a degree of flexibility and compromise with workers may prevent inefficiency and enhance cooperation and harmony. Organizational theorists were also con-
cerned with the psychology of complex organizations or the psychological bases of organizational behaviour. Studies of this nature posed questions regarding the process by which individuals accepted authority within organizations and the means by which obedience, loyalty, and consistency among organization members were developed. 11 Starting points for analyses in organizational behaviour included authority structures, leadership styles, administration procedures, consensus, formality and rule orientation, rationality, status systems and hierarchy, and obedience. For managers these studies provided concrete data on how to gain respect and evoke obedience. Management thus becomes fully defined as the process of eliciting more or less voluntary obedience by means of anonymous authority.

Although authority by consensus is a primary focus of organizational analysis, behavioural scientists also argue that compliant behaviour is fostered by carefully timed and satisfactory inducements. Through inducements managers engineer equilibrium, which is held to be mutually desirable. When workers obey only due to fear of punishment, then it is argued that they have not satisfactorily acquired a stake in the organization's purposes. These participants often require special managerial attention or regular rewards in order to maintain an adequate level of cooperation. Rule by force therefore is not required except where pathology and deviance have emerged. To be most effective managers are instructed
to function through covert means and hence present the illusion of willingness and choice in participation. In such analyses therefore, cooperation and consent are substituted for obedience and maintenance and stability are substituted for control.

Following from earlier forms of managerial theory--scientific management and the human relations school, modern organizational analysis has strengthened the legitimacy of the concept of managerial authority. Within the structural-functionalist perspective, management is characterized as an unobtrusive and sometimes paternalistic structure which derives its authority from both lower level and superior members. Its purpose is to guarantee cooperation, stability, and harmonious relations in the general interest of all participants. As a social science the sociology of organizations is reported to be an objective science. It is within this framework--in the service of objectivity and mutually agreed upon organizational ends--that management is thought to function in reality. In providing formulae for the development of harmony and equilibrium within the organization, organizational analysis contributed to the promise of social happiness. This promise became the basis of management education in the post war period.
Teaching Executive Responsibility
in the Schools of Business Administration and Commerce

Generally the university's task was to provide the student with "preparation for business responsibility." It served as a basic selection mechanism for business only through its role in socializing prospective executives, reserving the final processes of cultivation and in-house training and preparation to the corporations. Professor Hand of Queen's described the School of Business as a "processor", "a filter, screening so as to set a minimum standard of quality for the residue." As such its goal was broad: to teach competence in management, responsibility, and a satisfactory set of values. This included training in necessary technical skills, administration, the ability to cooperate in team work, decision-making, accepting responsibility, understanding social, economic, and political forces shaping the business environment, and direction toward acquiring company goals.

In the role of preparing students for business careers, the universities were faced with delicate decisions regarding what form this preparation should take. This question was particularly important since business graduates were hired as lower level managers and many would remain in these positions while only few would aspire to the rank of executive officer. To this effect the Canadian Society for Commercial Education urged that two types of university programmes were
needed, one to provide professional business education and another to "devote a larger portion of its curriculum to courses of general culture and therefore train executives."\textsuperscript{15} If improperly prepared, the students may become "impatient with the promotion system and hold unrealistic opinions of their value to the company"\textsuperscript{16} or they simply may become disillusioned--with their careers and over-confident that they "are fully qualified to take their place in the business and industrial life of the community without further training."\textsuperscript{17}

For its role in character development, education was regarded as a panacea. This notion was clearly expressed by prominent businessmen and educators alike especially during the 1950's when the cold war climate afforded questions regarding North American social institutions a sense of urgency. For example, education was promoted as a mechanism of regulation and stability since it "provides the economic and political climate most favourable to business."\textsuperscript{18} Imperial Oil's vice-president continued with this sentiment, arguing that there is no "process more productive of human development and progress than education."\textsuperscript{19}

Business maintained a close check on the university's role and justified its presence on campus through corporate donations. Donations were actively sought and endorsed by educators who felt, as Queen's Principal Mackintosh said, that "business and industry contributions should be continued and extended; in the long run they are likely to get good
prospects only if they are prepared to invest something in their training." This sentiment was shared by many prominent businessmen. For example, Herbert H. Lank, president of DuPont of Canada suggested that "business gifts to education" are an "essential cost of doing business and staying in business" and urged that in addition to money, "industry should also make available to education some of the knowledge and experience it has accumulated through the years of applied research, production and management administration."  

During the 1950's there was a systematic attempt to strengthen and formalize the link between the universities and the corporate order, especially through such institutions as the Industrial Foundation on Education established in 1956, as "the voice of business in the field of education." Such formalized partnership between business and education was needed according to Imperial Oil's president J.R. White "to guarantee continuation of the free world." Members of prominent business circles not only saw the importance of supporting education as an investment but they actually regarded it as their national duty to protect social and economic development, capitalism, and democracy. Along with specific skills such as "how to minimize friction between management and labour" and understanding "the chemistry of human relations", the value of education lay in the world view espoused by the institutions' leaders.

Aware of the university's role in maintaining a non-
partisan approach, academics described the role of education in less specific terms, yet with tacit agreement. The National Conference of Canadian Universities' 1951 President P.J. Nicholson, for example, described the universities as "the custodians of Western civilization" and University of Toronto's Sidney Smith declared that "every citizen who is not indifferent to the welfare of his [sic] country should be deeply concerned about the welfare of its universities--its bastions of freedom." Thus, through education, especially pragmatic education, progress and stability were guaranteed. Lessons concerning the maintenance of stability and harmony within organizations and therefore society became the primary focus of education and particularly business education during the mid decades of the twentieth century.

i) Toronto and McMaster

Even with the immediacy of the call for technical expertise, the business curriculum at Toronto and McMaster maintained its theoretical orientation. The purpose of business education at these universities was to provide opportunities for the study of business administration rather than to adopt the University of Western Ontario's focus and concentrate on the art of decision-making. Standing firmly behind this approach, educators argued that the programmes prepared students with skills and knowledge which were transferable across
organizations and into the future. At McMaster administrators agreed that "the training of a person is more important than the teaching of skills." The problem, however, as President Gilmour saw it, was one of accountability since the university's contribution to society was not always easily recognizable.

In 1938 Toronto became the first university in Canada to introduce a graduate course in business administration leading to a Master of Commerce. In 1950 a separate graduate training facility, the Institute of Business Administration was developed and Vincent W. Bladen was named its director. While professors were transferred to this new institute from the Department of Political Economy, according to Sidney Smith, in order to "closely integrate the Institute with day-to-day developments in commerce and industry", in addition "about a dozen men of achievement and prestige in the business world" were also appointed to staff. Emphasis was placed on leadership development with the advanced degree. As Sidney Smith suggested:

Business executives are accepted for this course regardless of their formal educational backgrounds. Emphasis is placed on discussion of current problems and trends in management and involves consideration of business practices at the general level. The programme is aimed at those assigned to general managerial duties and at those who, having reached the top of their special departments, are regarded as future general managers.

In this regard, the university played an important role in
supporting the continuing education of those already successful in the business world.

Business education at McMaster underwent a rapid period of growth during the 1950's and early 1960's. In 1953-4 the Department of Extension in cooperation with the Department of Political Economy offered four evening courses --Economics of Business Enterprise, Accounting and Statistics, Corporation Finance, and Industrial Relations--"designed especially for those in business and industry who wish to advance their professional qualifications." By 1956-7 when two more courses were added, the evening programme paralleled the first year of University of Toronto's Master of Commerce degree course and the Commerce Department petitioned the university to expand this into a full graduate programme. Once fully established in 1961-2, the two-year M.B.A. course covered all essential "problem" areas faced by modern business executives.

During the 1950's McMaster's business curriculum began to concentrate on problems of internal management and coordination of functions within an organization. Two new business courses offered in 1954-5 reflected this concern. Business management studied the coordination and control of finance, production and distribution of business units, policy formation, public and personnel relations, and the role of the entrepreneur, and Internal Control and Administration Problems covered administrative control and auditing techniques,
taxation, and miscellaneous administrative problems. By 1962-3 the Management course analyzed this problem of internal control by considering the "diagnosis of problems", the role of executives and logic and value judgments involved in decision-making. Themes of planning, control, and decision-making became the basis of management education. Future programmes emphasized "the integration of management functions" and curricular materials were prepared to develop a general management point of view.

By 1962 at the University of Toronto there were over 5,000 students registered in both credit and non-credit courses in business and industrial subjects. Several of these courses were offered under the auspices of professional associations, many of which held long standing relationships with the university. For example, in 1932 the Canadian Bankers' Association operating through the University of Toronto, Queen's, University of Montreal, McMaster, and Shaw Business Schools offered a combined correspondence/lecture certificate programme for bankers. Similarly, a growing demand in the construction industry for junior and senior executives led to a proposal by L.J.B. Forbes, president of Toronto Builders Exchange and Pilkington Glass Ltd. for a university course in construction management. While no certificates were issued upon completion, the university agreed to keep attendance records for the member firms. The course included study of human relations, labour relations and arbitration, and lec-
tures were given by the vice president of Angus Robertson Ltd., the Toronto manager of Pigott Construction Company, and a branch manager of the Bank of Montreal. Covering similar topics, one of the early programmes at McMaster was addressed by Stelco's Presidential Assistant and the Federal Government's Assistant Deputy Minister of Finance. Lists of such courses were endless. As a growing phenomenon in modern business education, these courses strengthened the university's pragmatic focus and raised the profile of the university in the business community.

Post graduate courses for the business executive came into vogue during the 1950's as executive development and leadership training were regarded as essential for maintenance in an economy of growth. University of Toronto's Administrative Development Programme offered courses in Administrative Practices on principles of administration, basic problems of management, essential administrative functions, and responsibilities of business leaders; Financial Management, Marketing, Production Management on planning, cost reduction and control, and time motion study, Managerial Economics, Human Relations covering clinical approaches to human relations in administration, Industrial Relations, and Personnel Psychology. These programmes were designed to "groom" and refine employees for executive responsibility once they were selected by their respective firms. According to University of Toronto's Professor O.W. Main, not only should the graduate of a business admi-
nistration course "be capable of sound management and good leadership" but "as a citizen of society, he [sic] should be aware of the long range responsibility implied in ... leadership." It was this "long range" or general responsibility that was seen to emanate from executive development programmes.

In 1960-1 McMaster's Department of University Extension offered two new "management improvement" courses which promised to increase a manager's competence "in decision-making, creativity, evaluation, problem-solving, and communication." These courses were somewhat general in orientation, providing essential background materials for use in any particular professional field. More popular, however, were the Executive Development Programmes offered in association with specific professional bodies. The programmes were usually offered during the summer months when firms traditionally prepared for peak fall and winter sessions. Along with the basic programme, associations such as the Institute of Chartered Accountants of Ontario, the Canadian Management Association, and the Canadian Bankers' Association offered certificate courses of varying lengths through the university. Such programmes helped to establish greater liaison with the business community.

Through its sponsorship of business and management education programmes, the university acquired a clearly defined service role for business and industry. Although the university's association with professional bodies dates back to the
establishment of the university itself, cooperation between the university and professional associations increased dramatically during the late 1950's and 1960's. This affected enrolment in the Department of Extension. McMaster's President's Report noted an increase of 123% from 700 to 1,563 between 1957-8 and 1958-9 with a further increase of 30% in 1959-60.\(^{45}\)

While the Faculty of Business concentrated on the graduate and undergraduate curricula, the Department of Extension assumed a larger and more significant role in executive development and certification programmes. The Department of Extension acted as a medium through which professional bodies asserted their influence on curricular matters.

In general business education at Toronto and McMaster maintained a firm orientation toward developing responsible executives with strong characteristics through theoretically sound, yet sufficiently pragmatic curriculum. The essential balance between theoretical and practical material was preserved through a close liaison with local and national business circles. The curriculum maintained its problem solving focus and adhered to principles of harmony and stability.

ii) Queen's University

With its combination of pragmatic and theoretical material, the Queen's business curriculum was considered to be most well-rounded and therefore most suitable as preparatory training for the public service. The purpose of business edu-
cation at Queen's was to train decision-makers who would assume important positions in government, trade, or private business. The Queen's programme focussed more directly on administration rather than management.46 This more direct promise of preparation for public administration generally gave the Queen's programme an appearance of neutrality and flexibility.

The Commerce Department continued with its specialization in public administration and maintained a close liaison with the field of political science. While the curriculum at McMaster and Toronto Universities was oriented toward the elimination of social problems, the Queen's curriculum was concerned with problem solving in the political sphere. Thus the first sociology course was not offered by the Department until 1949-50. Political Science courses, however, were featured in the business curriculum and provided study and analysis on many aspects of domestic and international affairs, trade policy, and imperial relations. Courses such as Public Administration, first offered in 1942-3, Municipal Government, and the Politics of Democracy strengthened the notion that the Queen's commerce programme provided essential background for public service.47 Finally in an attempt to offer a comprehensive picture of modern organizational relations, a course in Business and Government was developed in 1959-60.48 The course was organized to create an impression of the mutually exclusive, yet harmonious goals of business and government,
and of the government's role as neutral regulator and in providing a set of checks and balances. To ensure a "balance" in the curriculum, the Department's yearly list of outside lecturers included the names of government officials along with prominent businessmen.

While specializations prevailed in a similar fashion as in the other universities' commerce programmes, because the Queen's programme was aimed at preparing students for administrative work, the courses were developed with a broader context. During the 1950's even the Engineering curriculum adopted a similar goal of teaching administrative responsibility. In 1950-1, for example, the Introductory Economics course offered through that department studied such topics as industrial organizations, the organization of production, price analysis, distribution of income, monetary flows, international trade, and applied problems, and in 1952-3 a Politics course was added to the Engineering curriculum. 49

In the lessons on decision-making students were provided with opportunities to develop skills by examining various contexts within which decisions are made. For example, in Principles of Marketing, marketing functions, organization and policies were studied "from the standpoint of the economist and the businessman." 50 These lessons were based on the reality of the "specific problems" from the "Canadian experience." Several years later, Marketing for senior commerce students approached the question of decision-making responsi-
bility from the perspective of policy analysis. Not only was there an attempt to teach students to examine policy issues using a macro approach to organizational analysis, but the commerce calendar specified that the analysis would be presented from the top down.51

Training in professional responsibility at Queen's developed historically. Before the Department of Commerce was established in 1914, the Canadian Bankers' Association instituted courses leading to degrees of Associate and Fellow, and Queen's University was named as the examining body for these by the Association.52 Upon the establishment of the department, the Institute of Chartered Accountants of Ontario followed and in 1921 began to offer accountancy exams under the auspices of Queen's. Similar arrangements have since been established with the Society of Industrial and Cost Accountants of Ontario and The Trust Companies Association of Canada. Such programmes provide ongoing liaison between professionals and the campus. In 1958 a conference on Financial Capital Requirements in Canada was sponsored by the Department of Commerce by invitation. The purpose was "to bring together a selected group who are concerned with events affecting the capital market and who play a part in directing the flow of capital funds in Canada." This "selected group" included professors from University of Toronto and Queen's, the vice-presidents of Shawinigan Chemicals Ltd. and Imperial Oil, the Deputy Minister of Economics, and the
As in the other universities, in addition to the professional courses, an executive programme was established during the 1950's. Although they were officially established in 1956, executive development programmes and conferences had been associated with Queen's for a number of years and had been co-sponsored through such bodies as the Canadian Management Movement and through the work of such individuals as Clarence Fraser. The Executive Programme, a series of short courses and conferences, brought together executives from a wide range of business, industrial and government concerns. Most prominently featured in this programme were executive development courses dealing with the application of science to the field of management.

Generally the Queen's commerce programme aimed at strengthening the decision-making abilities of Canadian business and government executives. It accomplished this goal by providing a curriculum with a strong theoretical basis and an air of neutrality and administrative efficiency. The ultimate aims of conflict resolution and the maintenance of stability were adhered to as students were prepared for their future administrative responsibilities.

iii) University of Western Ontario

With its emphasis on executive leadership and decision-
making skills, the Western programme was appropriate for those intent upon climbing corporate or political ladders. Even the related political and economic science curricula was developed to support the model of education and training in the School of Business Administration. By 1932-3, for example, a course in Public Administration was offered and by 1939-40 Municipal Affairs, Comparative Municipal Governments and Problems, and Urban Sociology were added. A few years later in 1945-6, two more courses in Public Administration were available. For those enrolled in the business department, Policy and Administration was offered. This course was designed "to introduce problems at the top level of management, including relations between business and government." Public administrators and business executives presented their "points of view." This course was meant "to coordinate the courses of the department." Significantly, Chester Barnard's *The Functions of the Executive* was listed as a required textbook.

Theories of organizations and interorganizational relationships were prominently featured in the M.B.A. programme. A special required course, Public Relationships and Responsibilities, was "designed to emphasize the relationship of the business administrator to federal, provincial, and local governments, and to social groups such as churches, educational institutions, trade unions and societies for political and social agitation--clearly of leading importance." Because
business administrators are confronted regularly with various legislative and social action policies impinging on their efforts to conduct business, it was argued to be highly appropriate to train the student in "the public demands" encountered during a business career. 56

In the Administrative Practices course for seniors, students were taught the importance of adopting appropriate behavioural characteristics for organizational life. Emphasis was placed on the theory of the bureaucratic personality as well as on the organic nature of the bureaucratic structure. Elton Mayo's The Social Problems of an Industrial Civilization, F.J. Roethlisberger's Management and Morale, Chester Barnard's The Functions of the Executive, and Mary Parker Follett's Dynamic Administration were listed as suggested readings and the required text was Glover and Hower's The Administrator. 57 Drawing heavily on organizational and behavioural theorists, this course was directly concerned with maintenance and control within a complex organization and administrative technique.

Developing this theme further, the Executive Problems course focussed on business problems faced by top executives of business organizations. Confronted mainly with "president's problems", students would learn to analyze these issues from the vantage point of the top position and would hence seek to ensure the attainment of company goals to satisfy presidential needs and interests. Courses of this nature
therefore often incorporated an essential hidden curriculum.

The graduate programme continued to broaden the student's ability to analyze business problems from an administrative position. All students were required to take Business Policy, a course based on the viewpoint of top management "where company-wide objectives are set and departmental policies and activities are coordinated." This particular emphasis allowed the student to study management problems "from an overall, rather than from a departmental, point of view" and "to develop the habit of thinking about business problems comprehensively, so that the graduate, regardless of the management level in which he [sic] is located, may guide his [sic] own and his [sic] department's activities in such a way as to make the most effective contribution to the business as a whole."58 Similar perspectives were adopted in Business Conditions offered in 1952-3.59 By adopting the roles of top management, problems and their solutions in the business sphere are exclusively defined from a managerial perspective and an appreciation of the ongoing and sometimes difficult struggle for goal achievement or maintenance is made apparent.

Educators at Western's School of Business faced few difficulties in creating a curriculum based on the realities of modern business problems. Top Canadian business personnel were affiliated both directly and indirectly with the programme through advisory councils, through acquaintances among faculty
members, and through the efforts of the Canadian management
movement. In 1949-50 a committee composed of Canadian
executives was established to advise on academic policy.
This relationship proved to be a rather fruitful one from the
point of view of the academics. By providing businessmen with
input, the university was generously supported. The coopera-
tion of businessmen on campus in fact enhanced Western's repu-
tation for leadership in business education, lending credita-
bility to the curriculum and recognition to the Western busi-
ness degree.

Strong business support was shown when the first
Management Training Course, offered in 1948, was attended by
51 men, all "potential high level executives" whose attendance
was fully supported by their employers. The programme was
supported enthusiastically in successive years with registra-
tion increasing to 65 in 1949, 72 in 1950, 85 in 1951, 125 in
1958, and 131 in 1960. University of Western Ontario was
the second college in North America to sponsor a Management
Training Course and its direction in this regard grew out
of a meeting of senior business executives who met to discuss
difficulties in training for executive responsibility. The
programme was styled in a similar fashion to the regular
programmes with discussion groups, the case method approach,
and input from businessmen. Faculty members along with col-
leagues from the Harvard Graduate School of Business Admini-
stration constituted the staff. The courses were geared
toward "socially 'rounding out' personalities, developing self confidence, 'dealing with people' skills, decision-making, and developing a 'mature' man [sic]." To be effective, employers applying on behalf of their chosen employees were asked to submit details of the applicant's personal strengths and weaknesses, including relevant personality characteristics and psychological problems. For its "investment" the sponsoring company would learn of the employee's potential in the executive realm.

Western's School of Business Administration operated on the premise that with adequate technical preparation and a significant degree of socialization and personal growth, it was possible to graduate responsible executives. Executive responsibility was defined by the acquisition of a management perspective, decision-making ability, leadership and administrative technique, and a host of refined personality characteristics. Strength in leadership and executive responsibility for an organization promised stability and harmony. This promise was vigorously pursued by large numbers of Canada's top businessmen who supported all aspects of the programme in a variety of ways. Hence Canadian business executives viewed the programme as contributing most significantly to the organization's ability to attain its goals.
Leadership Training, Cooperation and Control: An Analysis of Business Education Textbooks

While experts in scientific management, human relations, and behavioural science were concerned with techniques of managerial control, organizational theorists provided broad analyses of the organizational environment in which students and practitioners would use these techniques. Organizational theorists generally accepted the main tenets of both the scientific management and human relations approaches. In an attempt to create smoothly functioning organizations, these social scientists studied the internal mechanism of the organization, its relationship to the external environment, the functional necessity of authority and leadership, and methodology for goal attainment. Through this process they proposed to eliminate any dysfunctions and thereby improve organizational performance and contribute positively to general social well-being.

Textbooks required for business and other social science courses continued with the general theme of preventing and curing social problems. The approach during the structural functionalist phase, however, differed from that presented in the courses during the 1930's. Rather than specifically examining and presenting solutions for particular problems, such as the depression and unemployment, many of the textbooks presented rather general structural functionalist analyses of organizational dysfunctioning and social disharmonies and
methods for their elimination.

In presenting solutions for social problems and organizational inefficiency, the reading materials emphasized the importance of strong leadership and managerial functions within the organization. Leadership performed the essential task of maintaining the organization as a system of cooperation and although strong and effective management was of functional necessity to the organization's well-being, it was usually argued that this strong leadership did not imply a degree of authoritarianism. Organizational theory and the business curriculum were very largely influenced by Chester Barnard's insistence that "organizations by their very nature are cooperative systems and could not fail to be so." With his reputation and variety of experiences in business and philanthropic organizations, Barnard's model was used as the basis of organizational theory and analysis popular during the 1940's and 1950's. While The Functions of the Executive was required reading at only two of the universities, Queen's and Western, although for a number of years during the 1940's and 1950's, many of the authors paid homage to Barnard. Koontz and O'Donnell, for example, referred to his work as "so comprehensive and rewarding" and as "one of the most influential and comprehensive treatises in this field." Indeed the work was influential as the predominant description applied to modern complex organizations in the business curriculum was that of cooperation.
Using Barnard's model, then, the curriculum and reading materials started with the principles of stability, harmony, and cooperation in order to advise prospective businessmen on goal attainment, the promotion of loyalty and esprit de corps, and efficient operations. This approach started with the findings of the human relations school regarding the dynamics of individual and group behaviour and examined how executives and managers may function in order to efficiently maintain cooperation at the worksite and thereby effectively achieve the organization's goals. Managers and other administrators were presented as benignly sympathetic, task oriented individuals whose sole purpose was to ensure goal attainment by efficient means. While discussions regarding efficiency and control were not readily apparent, it is clear upon examining a selection of business school textbooks that maintaining effective control was the key issue for modern managers. Thus, although it was imbued with liberal ideals of harmony, cooperation, and mutually agreed upon arrangements, managerial ideology taught the necessity of social control.

i) Managing the Modern Complex Bureaucracy

While it was still very often a requirement for students to read classical economics works, generally there were fewer courses available focussing mainly on questions of economic philosophy. The classical works provided a framework
within which the modern problem solving and pragmatic curriculum was presented. Rather than subject students to exercises and lengthy debates on economic doctrine, the courses aimed to provide the student with enough theory for effective management and concentrated on the process of sound decision-making.

Since socialism was no longer perceived to be as real a threat, during the 1940's and 1950's there was no longer a need for a variety of courses aimed at discrediting Marxian theory and the socialists. What the business educators aimed to do instead was to provide a context within which managerial doctrines could be presented. Introductory and Economic Theory courses therefore expounded on the benefits of large scale production, specialization and departmentalization, standardization, economies of scale, private property, market fluctuations, and international economics. Reading materials supported the principles of capitalism--competition, concentration and growth, and the necessity of inequality. These principles, however, were presented in light of "modern" doctrine and the realities of monopoly capitalism. Earlier theoretical work, for example, examined the rivalry of competition under a laissez-faire system. 69 Departing from this approach, during the structural functionalist phase, the "social system of industry" was described as based on cooperation rather than rivalry. 70

Although there were fewer courses aimed at critically analyzing the theories of socialism, there was also a notice-
able reduction in the number of required textbooks presenting
critical assessments of capitalism or alternatives to the sta-
tus quo. As a result the reading materials available seemed
to present "objective" viewpoints. For example, rather than
naming profit maximization as the ultimate goal of business
and industry, goals were described more vaguely. Gardner and
Moore thus write:

How to achieve efficiency is the eternal question
which rocks the average business or industrial
organization back and forth. 71

The matter-of-fact style of many of the writers made it easy to confuse facts with ideology. Declaring that "the
time is past when factories could be called 'capitalist pri-
sons'", Gide, for example, listed the advantages of large-
scale production, affirming the need for further concentration
and acceptance of modern capitalism. 72 Ross noted contributions
to general social well-being:

Private property is a social welfare institution
because the hope of acquiring property powerfully stimulates the economic activities of the capable. 73

Seemingly objective statements by leading economists provided
students with factual and background materials needed to com-
plete exercises in case management for the primary skill
development components of their courses.

Within this framework, organization was defined as a "cooperative system" whose purpose was to attain goals mutu-
ally agreed upon by members. In Barnard's words:

Formal organization is that kind of cooperation
among men [sic] that is conscious, deliberate, purposeful. 74

This form of cooperation, he notes, is "omnipresent and inescapable nowadays", yet it in no way limits or stands in contrast to individualism. Dysfunctioning or "unsought consequences" occur when the component parts or members are in disagreement or joined in uncooperative action. However, it is "the function of the executive", he notes, "to facilitate the synthesis in concrete action of contradictory forces, to reconcile conflicting forces, instincts, interests, conditions, positions, and ideals." 75 Cooperative activity undertaken with effective leadership "justifies itself, then as a means of overcoming the limitations restricting what individuals can do." 76 As a more efficient means of accomplishing any particular task, organization is therefore deemed as necessary for economic progress and social development.

A popular notion among business textbook authors was that organization was not only efficient but it was desirable for its contribution to social well-being. Fritz M. Marx, for example, stressed that the social desirability of organization rests on successful goal attainment and the achievement of "human satisfactions." 77 This notion was supported by others who held the "grand" notion that organizations primarily functioned in a harmonious manner, making particular contributions to the social whole. Nolen and Maynard employ the concept of the social good in their examination of the functions of sales management. They suggest:
Those charged with the responsibility of directing distribution activities can contribute to the social good by seeing that the marketing functions are performed with a minimum of waste. 78

The achievement of social happiness continued to be an underlying theme of organization studies as well as economics and sociology. This theme dominated the course textbooks and curricula during the human relations phase and its optimism was not lost during the 1940's and beyond.

Efficient goal attainment necessitated conscious planning and elaborate coordination of cooperative efforts. According to Elton Mayo, not only must cooperation be guided by managerial directives but organization for common purpose was viewed as a primary social responsibility. In the "Foreward" to Roethlisberger's Management and Morale, he wrote: "... collaboration in a society cannot be left to chance." 79 "No matter what type of social and industrial system may be developed in the future," Watkins and Dodd write, "management is indispensable." 80 The executive's "indispensability" was thus described:

We shall think of an executive as a man [sic] who has the job of guiding the behaviour of others; he [sic] is able to plan the goals of the group he [sic] heads and organize its activities into effective means of attaining those goals; he [sic] has the ability to reach decisions about goals and means which will stand up when reviewed, to gain acceptance of those decisions, and to put them into effect. 81

The management task was not viewed as a haphazard arrangement but as a definite procedure, the need for which is partially determined by the unpredictability and unreliability of lower
level workers.

Literature on complex organizations and business described at length the contributions of management to the efficiency of the operation. Management was credited with eliminating disharmony, instilling members with appropriate attitudes, increasing the level of efficiency, and coordinating departmental efforts. In industry Folts identified standardization as "a principle of modern management." Barnard suggested that with proper management, specialization—the essence of modern organization—is possible.

The "special position" of managers grants them authority to enforce rules necessary for the achievement of the organization's goals. This authority was often conceptualized as legitimized by the acceptance of organization members.

Marx, for example, argues:

In social groups one test of authority is legitimacy. But another test, equally important, is acceptability. If authority becomes capricious, uncertain, or harmful, there will be obstruction and ultimately, revolt.

Spengler and Klein refute the argument that personal freedoms are limited by authority and even seem to suggest that freedoms persist within administrative hierarchies. Effective managers were therefore described as those who ensured that individuals not only recognize the importance of organizational over individual goals but avidly seek to further these goals.

Maturity and responsibility were required to handle the authority vested in the managerial position. The complexity
of the managerial job increases upon ascending the organizational hierarchy, necessitating further skills and complicated effort. According to many authors, the managerial job involves creativity and a variety of tasks. Such conceptions leave the impression that managers are indeed a special group of workers—with talents, knowledge, and special abilities beyond those of "regular labour."

The managerial discipline was often afforded the special status of both art and science. Most authors agreed that its practice must be founded on scientific principles. Weaknesses among executives in fact were usually attributed to the "lack of a scientific attitude." However, because management involved the delicate work of "handling men", it was also by necessity often defined as an art. Straddling the separation between art and science, anyone with managerial talent was viewed as having the special combination of the objectivity, discipline, and analytical abilities of the scientist along with the creativity, insight, imagination, and "personal" skills of the artist. Thus, management was portrayed as a special position, more important and essential than the worker and hence indispensable to the organization.

Writing on the importance of management Barnard claimed that the manager's function in an organization was analogous to the function of the brain and nervous system in an organism. Allcutt compared the manager to an army general: [Management] occupies the same position in
industry as does the general staff in an army, and as the latter would fail to operate with unity and precision without the staff, so the former would be as a body without a head if efficient management were lacking. 93

While Barnard noted that the organization effectively functioned automatically, that is, the cooperative system "is managed by itself", he points out the indispensability of the executive for three essential functions--"first, to provide the system of communication; second, to promote the securing of essential efforts; and, third, to formulate and define purpose." 94 Leadership in many respects provided the parameters in which organization members performed specified functions cooperatively. In Barnard's words:

Cooperation, not leadership, is the creative process; but leadership is the indispensable fulminator of its forces. 95

In this effort, according to Haire, the manager or "superior" "must maintain an atmosphere of approval." 96 A manager's success therefore would ultimately be manifested through observation of intra-organizational harmony of effort and satisfaction.

Due to the importance of management, it was of great concern to business executives to continue to recruit adequately trained personnel. The modern writers' preference for the externally recruited or professionally trained managers differed from the earlier writers' insistence on the long "corporate climb." 97 Similar arguments were put forth by many businessmen who were skeptical of the usefulness of business education. However, as business education gradually gained
acceptance among business circles, so did the acceptance of management training.

Beyond Human Relations: Toward a Theory of Organizations

Generally the business textbooks were chosen to provide the student with an understanding of the organizational society from both macro and micro perspectives. The literature was dominated by structural-functionalist analyses of society and its organizations. The approach was, moreover, often mechanistic. The authors stressed the maintenance of stability, harmony, and equilibrium within the efficient "well-tuned" organization.

Business students were required to read hundreds of pages of descriptions and reports on the particular features, intricate designs, control mechanisms, in-house rules and regulations, and formal and informal codes of a variety of industrial, commercial, and public bureaucracies. The student was expected to acquire appropriate analytical skills to diagnose problems and present solutions to specific difficulties. The problem solving was, however, to be accomplished within the framework provided regarding the necessary requirements and characteristics of organizations and the distinctive features contributing to effective and efficient goal attainment. Reynolds, for example, emphasized the need for top-down management in industry. He wrote:

It is probably impracticable to have democratic
government of a producing establishment. Worker-owned factories ... which have taken democratic principles seriously, elected supervisors from the rank and file, decided questions of business policy by rank and file vote, ... have usually ended in bankruptcy. ... Down the line of command come directives, production targets, cost budgets, and other instructions. Up the line go progress reports and explanations of difficulties and problems. 100

The majority of business authors agreed with Reynolds and specifically explained the advantages of staff and line organization. 101

In all analyses, it was essential that the organization's goals be clearly defined. Goals of profit-making organizations were similar. Ranking the specific goals was the task of the upper levels of management. Managers' work largely involved encouraging loyalty to the organization's goals. As Koontz and O'Donnell explain:

... managers may follow the principle of harmony of objective: that in directing subordinates, the manager's task is to harmonize the objectives of the individual with those of the department or firm so that the former contribute effectively to the latter. ... they encourage the subordinates to seek goals that will yield personal satisfactions and, at the same time, contribute positively toward the realization of the enterprise objective. Indeed, the alert manager will go one step further. He [sic] will suggest the goals and attach to them the rewards for which men [sic] strive. 102

Securing loyalty to the organization's goals was of utmost importance and according to Kuhn most firms forfeited additional profits to maintain stability of operation. 103 The idea that firms pursued less than the maximum profit levels but ensured personnel contentment created an impression of
paternalism—of the organization's concern for the happiness
of individual members.

During the 1920's and 1930's while businessmen recog-
nized that it was important to find means by which to regulate
behaviour at the workplace, during the latter period it was
important to refine those means and to promote acceptance of
the organizational form as fact and as necessity. Centraliza-
tion of control "avoids the chaotic condition that would
exist if subordinates were permitted to act without direction
or give orders helter skelter to one another."104 In this
way, Marx suggests, hierarchy functions "to provide an inte-
grated scheme of successive control points for the attainment
of efficiency, consistency, and continuity in the performance
of the organization's work."105

To be most functional within an organization, it was
usually argued that authority was to be delegated very care-
fully.106 According to Haire, successful managers used their
authority wisely to maintain maximum efficiency:

To a large extent, the subordinate is in the
same position as the infant. He [sic] is dependent
and it is in the basis of this dependency that
the superior gets ... power to control the subor-
dinate's behaviour. However, if the superior
chiefly exploits the dependency, we have the
passively acquiescent yes man who does what he
[sic] is told but does nothing else. If we are
to utilize our subordinates maximally, we must
provide opportunities for the development of
active independence on the job, so that we may
have from them some of the initiative, self-
directed effort, and growth of which they are
capable. 107
Moreover, Koontz and O'Donnell argued: "More immediately than any other executive function, the direction of subordinates is the process through which life is breathed into an enterprise." As overseers of others' work performance, managers' most significant contribution to the organization is in the successful and smooth orchestration of those performances.

For the middle manager, the task of maintaining internal harmony meant "keeping the channels of communication free and clear." The problem facing management was one of "building sufficient cooperation and teamwork throughout the organization so that the energies and personal resources of executive, supervisory, and rank-and-file employees are not wasted in conflict but, instead, are released for the constructive task of getting the job done." Gardner and Moore describe a successful company as one "which can weld able people into a loyal and cooperative team which can hold its own competitively, and can withstand the buffettings of social and economic change."

Research by behavioural scientists had proven that success in management required a recognition of the worker's needs and sentiments outside of the workplace environment. According to Roethlisberger, when a worker "obtains human satisfactions" within the social structure of the workplace, he/she may be "willing to cooperate through contributing his [sic] services to the economic objective." Commitment to
the purposes of the worker was stated as a goal of industry. In Gerstenberg's words:

The ultimate aim of industry is the production not of wealth but of human happiness. Since the creation of an abundance of economic goods, however, is the most practical means of insuring the maximum of human welfare or happiness, industry devotes itself immediately to the production of economic goods. 114

The manager prominently assumed a primary role in the promotion of such a lofty goal.

To achieve "human happiness" the manager must, according to the business literature, understand both the psychology of organizations and organizational behaviour patterns. Marx, for example, refers to the organization as "a pattern of interpersonal relationships." Moreover, Gardner and Moore relate the importance of conducting specific organizational studies:

As we go from organization to organization, we find that each has its own special personality which gives it a special tone or atmosphere. ... These differences between organizations are not due to differences in the people but to differences in the way the whole is put together and to the forces acting on it. 116

Hence managing the interplay between organization and workers' characteristics required a variety of talents, intelligence, and analytical ability. 117

While many authors list characteristics of administrators, Barnard analyzes "contributions required of the executive." The "most important single contribution", he argues, is "loyalty" or "domination by the organization personality."
Although this, he notes, "cannot be bought either by material inducements or by other positive incentives", he did suggest that "love of prestige" must usually be present. The warning for future managers was that the successful top level bureaucrat must sell his/her life essence—his/her personality—to the organization. The higher the position, the more the executive must adopt the essential organizational personality characteristics. Workers, in other words, may demonstrate a more instrumental orientation to work than the manager.

Moving beyond the early human relations approach, then, the industrial relations manager, as Bethel, Atwater, Stackman and Smith suggest "no longer views his [sic] job as 'personalizing management', 'social work in the factory', or 'union busting'." Thus, once lessons of human relations had been fully understood, management applied these fundamental lessons using a degree of subtlety and principles of organizational psychology to achieve a stability and efficiency in the organizational setting.

iii) Problem Solving Through Effective Leadership:
Justifying the Extended Bureaucracy

Through extensive use of the case method along with certain reading materials, the business curriculum provided students with insight into the dynamics and requirements of the leadership role. The business student was repeatedly required "to think for himself, [sic] to project himself [sic]
into the situation, and to think responsibly with regard to the particular situation and circumstances. This process allowed for the development of enthusiasm essential for the position. Executives were often described as having an affinity for their jobs due to their quest for power. In Donald's terms:

Executives, no less than the worker, have an instinct for workmanship. They get a thrill out of their occupational activities but, in addition, the great majority have a love of power and influence which is much more highly developed than among the rank and file.

Executives and managers did not merely work for organizations but were integral members of those organizations.

To the worker the foreman or immediate supervisor represents "the company" and is therefore, in Reynolds' terms, "the only living embodiment of that vague creature--'the company'." For this reason it is important that managers acquire the necessary skills for handling workers. Reynolds continues:

The personnel manager may announce regularly every week how much the company really loves him; but how the foreman actually treats him is what really matters. If 'the boss' is good, the company is good.

Managers at all levels are primarily concerned with "how to secure the cooperation of people in attaining its collective purpose" and at the same time they are expected to increase productivity and maintain morale. In other words, while procuring higher profit levels and increased efficiency,
managers' fundamental task is to maintain a peaceful relationship with workers. Thus, Nolen and Maynard emphasize that "great business administrators are true leaders." To carry out executive level responsibility and to act as a model for subordinates, particular characteristics were required for the position. Business authors described the characteristics of leaders in highly positive terms and often concluded that it was the managers' possession of particular combinations of these characteristics that led to their successes. Among characteristics commonly listed were good judgment, technique, an ability to handle workers, prompt diligence, emotional stability, integrity, courage and fortitude, high ethical standards, intelligence, influence, quickness and accuracy in decision-making, persistence, an ability to think and act responsibly and charisma. Leaders as administrators were rarely criticized and when causes of failure were examined, often authors concluded that failure was due to an overdevelopment of an admirable quality. Jones argues that unsuccessful leaders are simply over-enthusiastic.

Such exposure of "failure" in leadership is sharply contrasted with causes of employee failure. Allcut, for example, lists causes of labour turnover due to the "incompetence, insubordination, laziness, roving disposition, and misfortune" of employees. While he concedes that labour turnover may also be caused by poor working conditions, low wages, unsafe work, injustice, or inefficient management, he
is reluctant to list personal characteristics possibly contributing to this inefficiency. From this and similar discussions future business managers were advised on how to "win leadership." 130

Decision-making forms the basis of the manager's job and to be successful students were encouraged to practice solving business problems. As Folts advises:

The daily life of an industrial executive consists of a succession of problems to which he [sic] must either supply solutions or approve solutions proposed by his [sic] assistants. His [sic] success as an executive is dependent on his [sic] ability consistently to be right in his [sic] decisions. The aim of the student of industrial management should be the exercise of sound judgment in problem solution. The viewpoint in seeking solution of a business-management problem is invariably profit, either immediate or long-run or preferably both. 131

Emphasis is placed in the literature on the complexity of the decision-making process. Roethlisberger thus constructs an appropriate analogy:

The executive has to size up human beings and human situations. In this respect his orientation is like that of the clinician. He has to make diagnoses. 132

While it was acknowledged that a variety of factors including family background, national heritage, religious and moral background, and political and social philosophies may affect the executive's approach to decision-making, 133 it was generally agreed that decisions must have a rational basis. According to Grant, therefore, engineers are very qualified to make business decisions. 134 Although decisions were to be
based on concrete data and reasoning, Smith and Christensen argue that there is still no clear formula for decision-making. They write:

At the top level, an executive does not have any 'all-wise' adviser tell him [sic] what problem or problems he [sic] should be watching, or working at ... at a particular time. ... And he [sic] has no reference book to look into, no infallible aid to give 'the solution'. He [sic] must, nevertheless, find some solution. ... This he [sic] does by the exercise of ... judgment. ... And neither before the decision is made nor after, will he [sic] be absolutely sure he [sic] has taken the 'right' action. For there is no 'absolute right' in the area of important business decisions. There are only 'opinion' and 'judgment'. The administrator must be willing and able to work in such an atmosphere. He [sic] must accept the responsibility of dealing with some facts and with many unknowns in reaching ... decisions. 135

At the upper levels, then, Jones adds, even greater skills and abilities are required as the "needs for decision making steadily grow more numerous and more complex, and the proportion of value premises increases strikingly." 136 These sentiments were based on the notion of meritocracy—that the most able decision-makers would achieve high ranking positions under normal business circumstances.

Although a major part of management education was devoted to the solution of labour problems, structural functionalist analyses reinforced the notion of organizations as cooperative systems. 137 Social problems were described as "abnormal conditions", "unadjustments, maladjustments or pathologies" which were sometimes "dangerous and intolerable." 138 Yet lessons regarding the manageability of labour and labour
problems were clear. The only "problem" therefore was finding the appropriate way in which to deal with instances of disequilibrium. On absenteeism and tardiness, for example, Watkins and Dodd write:

The real problem of absenteeism is how to handle it, especially in cases of workmen who feel that they are entitled to take a day or so off whenever they are inclined.

Using scientific means of selection, placement, task analysis, and fair employee benefit packages, management engineered stability and harmony within the industrial setting. With careful decision-making by well trained and selected leaders, stability, morale and harmonious relations were guaranteed to develop within the complex organization.

iv) Skills and Techniques for the Modern Manager

Modern organization theory and writings on management and leadership generally supported the notion of the manageability of labour and other organization problems. Most social scientists searched for clues to "disharmonies" or problems within the organization's internal environment and suggested adjustments to the management process to cure those problems. When difficulties were perceived to be external to the organization, managers were urged either to insulate the organization against detrimental influences or initiate the process of change. In this task, the upper levels of management were indispensable.
Analyses of problem solving within the organizational framework were based on a model of consensus rather than conflict. This is implicit in a statement by Folts:

... the president of a company cannot expect his factory superintendent to plan well, to plan effectively, to plan as he wants him to plan unless both the superintendent and the president have clear and explicit knowledge of just what the superintendent's objectives are. The more this requirement of definitive objectives is common practice throughout all levels of the organization, the better the organization will operate, function harmoniously and effectively.

Even conceptions of authority overlook the conflict of interest in a power relationship. For example, Barnard's statements on participants' "willingness to cooperate" or "purposive cooperation" are based on the assumption of mutuality and agreement among "organization members."

A primary purpose of the business textbooks was to provide students with insights into the successful management of labour and other social problems. Major lessons revolved around the nature of labour problems, the right of management to solve problems and "coordinate" activities within the organization, how the student should analyze problems, and what techniques are most effective in solving problems. With these concrete lessons came the "hidden" curricula--conceptions of workers' and management's right to control. The selective descriptions offered in case materials textbooks or in examples of real business situations provided students with insight into the types of data required for successful problem solving.
In an introductory textbook, for example, the following statement on the Kansas City labour force was provided as information necessary in deciding on plant location:

Labor: Ninety percent of Kansas City labor is white, American born. It is contented labor, working in the best of surroundings, with a record of only 7 strikes since 1900, and none since 1921. It is efficient labor, as proved in the production records of Kansas City manufacturers having plants in other cities. 147

Along with lessons providing information needed to successfully solve organization problems, suggestions on possible techniques are freely offered. On raising productivity, Allcut suggests:

The highest individual productivity is possible only when the worker is given the highest class of work for which his [sic] natural abilities fit him [sic]. 148

Adding to this lesson on the psychology of the worker, Roethlisberger notes:

... it is important for the executive to listen before talking. By this means he [sic] comes to understand the sentiments and situations of the person or group before he [sic] practises the art of persuasion or assurance in order to secure their loyalty, confidence and cooperation. ... This is the exercise of human control by 'understanding' and not by 'verbal magic'. 149

According to the literature, the key to solving labour problems was to follow some basic and simple rules regarding workers' psychology and the satisfaction of workers' needs. Reynolds, for example, argues that workers are preoccupied with security and this must be kept in view by management. 150

Gardner and Moore's analysis stresses satisfaction of workers'


psychological needs:

Good administrative leadership utilizes the stimulating effects of both reward and punishment to achieve a cooperating, enthusiastic work team. 151

Moreover, Haire stressed the importance of the worker's need to feel that his/her work is essential to the organization. If this is so, then, "psychologically, he [sic] is in a situation where it is much easier for him [sic] to provide help to his [sic] superiors in getting the job done."152 It is important, Bethel, Atwater, Stackman, and Smith explain, that managers "turn to the social scientists" "to learn how people want to be treated."153 Maintaining a "happy" workforce is, in Marx's terms, the "essence" of the manager's job:

... morale is obviously the very essence of successful administration. Whether the undertaking administered be an army, a public agency, or a private enterprise, it is clear that if its leaders aspire to sustained accomplishment of desired results, they must seek to master the problem of morale both as a standard of appraising the effectiveness of their organization and as a means of maximizing its esprit de corps. 154

Thus, the primary task of management was emphatically set forth.

An essential part of modern management education was concerned with techniques of control. Both overt and covert techniques are explored and advice is appropriately given. Jones endorses the use of sanctions in particular situations.155 Many authors, including Allcut, chose wages as the main means of "inducement."156 Moreover, there seems to be firm agree-
ment on the need for more subtle forms of control. Haire, for example, argues:

Indirect approaches to changing the way people see things are much more apt to produce the change in behaviour than are attempts to change an attitude by force of argument. 157

Logan and Inman suggest positive means of motivating workers:

Men [sic] working for their wage only, stimulated merely by the fear of their poorer condition if they fail to hold their jobs, are not the best labourers in the long run. Content and pride and security rather than fear are satisfactory supplements of the pay envelope in holding men [sic] at their tasks. 158

Various techniques such as providing opportunities for growth, creating feelings of belonging, and providing mechanisms through which employees may participate in the decision-making process were all suggested and success rates were concretely documented.

Perhaps the most difficult lesson for future administrators was the ability to use authority effectively. Efficient use of authority in the modern organization required a subtle approach and a substantial knowledge of the worker's needs and sources of satisfaction. Watkins and Dodd explain the dynamics of successful employer-employee relations:

To the average American workman, excessive paternalism is distasteful. This seems a difficult lesson for employers to learn. Those who believe that either benevolent paternalism or unmitigated autocracy will satisfy employees have not learned the most rudimentary lesson about human nature. The intelligent, self-respecting modern wage earner wants justice, not charity, recognition of his [sic] personality and his [sic] rights, not the patronage of a feudal baron. Consequently, ... cooperation, and not ... submission should
be sought. Cooperation by consent is much more effective than cooperation through force or fear. 160

Hence, modern managers were advised to employ techniques to elicit willing cooperation rather than simple obedience. The effectiveness of this approach would eventually be proven especially in periods of turbulence and uncertainty.

During the earlier periods management theory and management education were based on the assumption that techniques were necessary to eliminate the destructive conflict between management and labour. Both scientific management and the human relations approaches assumed an inherent conflict within the organizational setting. During the later period, following close examination of the Hawthorne findings, organizational theory was based on the assumption of cooperation. While similar techniques developed by scientific management and human relations scientists were still employed, management focussed on the question of how to maintain harmony within the organization rather than how to eliminate conflict. This modern positive approach strengthened beliefs in the necessity and importance of management and lent further credence to the idea of an inevitable panacea.

Organizational Analysis and the Business Curriculum: Toward a Model of Stability and Leadership

As social scientists developed a model of organizational analysis, business practitioners sought methods of developing
stability and harmony within their organizations. Organizational theorists examined the concept of leadership style and from their analyses, businessmen experimented with leadership techniques within their organizations. Relying upon strong leadership to cure organizations ailing from the depression and the war years, businessmen looked toward the universities for guidance in developing responsible, mature administrators. Incorporating both elements of scientific management and the human relations approach, social scientists sought to develop efficiency in organizational functioning through analysis and control of environments, technologies, personalities, and administrative qualities.

The focus on leadership, administration, and responsibility did not eliminate the earlier framework of human relations developed by the behavioural scientists. Rather the new focus provided a context within which programmes for organizing social happiness would be developed and maintained. In this regard the general promise of social science and the specific promises of business education were strengthened.

Organizational analysis provided a basis for understanding the components of an organization and their interrelatedness. It taught the importance of the development of particular characteristics among members and the need for acceptance of the organization's goals. A science of organizations provided a neutral framework upon which authority relations and power differentials among the organization's members
were justified.

Recognizing the immediate importance of establishing stability and harmony within business corporations, businessmen and key members of the Canadian management movement worked closely with Canadian business educators to develop a sound programme for professional management development. Undergraduate, graduate, and post-graduate courses stressed the process of decision-making and trained managers and administrators how to function appropriately when faced with key decisions. Whether these lessons in decision-making were used by marketing, production, or personnel managers, the promise was clear. Managers showing responsibility and sound judgment in applying the principles contributed specifically to the organization's internally stable environment and generally to the smooth functioning society.

The next chapter will examine the development of the Canadian management movement and the work of Clarence Fraser in this regard. The analysis will primarily study the liaison between key Canadian managers and the universities and their influence on the development and direction of the business curriculum.
Footnotes

1 Dr. R.S.K. Seeley, quoted in Financial Post, 47, May 23, 1953, p. 14. Dr. Seeley held the position of provost, Trinity College, University of Toronto.


4 Weber considered bureaucracy, the "iron cage", to be the only logical outcome of rationalism. Bureaucracy, he argued, was inevitable. Although he suggested that workers obeyed voluntarily and thereby legitimized modern means of authority encountered in a bureaucratic organization, he acknowledged the contradictory and inherent control perpetuated within a bureaucratic structure. See H.H. Gerth and C.W. Mills, editors, From Max Weber: Essays in Sociology, (New York: Oxford University Press, 1958), pp. 228-9.


9 Henry Landsberger noted that Elton Mayo was criticized for defining all action in terms of equilibrium. See Hawthorne Revisited, (Ithaca: Cornell University Press, 1958), p. 33.

10 Perrow argues that Chester Barnard was largely responsible


21 Quoted in Financial Post, 49, March 19, 1955, p. 15.

22 Canadian Business, 30:6, June 1957, p. 20. Between 1957 and 1962 the Industrial Foundation on Education undertook a comprehensive study of corporate giving to higher education and results were published in 14 reports on various aspects of corporate-university funding arrangements and policies. I.F.E. members sought ways in which to improve university-business liaison and funding arrangements for the university. This task was viewed as a nationalistic effort. As the first report read: "if Canada is even to maintain her position among the industrial nations of the world, the country will have to increase substantially the rate at which it can produce highly trained people." See The Case For Corporate Giving to Higher Education, Report No. 1, (Toronto: Industrial Foundation on Education, December 15, 1957), p. 1.

23 J.R. White, "Teaching is Our Business", Business Quarterly, (XXII:4, Winter 1957), p. 340. White, president of Imperial Oil, was chairman of Western's School of Business Administration Committee. At a luncheon marking the occasion of the opening of the Richard Ivey Building at the School of Business Administration, he said, "Indeed, corporate giving has so important a role in higher education that it can substantially determine the level of academic freedom which is to be achieved." p. 342.


29 Ibid., p. 10.


31 Quoted in Ibid.

32 McMaster University, *Calendar of the Department of University Extension, 1953-54 and the Summer School, 1953*, (Hamilton: 1953), p. 17. McMaster University will be referred to as McM.U. from here on.

33 McM.U., Report of the President and Vice Chancellor to the Board of Governors and the Senate for the Academic Year, 1956-57, (Hamilton, 1956), p. 47.

34 The M.B.A. programme was offered only through the Department of University Extension until 1962-63 when it was incorporated into the Faculty of Graduate Studies.


39 *Financial Post*, 26:45, November 5, 1932, p. 12. The relationship between U. of T. and the Toronto Bankers' Educational Association dated back to 1918 when courses were first jointly sponsored by the two institutions.
40 Financial Post, 47, October 3, 1953, p. 9.


43 Main, op. cit., p. 52.


46 Even for the social service specialization, for example, 5 out of 20 courses listed were concerned with the political process and government issues. Queen's University, Courses in Commerce and Administration, 1921-22, (Kingston, 1921), p. 21. Queen's University will be referred to as Q.U. from here on.


48 Q.U., School of Commerce Calendar, 1959-60, (Kingston, 1959).


50 Q.U., Courses in Commerce and Administration, 1936-37, (Kingston, 1936), p. 25.


52 Queen's Calendar, 1952-53, op. cit., p. 25.


54 University of Western Ontario, Calendar of the Faculty of Arts and Science, 1945-46, (London, 1945), p. 116. University of Western Ontario will be referred to as U. of W.O. from here on.


57 Ibid., p. 37.

58 Western Calendar, 1950-51, op. cit., p. 48.


60 For example, in 1950-1 some of the visitors to the undergraduate Retailing Course included the president and vice president of Dominion Stores, the president of Metropolitan Stores, the president of G.W. Robinson Co. and Allied Merchandising, the president of The Robert Simpson Co., and the personnel manager of The T. Eaton Co. Ltd. Western Calendar, 1950-51, op. cit., p. 44.

61 Thompson, op. cit., p. 67. Lists of members of the Academic Advisory Committee year after year read like a Canadian Who's Who directory. See, for example, U. of W.O., Calendar of the School of Business Administration, 1953-54, (London, 1953).

62 Businesses and businessmen were formally acknowledged for their contributions. The Calendar of 1950-51 lists the "cooperating" firms and individuals by name. Western Calendar, 1950-51, op. cit., pp. 12-3.

63 Ibid., p. 27.


66 Perrow, op. cit., p. 75.


71 Ibid., p. 67.


74 Barnard, op. cit., p. 4.

75 Ibid., p. 21.

76 Ibid., p. 23.


83 Barnard, op. cit., p. 136.

84 Marx, op. cit., p. 144; Koontz and O'Donnell, op. cit., p. 50; Barnard, op. cit., p. 163.

86 Marx, op. cit., pp. 140-1.


88 Watkins and Dodd, op. cit., p. 9.

89 Nolen and Maynard, op. cit., p. 5.


92 Barnard, op. cit., p. 217.

93 Allcut, op. cit., p. 234. Spengler and Klein similarly wrote: "A company without capable managerial leaders is like a ship without a pilot." op. cit., p. 156.


95 Ibid., p. 259.


99 Roethlisberger, op. cit., p. 125; also Gardner and Moore, op. cit., p. 18.


102 Koontz and O'Donnell, op. cit., p. 397.


104 Koontz and O'Donnell, op. cit., p. 57.

105 Marx, op. cit., p. 371.


109 Roethlisberger, op. cit., p. 192; Brown, op. cit., p. 110; Watkins and Dodd, op. cit., p. 9.


111 Ibid.

112 Humphrey Michell, for example, wrote: "It is often true that employers, who sincerely endeavour to benefit their workers, have been heartbroken at the ingratitude and hostility they have met. But, after all, we are finding that the truth is no more than that both employers and workers are human and partake of the unhappy weakness of humanity. We are all selfish and greedy, more or less, and it is easy for these unlovely traits to come to the surface and spoil our relations with our fellow beings." Elementary Economics, (Toronto: Pitman & Sons, 1932), p. 154. Michell was a professor at McMaster. Also, Brown, op. cit., p. 124.

113 Roethlisberger, op. cit., p. 125.


116 Gardner and Moore, op. cit., p. 194.
117 Roethlisberger explains: "To preserve the social values existing in the cooperative system, the administrator needs skills of diagnosing human situations. To expect him [sic] to exercise effective control, to maintain authority, to obtain loyalty and confidence without such skills is to ask him [sic] to stay in a horse-and-buggy stage with regard to this aspect of his [sic] job when the remainder of it has long since become streamlined. op. cit., p. 193.

118 Barnard, op. cit., p. 220.

119 Bethel, Atwater, Stackman and Smith, op. cit., p. 384.


122 Reynolds, op. cit., p. 45.

123 Ibid. Also, Bethel, Atwater, Smith and Stackman, op. cit., p. 382; Gardner and Moore, op. cit., p. 52.


126 Nolen and Maynard, op. cit., p. 94.


128 Jones, op. cit., p. 169.

129 Allcut, op. cit., p. 200.

130 Jones, op. cit., p. 158.

132 Roethlisberger, op. cit., p. 172.

133 Jones, op. cit., pp. 95-6.


136 Jones, op. cit., pp. 75-6.

137 To illustrate Barnard suggests that "an organization is a 'construct' analogous to 'field of gravity' or 'electro-magnetic field' as used in physical science." op. cit., p. 75.


139 Allcut, for example, writes about the manageability of routine work. op. cit., p. 64.


141 Barnard, op. cit., p. 238.

142 Gardner and Moore's analysis even includes the unions' contribution to harmony. They write: "Once top management has accepted the point of view and powers of the union, however, it usually sees the union organization as a useful part of the total structure. If worker attitudes must be considered, management usually finds it simpler to have one organization which can present a composite of these attitudes. And it is easier, too, to deal with a small group of union officials than with a mass of individual workers ..." op. cit., p. 129.

143 Folts, op. cit., p. 20.

144 Koontz and O'Donnell, op. cit., p. 47.

145 Barnard, op. cit., p. 119.

146 On workers' restriction of output, for example, see Michell, op. cit., p. 149; Bye, op. cit., p. 127. On unions' thwarting of harmony, see Spengler and Klein, op. cit., p. 337.


156 Thus, Allcut writes: "It does not pay to have a cheap and inefficient man [sic] operating an expensive machine. In all types of work, freedom from labour troubles and increased cooperation produce decided economies." *op. cit.*, p. 163.

157 Haire, *op. cit.*, p. 94.


159 See, for example, Haire, *op. cit.*, pp. 61-3.

Chapter Eight

Liaison -- Managers and Management Education: Clarence Fraser and the Canadian Management Movement

Modern medicine applies thorough diagnosis before treatment. Modern management likewise can assess its own conditions and needs, before moving into its next phase of development for health growth. 1

As the administrative function within organizations was enlarged, the professional manager became more prominent and important in all areas of work. Simply, by the 1930's, the manager's presence was felt by workers at all levels of both public and private bureaucracies. From the point of view of the management experts, this visibility of the manager was not enough to ensure smooth functioning. Besides his/her presence, management experts sought to gain most from the managerial function by first of all, ensuring that managers were well trained and secondly, by engaging in further analysis of the work process and management techniques.

Just as the incorporation of any new theoretical material into the curriculum was a slow process, industry's response to various forms of research was neither immediate nor always favourable. Industrialists, businessmen, and
managers adjusted practical techniques of production and administration only when they were adequately convinced of the usefulness of change. This does not mean, however, that experimentation occurred at an academic level and was then transferred to the wider community. What is important to understand is the process by which academic teachings and research were integrated into the work of Canada's managers, and in turn how the management movement affected business education and the educator's willingness to incorporate the techniques and principles of the practitioners' science into the schools.

This chapter examines the involvement of Canadian managers in the promotion of management education. In particular the section studies the work of Clarence Fraser who acted as a liaison between academia and the business environment. Management practice is closely examined in each of the three phases under study as it embraced the theories of scientific management, industrial psychology and human relations, and structural-functionalism.

Clarence H. Fraser: Management Education Promoter

A pioneer in the development of the Canadian management movement, Clarence H. Fraser was instrumental not only in coordinating some of the work done by managers and management educators but also in developing a concrete set of objectives for the field. His concern for coordination and insistence on the advancement of a management movement in Canada,
he argued, reflected the growing needs of the Canadian economy
which increasingly required "not only well-intentioned but
well-trained managers for general administration and for those
special fields of activity which are 'integral parts of
management'."²

Fraser was a member of the faculty of the School of
Business Administration, University of Western Ontario, mem-
ber of the advisory committee, Management Training Courses
at Western, and was a founding member of the Industrial Rela-
tions Centre, Queen's University. Other educational commit-
ments included faculty appointments in Industrial Relations
at the Graduate College of Princeton University and in the
evening division of Palomar College, California. Additionally,
Fraser contributed to the programmes and conferences of a num-
ber of professional societies and held directorships in the
Institute of Administration, Montreal, the Montreal Personnel
Association, and the Personnel Association of Toronto. Despite
these prestigious positions held within educational and profes-
sional institutions, Fraser was best known for his work on
manpower problems and in personnel development at the Bell
Telephone Company of Canada. In recognition of his work,
he was employed as personnel consultant to the Canadian govern-
ment on manpower utilization in Canadian war plants, to the
War Assets Corporation on organization and personnel as well
as to business, government, and other enterprises in Canada,
U.S., and overseas.³ Fraser's activities as a personnel con-
sultant were very extensive.\textsuperscript{4}

During the 1930's one of the objectives of Canadian executives was to establish programming in Industrial Relations at the universities. Clarence Fraser was instrumental in his words in "planting an industrial relations centre at Queen's University."\textsuperscript{5} The initial idea for the centre at Queen's was developed at the Princeton Industrial Relations Conference in September of 1935 by Bryce M. Stewart, Research Director of Industrial Relations Counsellors, New York, Clarence Fraser of Bell Telephone Company of Canada, and one of the founding members of the Montreal Personnel Association. These men agreed to work together from their locations in New York and Montreal to push for the centre\textsuperscript{6} with Stewart gathering support from his associates at Queen's and Fraser convincing various Canadian management groups. Through such networking support for the idea was developed and Queen's agreed to host an Industrial Relations Conference in 1936 in conjunction with the Montreal Personnel Association, the Personnel Association of Toronto, and core planners, W.A. Mackintosh, Director, Commerce Programme, Queen's University, Fraser, representing the Montreal Personnel Association, and W.H.C. Seeley of the Personnel Association of Toronto. As a result of the response to the conference and interest generated, the Industrial Relations section of the Department of Commerce and Administration at Queen's was established in 1937 with Professor J.C. Cameron as its director. Thus, these
management experts targeted their concerns and actively promoted their whims as well.

The urgency with which Fraser and company promoted the development of a Canadian industrial relations centre was related to their common conviction that organizational problems could be abated with careful planning, research, and management of labour. Once this was recognized by university personnel, the task became one of instituting appropriate curriculum, finding specialists to teach, and gaining the support of the business community in this effort. When the Industrial Relations Centre was first established at Queen's in 1937, there were no immediate plans to "turn out specialists in industrial relations who would be snapped up by industry for expert jobs." Rather, as Professor W.A. Mackintosh expressed in a letter to Fraser:

> What we would like to do is to see that every graduate in Commerce knows something of the field of industrial relations even though very few of them will ever take it up as specialized work ... everybody entering industry ought to have an intelligent approach to industrial relations and ... it ought not to be a subject which receives consideration just before an industrial dispute. 8

Those destined for specialists' training would research and consult to industry. Built into the plan, however, was the notion that basic knowledge, information, and skills in managing labour relations on a daily basis were fundamentally required by all desiring a business career.

In programme planning, university personnel were care-
ful to maintain an agreeable relationship with businessmen and industrialists. Before a faculty appointment was made for the Industrial Relations Centre, for example, Mackintosh deliberately relayed his ideas concerning the position and his expectations of the successful candidate to Fraser. The candidate was expected to spend only one-third of time in teaching while research and consultation would occupy the major portion of time. In hiring a researcher consultant, Mackintosh expressed his perspective in this way:

We would expect him [sic] to maintain active contact with industrial relations particularly in Canada and, to some extent, in the United States. ... We would hope in this way to render in a comparatively short time a valuable service to those engaged in industrial relations work by being able to make available to them in bulletins and circulars information as to developments in the various fields. 9

The "valuable service" would include the housing of files of agreements and employee relations plans of various companies, library service, and up-to-date books, periodicals, and research endeavours. Consequently, the university would be cast as an information/resource centre for those engaged in industrial disputes and other labour relations problems.

Generated from within business circles the management movement had an impact on the direction and focus of business education. Although Fraser was careful to separate and account for the particular mandates of the professional associations as distinct from that of the universities, in the end he concluded that "each may contribute to the common pur-
pose before they proceed along their respective roads."^{10}

In examining the development of Canadian personnel associations in relation to the Industrial Relations Centre at Queen's, Fraser established that "both purpose to advance the cause of sound human relationships in industry and commerce."^{11} However, the university's contribution to this goal differed from that of the professional associations due to the nature of its programmes. Basically, Fraser acknowledged, as a public body, the university programme must incorporate a broader basis. In Fraser's analysis, the emphasis in the university was on society "with a focus on human relations within and surrounding industrial and commercial institutions" while the professional associations focussed on management, particularly personnel administration and personnel management.^{12} As such while the latter organizations emphasized practice and only indirectly dealt with legislation or labour union movements as these affected management, the Queen's programme sought to analyze labour legislation, union activity and policy, and management practice and its interrelationships. As active participant and organizer in both organizations, Fraser, as go-between, worked toward an agreement on the usefulness of the one group's theory and analysis and the other's experience and data base.

To a large extent Fraser pioneered the management movement in Canada. Its purpose was mainly educational and to achieve this, he necessarily argued that "the educational
institution, the industrial enterprise, and associations of practitioners ... are allies in this growing movement."\textsuperscript{13}

It was expected that the universities would provide students with a broad foundation in the "theory of administration and related fields of knowledge", the industrial work experience would allow participation and practice, and the professional management association would operate as a forum for discussion and evaluation of both theory and practice with a variety of professionals sharing a diversity of problems. Although this arrangement seemed to provide ample opportunity for the free exchange of ideas, there were definite plans for the direction this information sharing was to take. Thus, as secretary and treasurer of the Administrative Group of Montreal, Fraser sent notice to all members that the theoretical direction of the group would be taken from two main sources: \textit{Papers on the Science of Administration}, edited by Gulick and Urwick and \textit{Industrial and General Administration} by Henri Fayol.\textsuperscript{14} With even more specificity, Henri Fayol's definition of administration was adopted.\textsuperscript{15}

In specifying the direction and function of the management movement in Canada, Fraser outlined the role of the universities. The upper levels of the management movement --"top executives and their understudies", and representatives of city and regional management associations working to develop the movement locally--would originate from "schools of administration preferably of postgraduate standing" and would
further be provided with correspondence and extension courses from the schools. Regular membership—practitioners, researchers and teachers within the specialized field—would be "fed by schools dealing with special phases, undergraduate and graduate" of the management experience as well as by extension courses offered. In providing initial learning experiences in management, the business schools prepared future managers and administrators with a common base of theoretical and practical knowledge. It was the task of the professional associations and Canadian management movement to continue and reaffirm this process.

Fraser's goal was to coordinate the efforts of three primary groups within the field of management. These were groups involved with manpower, that is, personnel and adult education associations, the monetary groups, such as accountants, secretarial associations, and "credit men"; and those primarily involved with equipment, including engineering institutes, associations of professional engineers, and purchasing agents. By meeting together in a professional capacity and engaging in educational endeavours and joint efforts of consultation and practice, Canadian managers would be able to keep pace with the "international sphere of management."

In setting out the guidelines for the Canadian administration movement, it is evident that Fraser and his associates assumed that there was one essential theory of management and consequently "one best" management system. The pur-
pose was to coordinate efforts both vertically between management and the higher sphere of administration and horizontally among departments within an organization. Moreover, if properly coordinated, this unification of management practice would cross organizational boundaries, thereby alleviating serious problems of "breaking in" new managers and re-socializing them to the management system of the particular corporate concern.

Fraser's plan started with the premise that those choosing "the vocation of 'management' as a career" were most often experienced in "technical, sales, clerical, craft, production or other related work as a supervisor" and were then promoted to manage units of departments or complete departments "directing and coordinating production, distribution, control, ... or labour functions." As distinct from this, the administrator or the "manager's manager" was concerned "with all or a major portion of the operations of the enterprise as a whole." While a select few, comparatively speaking, were destined for administration, "the growth of institutions is calling for an ever-increasing number of highly qualified practitioners" whose "status is not that of owners." The "primary duty" of this level of managers is to act "as a judge or umpire--weighing and deciding action on the claims of all parties in the economic system--labour, owners, consumers, and the public." For the process to run smoothly, Fraser recommended that common definitions and language be adopted,
that current management practices be appraised against "accepted theory" and that standards of knowledge and skill be established for the effective practice of administration. Essential to the effort were university courses in management, other educational associations or institutes, a system of information, and a network among practitioners.

In his writings and advice offered through consultation, Fraser's early work can be distinguished from later pieces. Concerned largely with the breakdown of the work process and the scientific analysis of the breakdown during the early years, Fraser was actively involved with the Taylor Society of New York and corresponded with H. Person, the Society's director. His advice and written work seemed to reflect this intense interest in scientific management. During the later years, the 1940's, Fraser's concern was with matching employees to jobs. Once the trend toward breaking down the work process into smaller components had been successively implemented, he argued that the task of the personnel specialist became one of scientifically analyzing the jobs and then finding employees with specific characteristics. Later works reflected Fraser's personal knowledge and contact with the Hawthorne experimenters and the human relations school as well as with the fields of industrial sociology and psychology.

Valuable lessons regarding the process by which various management theories such as those of Ordway Tead, Thomas G. Spates, F.W. Taylor, Henri Fayol and others were
introduced in Canadian management schools and practices and the coordination and contact between the practitioners and educators are gained from studying Fraser's activities. Specifics with regard to his work and its influence on Canadian management education and practices will be analyzed subsequently.

Scientific Management and the Management Community

As noted above, the Canadian management movement carefully adopted its definition of administration from Henri Fayol and its theoretical direction from Luther Gulick and Lyndal Urwick's edited collection, Papers on the Science of Administration. Fayol's concept of administration, briefly, to plan, organize, command, coordinate, and control, was essentially based on Taylor's scientific management. Fayol was a contemporary of Taylor's and as Braverman notes, he approached administration systematically in order to secure absolute organizational control. An outspoken supporter of Taylorism and the management movement, Urwick directed the International Management Institute centered in Geneva, Switzerland. Writing in praise of the work of New York's Taylor Society, he named the Taylor Society Bulletin as "the best periodical" available for the person "who wants to keep pace with the progress of the general management movement." Of Taylor himself, Urwick was impressed by his stature as a "practical man, an engineer
of great technical distinction" who contributed greatly by "applying consciously to the whole process of industrial organization the intellectual methods responsible for the advances in the physical sciences which had made modern machine industry possible."22

Fraser himself was deeply interested in the work of the Taylor society and in fact corresponded directly with Dr. Harlow S. Person, the Society's managing director. In a letter dated July 13, 1934, Fraser acknowledged Person's influence on his own ideas. Having read Person's article, "Mental Pitfalls in Leadership", Fraser commented: "I enjoyed your clear-cut presentation very much and it has served to clarify my ideas on that involved subject".23 Similarly, he added that the copy of "Scientific Management in American Industry" Person provided him during their meeting in September of 1932 had proven "very useful" in his own work.

Fraser was particularly interested in pursuing work in scientific management before leaving for a period of study in Britain and Europe with such organizations as the Institute of Labour Management, the British Labour Ministry, the National Institute of Industrial Psychology, the British Works Management Association, and the International Labour Office. He asked Person whether he knew "of any work paralleling that of the Taylor Society" in Britain or Europe. Upon his return, he wrote: "I should like to become a member of the Taylor Society ... I have contemplated [this] since our conversation."24
During his 1934 sabbatical Fraser would be introduced to the British adaptation of scientific management since, as Person pointed out, the various institutions which were intending to "pilot" him about, "take the place of what the Taylor Society is in the United States."25 Excited about Fraser's obvious commitment to scientific management, Person gave Fraser the names of two important scientific management contacts. One was R.K. Mackay of Management Research Groups, which he noted was "one of the most important of the equivalents of the Taylor Society in Great Britain." The other was Major Lyndal Urwick whom he suggested could provide Fraser with "more information and advice about management in Europe than ... anyone else abroad."26

Upon his return Fraser wrote to Person once again, this time asking for specific advice on the application of the principles of scientific management. Fraser, it seems, was particularly interested in acquiring a copy of specifications on the application of scientific management to the work of the nursery within the Forest Service. His interest was sincere. He intended to work "with [these] specifications in ... [the Bell Telephone] Company" and also wished "to apply some of the elements of scientific management to a homestead project where forestry, of course, applies."27 Fraser learned of this information through a mutual acquaintance, Ordway Tead, president of the Society for the Advancement of Managers and an editor of Harper & Row, with whom he corres-
ponded freely throughout his career.

Fraser's association with the Taylor Society and scientific management was not overlooked in Canada. In pioneering its efforts, for example, the Administrative Study Group of Elliot Lake wrote to Fraser asking for his help and support. A letter to Fraser dated December 30, 1959 read:

We have recently formed an organization along the lines of the Porcupine Institute of Administration to study scientific management. ... We have discussed a study programme with officers of the Porcupine Institute, and selected their information on your "Hub of the Administrative Process" as our starting point. 28

Fraser consequently responded and cordially accepted the invitation, thereafter performing a great deal of work for Nordic Mines and the administrative group.

Among Canadian Managers and administrators the question was not one of whether or not they should employ techniques of scientific management, but rather how to use the techniques more effectively. In an address to the Canadian Club of Montreal in 1951, Lyndal Urwick reminded Canadian managers of the profound effect scientific management has had in "alter[ing] ... ideas of how to conduct industrial operation." Resulting from scientific management were experiments with "planning, time study, motion study, routing, scheduling, and many other devices." 29 Beyond the concrete experimentation and changes in approach to the methods of work, however, scientific management profoundly affected conceptions of the relationship between management and workers. Urwick clarified
this in his address by saying:

It demands of us, as Frederick Winslow Taylor, its greatest pioneer, expressly recognized, 'a mental revolution'. It means the substitution of inductive thinking ... based on theories or opinions or custom, in all matters concerning the organization of our societies. More concretely, it demands recognition ... that machines have made it essential that men [sic] should cooperate together in much larger groups than were appropriate to the older culture of handicraft production. ... That means we must learn to abandon completely the current picture of our industrial world in which men [sic] are divided into workers and management groups which are assumed to have divergent interests. 30

Through the process of instituting work systems based on Taylor's principles, managers became convinced of the common goals of workers and management and assumed in a somewhat paternalistic manner the necessity of harmony and cooperation. Convinced of the importance of consensus, efforts of management were eventually directed toward eliminating sources of conflict and persuading workers of the benefits of consolidating their own interests with those of management.

In his personal career, Clarence Fraser was mainly involved in "the personnel aspect of management" and devoted considerable time to the analysis of the interests of employees vis-a-vis company goals and the application of practices of what he referred to as "personnel budgeting." 31 From Fraser's point of view, while it was possible to derive work loads "from coefficients made from time and motion studies", to adjust numbers in the work force, to arrange "schemes of training and interdepartmental transfers", he argued that "for
execution tasks in the work process. With Systematic Management, specific management techniques were developed, rationalized, and eventually refined.

**Scientific Management in the Curriculum**

Studying the development of business and management education allows insights into the development, rationalization, and refinement of managerial techniques under Systematic Management. Management education served to justify this process by lending credibility to the management movement through affiliation with the university. One of the essential features of training programmes for modern managers was the lesson of the inevitability and necessity of management and its various disciplinary techniques. Schools of business were guided by the efficiency ideals of the modern management movement and as such presented a positive approach to problem solving within business organizations and the wider society.

The social history of management practice and management education clarifies the objectives of social scientific work in industry. For the industrial social scientists who strove to ease the difficulties of the work situation and achieve the "efficiency ideal", the science of rationalizing the work process and behaviour in it perpetuated the routinization of labour, the further division of tasks, and the removal of craft and skill. In developing modern management techniques in response to the challenge to maximize the effi-
ciency of the labour component, the behavioural scientists merely completed and refined the process begun by scientists and engineers in standardizing the workplace. Once the formula for the "science" of handling workers, best represented by Taylor's principles of scientific management, was fashioned into the design of the industrial organization, this formula was eventually adapted in response both to changing needs and to criticisms of its harshness. The human relations approach along with a belief in the necessity of strong leadership became the universal mode of management. The science of management was softened to become the "art" of handling workers. The theory of scientific management started with the ends of management--the efficiency ideal--and provided justification for management design. Human relations experts contributed technique. Human relations approaches became the means to the achievement of scientific management in the organization.

While the theory of scientific management permeated the modern work process, the technique of scientific management was gradually replaced with human relations methods. Scientific management techniques were representative of the early management phase, 1900-1930, when corporate goals--productivity and efficiency--were most tangible. Business education during this period was most concrete with skill building as its primary objective. Management training was in its infancy. While business schools gradually adopted courses
the company as a unit, personnel provision ... was not ... highly qualitative", thereby encouraging inefficiency of operations. To avoid this problem, he advocated careful "personnel budgeting" by means of detailed study of occupational trends, job analysis, selection and training procedures, and approaching personnel considerations with "knowledge of both numbers and personalities."  

Although it also addressed the issue of the employee's satisfaction on the job, Fraser's concern with "personnel budgeting" evolved with his commitment to the maintenance of corporate goals and the ideals of harmony and cooperation. Through careful management, company goals are re-iterated as employee goals. Fraser's own description of his work during the 1940's in promoting the "personnel review process" in Bell Telephone's Western Area Plant Department in Toronto bears this out. In his words:

The personnel review process, now general throughout the Company, started there in the craft groups, and grew to what I have called "A Career Plan for Every Man"--initially developed and applied for him [sic]--then with him [sic]--and eventually by him [sic], with the cooperation of his [sic] immediate associates and the rest of the organization, and at times with the aid of people outside the Company organization. 34

Thus, corporate goals are developed and reinforced in a carefully construed manner.

The aim of the professional management association conferences was to address issues faced by managers and remind various types of managers of the commonality of their
goals. That is,

Management must link up all its practitioners into one body, pursuing a common end, conscious of a common purpose, actuated by a common motive, adhering to a corporate creed, governed by common laws of practice, sharing a common fund of knowledge. Without this we have not only no guarantee of efficiency, no hope of concerted effort, but also no assurance of stability. 35

The purpose of management was to act as a balancing mechanism, deflecting both sources of internal disruption and external forces of dissatisfaction and change.

In carrying out the mandate of corporate efficiency and profitability, questions of "fair" wages and employee satisfaction were major obstacles faced by managers. In 1937 the Industrial Relations Conference at Queen's University defined a "fair wage" as the "full competitive rate which the work will bring in the market and time where it is offered." In discussing the issue of fair wages, Canadian managers hoped to act "on those things which management can control in the wage issue [and] to indicate elements which management cannot control and for which government, labour organizations, etc., must assume responsibility." 36 First, managers were interested in how they would determine the full competitive rate in a locality for certain kinds of work and secondly, once competitive rates were known, they questioned how management could develop a fair wage structure for an organization. The concept of "fairness" was defined by management. The means employed by managers--occupation and job
analysis, time study, comparing classes of work by task analysis and vis-a-vis standards and costs of living—were scientific and at the outset seemed to be unrelated to questions of profitability and managerial authority.

According to Fraser, adequately dealing with the issue of wages not only enhanced profits but, more importantly, determined survival. In trying to establish working relations with successfully operating personnel consultants, Fraser became one of the most knowledgeable about Canadian personnel matters and often acted as a referral service. For example, early in 1937 he wrote to C.S. Slocombe, acting director of the American based Personnel Research Federation about the interest the presidents of both Imperial Tobacco of Canada and R.C.A. Victor had in personnel related matters. "The Imperial Tobacco people," he wrote, "are particularly interested in wages in relation to prices and have a special interest in the question of annual earnings against standards of living." In his correspondence with Bryce M. Stewart of the Industrial Relations Counselors of New York, Fraser announced the formation of the Personnel Association of Toronto and noted that the executive officers included men associated with the Toronto Transportation Commission, Swift Canada Co., Canada Packers, the Ontario Employment Service, and Canadian National Carbon Company. Thanking Stewart for soliciting the participation of representatives of A.T. & T., Union Carbide, and U.S. Rubber in the 1936 Industrial Relations Conference
at Queen's, Fraser noted that American companies with interests in Canada were welcome to join since they may wish to "keep closely in touch with developments in Canada"\textsuperscript{38} and he worked actively to encourage their support and attendance.

In another instance, D.G. Willmot, Personnel Manager of Atlas Steels Ltd. wrote to Fraser asking him how to establish "a true basis of remuneration for foremen and men [sic] in the plant supervisory group."\textsuperscript{39} The next year, still troubled, Willmot asked Fraser to recommend someone for the position of Director of Foremen and Employee Training,\textsuperscript{40} to which Fraser obliged by suggesting "the possibility of getting a man [sic] who has served with the Army, preferably in a General Staff Officer capacity."\textsuperscript{41} Hence, personnel officials sought centralized sources of knowledge and information in determining needs and requirements and in setting down the parameters of personnel policy and corporate control.

Along with those prominent in the personnel field in both the U.S. and Canada, the Canadian administration movement attracted the attention of university business school officials and educators as well as the occasional member of Departments of Engineering. According to Fraser, effective labour and organization management could only be accomplished through coordinating the efforts of the engineering, production and personnel units. Writing to Professor J. Douglas Brown of Princeton University's Industrial Relations Department, Fraser commented on Brown's paper, "Maximum Utilization of
Employed Manpower" by saying:

When I was out on consulting work ... we found that plants that had representatives of these four bodies, [industrial engineering, production control, manufacturing, and personnel], meeting periodically were generally on top of the job. Usually the Personnel man [sic] was chairman. Industrial engineering providing work standards, production control provided schedules of materials and manhours, manufacturing indicated components of working groups required and personnel indicated its plans for hiring or removing required manpower. 42

Further, he suggested that Management Personnel and Industrial Engineering Departments could most effectively develop job classifications, job specifications, and promotional and transfer charts. Grafting the data of the industrial engineer--task analysis of production plans--to that of the personnel manager--job and employee specifications--was seen to be the most effective means of corporate manpower planning. However, it is clear that the engineer's input was to enhance the process of planning, not to determine it. The upper hand would be maintained by members of the management team.

Although management courses had been available in engineering departments since the early twentieth century, engineers were not represented in great numbers in the management movement. This reflected the growth and development of management as a separate occupational category and was not due to any lack of interest by engineers in management issues. Engineering educators, in fact, continually sought to improve and strengthen the management courses offered through their
departments and maintained close contact with business depart-
ments on campus. With the existence of one branch of the
Canadian administrative movement in Montreal, the Administra-
tive Conference Group, Professor J.A. Coote of the Department
of Mechanical Engineering at McGill, for example, wrote to
Fraser asking for his endorsement for additional management
courses for engineers. Fraser replied with his prescription
for the most appropriate form of education:

Personally, in talking with young and older
engineers I have had most success when I have
moved them through the structural and mechan-
ical aspects of mechanical engineering--into
the realm of industrial engineering with its
emphasis on work--into the field of personnel
with its emphasis on people in relation to
work--and finally into the realm of the dynamics
of industrial relationships ... 44

Coote was important to influence in this matter. Like Fraser
himself, Coote was a key liaison between academia and the
management community. Along with his post at McGill, he
acted as chairman of the Montreal Administrative Group in
1939 and became a member of the Administrative Conference
Group of Montreal.

While engineering educators, especially in the U.S.,
sought to integrate departments of business and engineering,
in Canada the movement was not as much toward having engineers
acquire business education as it was for businessmen to
acquire enough technical knowledge to protect their territory
and field of interest. The problem was one of definition of
the field of business vis-a-vis engineering and the expecta-
tions of the new and rather unlimited field of administration. Outside the universities, the problem of defining the areas of industrial and business education was manifest even before the turn of the century. For example, the first meetings of the International Congress on Commercial Education (of which Canada held membership) were held in conjunction with those on industrial education. The first congress in 1886 at Bordeaux was for technical, commercial and industrial education. By 1898 a separation developed between commercial and industrial education and in 1901 the International Society for Commercial Education was formed. Once formed, main questions addressed included the training of responsible administrators, marketing at home and abroad, personnel matters, vocational guidance and selection, and psychological testing. 45

Although management theory and hence management education was eventually approached in a more "humanistic" fashion, the foundation of management as a scientific discipline was never abandoned. Business faculty members were continually engaged in research aimed at perfecting the precise measurements of workers' activities. One Canadian business school instructor detailed a current project on basic motion times. It read:

We have built a variable work station set-up at which a subject can perform the majority of basic motions in various sequences under various conditions of difficulty. The duration of each motion is recorded in time units of 1/60 seconds by an electrical stylus marking on a constant-speed sensitized paper tape. The first project for
which this apparatus is to be used is part of a general study of basic motion times. 46

Further examples of work in progress by Canadian business professors--work measurement, fatigue, productivity, idle time, incentive wage payments--pointed to the efficacy of underlying assumptions regarding the science of management and the ubiquity of Taylor's work in the twentieth century.

Fraser and his colleagues worked for a number of years to establish a Canadian management movement which would function as a decision and policy making body and resource and educational guide for Canadian managers. Throughout his career he worked in earnest to engage the support of the universities in this attempt. Recognizing the importance of the Canadian management movement for business education, the University of Western Ontario established an Academic Advisory Committee and its first meeting was held on May 27, 1948. In attendance at the meeting were members of London Life Insurance Co., Lever Brothers, Ford Motor Co., Dominion Securities, I.B.M., Hobbs Glass, Fraser himself representing Bell Telephone, and numerous top level university administrators. 47 At this historical meeting, the Committee identified its objectives which read:

To constitute a link between business executives and the School, to bring about a closer working arrangement. ...
To take an active part in the development of the courses of instruction for both the undergraduate and the graduate schools.
To cooperate with the Department in organizing the special courses of instruction designed primarily for business executives.
To facilitate the work of the Research Division in gathering the case material. 48

Through this committee, key members of the Canadian management movement would ensure not only that students were properly trained for future roles as managers but that managers currently under their direction within Canadian corporations were guaranteed staff development and training within the university framework.

The Academic Advisory Committee monitored the curriculum of the Faculty of Business Administration. It evaluated programmes, made suggestions for change, and contributed case materials for instruction purposes. Various subcommittees studied courses in the different areas of specialization. The Committee on Production, under the chairmanship of Harold Newell, President, Andrew Wire Works, recommended that there should be advanced courses in production for graduate students, including such topics as the use of planning and control boards, quality control, and problems of organization and administration. Further suggestions included a course "covering several important Canadian industries" examining mainly production problems in those industries with consideration of the problem of plant safety. 49 The Committee, in general, endorsed the production course since it adequately covered problems encountered in manufacturing enterprises, especially planning, use of machines, methods of instructing workers, administering wages, and organizing and controlling the productive process.
The development of an Academic Advisory Committee formalized the liaison established by Fraser and others between the Universities and the Canadian management movement. The existence of such a committee and the consistent attendance of go-betweens such as C.H. Fraser guaranteed not only that specific courses would be developed but that they would address issues within a particular theoretical framework.

Human Relations and Management Practice in Canada

In his endeavour to uncover the roots of organizational dysfunctions, Clarence Fraser carefully analyzed personnel relations and argued that the key to organizational well-being was a successfully functioning personnel administration. Fraser influenced the Canadian management movement to incorporate the human relations response as a central feature of the movement. While this did not negate the movement's endorsement of scientific management, it required that the management associations consider the lessons of social science.

Fraser began with the assumption that it was essential to "promote a mutuality of interest." He argued that this was only possible when both employers and employees were regarded as human participants "in search of the satisfaction of urges as persistent as life itself" rather than as "two organization charts greeting each other across a table." Problems in establishing harmony in employer-employee relations
were attributed to managerial conceptions of the organization as mechanical rather than dynamic. The particular approach and the internal organizational environment were the most important elements, Fraser noted, in promoting common goals between employers and employees. Managers were to determine whether such demands were reasonable and whether industry should be expected to meet these demands.

From his studies, Fraser concluded that it was essential to develop the worker's acceptance of the organization's goals. He advised managers to create in the worker a "desire ... to be on the team." Many factors contributed to the development of this "desire", such as day to day relationships between employer and employees, organization's communication system, and specific "quality of life" social and recreational activities. Feelings of trust, mutual cooperation, and sharing were essential. According to Fraser, "the loyalties on which any undertaking is carried forward come out of understanding and sharing. If there is a chance for a "concert of interests" in industry it would seem that this is the arena in which the concert must be played." In order to guarantee loyalty, Fraser added, employers must take extra precaution to develop fair wage policies and security measures.

Fraser corresponded regularly with Harold Bergen and Thomas G. Spates, both of whom he considered to be leaders in the personnel field. In an article entitled, "New Fashions in Personnel Relations", Bergen outlined the ways
in which personnel work was becoming "streamlined" from its "crudely developed ... creaking and ... cumbersome" past and argued that the "personnel man [sic] is emerging as a major business executive ... as he [sic] should be." Providing advice on the development of personnel policy, Bergen gave his assurances that "one rarely hears of serious labour troubles in companies with sound personnel programmes of long standing." Sound programmes promised "increased efficiency, employee satisfaction, and freedom from labour disputes." Congratulating him on this article, Fraser wrote:

You have done a remarkable job which to me is singular for its emphasis on organization structure, the integration of personnel administration with total operations, the emphasis on the 'social organization' as well as the formal organization, the desirability of institutional education and finally for the note on research. ... It seems to me that you are relatively one of the few ... with wide experience in industrial relations who sees it as a whole related to administrative management. 57

Six months later, Bergen sent Fraser another article, "Finding Out What Employees are Thinking". Outlining specifically how to measure employees' attitudes and what to expect from the results, Bergen clearly indicated practical uses of social science techniques in personnel management. He pointed out the necessity of such endeavours:

It is generally recognized that the morale of employees is closely related to their productivity. Hence, if management can determine the true nature, extent and causes of dissatisfaction, constructive corrections can be made which will increase profits. Most employers would like to know what their employees are thinking in
order that they may make these changes. 58
In examining "employee difficulties" in Bell Telephone, Fraser wrote to Bergen, noting that "his work would be helpful" in focussing his own study at Bell. 59

Just as the practitioners in the field sought advice from each other and experimented with new techniques in their respective organizations, academics sought information and new sources of data as teaching materials. This sharing between business and academia was facilitated by the case method approach and the teachers' need for up-to-date case materials. To this end Fraser wrote to Spates:

Would it be possible for you to let me have 25 copies of the Canadian version of your personnel policy statement? I am anxious to have a statement of this kind available to each member of my class of fourth year students at the University of Western Ontario. As one of their analytical exercises I am asking them to break down into its components such a statement. Yours is so complete that I would like to use it for this purpose if you have no objections. 60

Delighted with Spates' willingness to comply with his request, Fraser informed Spates exactly how this information would be used at the University of Western Ontario:

I am asking the members of our course at the University of Western Ontario to analyze ... [your Basic Personnel Statement] as one of their 'Analytical Exercises'. I have selected your policy statement and union agreement of the Canadian General Electric Company for this purpose. 61

Assuming the necessity of the worker's loyalty and cooperation at the workplace, the most important lesson for Spates was
that "for the attainment of those goals for which people everywhere have been striving since the early dawn, there is no substitute for sound personnel administration."

Backed by experience and reputation in the field, such statements would appear to undergraduates who were mainly inexperienced as absolute truths rather than as theories to be explored.

As a leader in Canada's management movement, Fraser kept abreast of new research in the field of personnel management. In addition to his correspondence with men such as Bergen and Spates, Fraser noted developments and recent publications in the field. On one of his lists, "Some Recently Published Books on Industrial Relations of Likely Long-Term Value", Fraser's interest and orientation in the field were clear. Along with his noted interest in the work of Ordway Tead and Luther Gulick and Lyndal Urwick, this list included Human Problems of an Industrial Civilization by Elton Mayo, Leadership in a Free Society by T.N. Whitehead, works on mental and aptitude testing by Raymond B. Cattell and Harry Hepner, and the National Institute of Industrial Psychology's 1936 book list.

In addition to the availability of up-to-date publications of research materials, through their positions and memberships in the professional management conferences, Fraser and his colleagues were privy to the most recent findings of experimenters. In a letter thanking Fraser for suggesting his name as a speaker at the 1937 Industrial Relations Con-
ference at Queen's University, Charles S. Slocombe, reported his involvement with the Hawthorne experiment:

I spent four days with the people at Hawthorne. Their stuff is pretty interesting, as they started up their interviewing again early this year. The interviewing is done by a specially selected and trained man, who came off the bench. Whether he is formally in the personnel department I do not know, but apparently is not so regarded by the employees. He appears to be in a side section of the personnel department, but had made no reports to anyone else, for the six months he had been working. ... I will talk about the set up and results at Queen's, and then possibly at some time we can sit down and go over it in more detail. 63

Slocombe stressed that information was not intended for wider audiences:

There is one thing that occurs to me about the conference and that is the question of reprinting or reproducing the papers. I always curse these people who will not talk for fear they will get into trouble, but the Western Electric as you know has been under investigation by the Federal Communications Commission, and their policy is to keep everything quiet until after the investigation is over. So I think I would not like to abuse their confidence by talking about them in a way which would get into print. 64

Not only would Canadian managers be given the opportunity to hear Slocombe's description and analysis of the Hawthorne events, but this type of "privileged" information represented a formalized professional link among members of this rather new occupational category. Comfortable in his own position at the helm of the Canadian management movement, access to such information was not unusual for Fraser. Fraser corresponded regularly with the Chief of Personnel of the Western
Electric Company between 1936 and 1943. His interest in the Hawthorne experiment and his ongoing correspondence with men like Ordway Tead were indications of the direction in which he moved the Canadian managerial profession rather than merely marks of a curious practitioner.

At a meeting of the Personnel Research Federation at the Canadian Club in 1936, several suggestions were entertained as to how psychiatric methods could be more widely accepted in industry. Members commented on the contribution of psychiatry in industry to advance standards and of its appeal to executives for raising "dollar value." Notwithstanding the reluctance of some industrialists to use social science procedures, this was generally not the problem at all. Rather, social science terminology seemed to create an impression that some executives were most uncomfortable with--that is, the organization's encroachment upon the realm of personal, informal, and difficult situations. In response to this Elton Mayo questioned, "Why not drop [the] term Psychiatry and use one that frightens nobody?" A more pointed response, however, recommended that practitioners "squeeze the juice out of psychiatry and press it into industry." Methods of psychology, psychiatry, and even sociology had to be represented as appropriate undertakings in the industrial sphere.

Fraser was affiliated with higher education in both Canada and the U.S. and responded directly to current research in the field. In a letter to Professor J. Douglas Brown of
Princeton University, Fraser described his "systematic approach on inward movement" of men and women within an organizational structure. He wrote:

Recently when in New York, Ordway Tead asked me if I would let him have a description of the procedure. I have sent him the enclosed notes. As you glance through them I think you will see the combination of ideas of Fayol on 'Functions Within Administration'; Urwick on 'Organization Structure, With Special Reference to the Function of the General Staff Official'; of your own group on 'Policy Determination and Organization of Personnel and Industrial Relations Operations'; of the Western Electric and Harvard people on 'Conditioning the Individual' and on 'Group Organization'. Others that have contributed to our stream of thought might be mentioned also, but you will detect them yourself. 67

Fraser presented his analysis and sought Brown's advice on the usefulness of his model. He outlined his inquiry:

... the suggestion I have to offer is this. With current general interest in manpower giving special attention to placement, I am wondering if we are not generally focussing on 'the right man in the right job' objective, and are failing to emphasize sufficiently the appeal to the individual in terms of the development of his [sic] capacities, interests, and opportunities. I think that by concentrating on the short range objective only, we are failing to obtain a sufficient response from the individual on account of this short range view. ... While the physical facts remain the same, the psychological factors are totally different. Do you think that this line of thought is one which should be brought forward at your September meeting? 68

Ongoing dialogue and analysis among researchers and practitioners were based on mutual need and dependency. Researchers required the insightful observations of the practitioners who in turn sought scientific support for their daily endea-
Fraser was interested in finding ways in which to use manpower most efficiently through effective management. Using a model of "mobility, flexibility, and stability", he analyzed workers to determine the importance of lateral and vertical moves by employers within an organization. He found a "stable 'core' is the 'hub' around which the remainder move or revolve" and then used this information to analyze a "decentralized application of manpower planning and control." His research pointed to his general interest in the promotion of scientific manpower planning devices. He described his work to J. Douglas Brown who was also "working directly in the field."

Research in human relations matters and the psychology of the worker became an important part of university business departments. The essential question was that of worker productivity and many studies aimed to decipher the effects of various phenomena--work environment, fatigue, incentives, allowances--on productivity. Many studies were specifically directed at analyzing worker behaviour patterns and attitudes. Research interests of Canadian business professors, for example, included determinants of informal group behaviour, influences of group composition, leadership and environmental factors, techniques and procedures of human relations, leadership patterns and motivational influences on labour leaders. One professor specifically described his work in progress:
I have done some exploratory research on attitudes as a behavioural stimulus in an attempt to discover some workable hypotheses. I believe that attitudes may be controlled to the extent that we can have a valuable device for motivating the worker and for predicting subsequent behaviour patterns.

Fraser and his colleagues supported such endeavours and provided a basis of entry into the practical settings of corporate enterprises.

Fraser and his associates had a vested interest in the education of future colleagues. In many respects there was little distinction between the university business curriculum and the educational process supported by the professional associations. Key academics and practitioners operated on an informal, first name basis and therefore relied on mutual input as a matter of course. For example, J.C. Cameron conversed regularly with Fraser about the Industrial Relations course he taught at Queen's and sent him copies of the examination questions for Fraser's interest. In pursuing a line of questions regarding wage increases, diverting strikes, and dealing with employee organizations, Fraser could concur that the perspective offered in the university was one that was acceptable to management professionals.

The relationship between university educators and Canadian managers guaranteed that the analysis of labour relations presented in the universities was one that was most appropriate in the business relationship. The university officials, however, tended to emphasize the institution's neu-
trality and the need for non-partisan scientific investigation. In a letter to Fraser regarding the development of the Industrial Relations Centre at Queen's, W.A. Mackintosh, for example, boldly stated:

We have no other object, however, than of having careful objective work done on the facts of industrial relations in Canada, and we hope we may make a contribution toward more hard thinking and less loose talking than there is at the present juncture. We don't intend to rehash the controversy of capital and labour, but to try and find out the most successful methods of dealing with various aspects of industrial relations. 72

Defending the university curriculum as thoroughly scientific, Cameron promised that the business department was "not any more interested in radicalism than ... in conservatism." 73 The department's role then was to determine the most efficient means to manage the relationship between employers and employees and in this respect stated its mission clearly:

... we must show constructive results which will commend themselves not to the noisy elements of any faction but to the sensible industrialists who see that there is need for clear thinking on the subject of industrial relations and are willing to utilize every means of improvement. 74

Based on this definition of "clear thinking" and unbiased accounting, then, Canadian managers were hired to provide students with first hand accounts of the problems of handling workers.

During the 1940's Fraser was hired at the University of Western Ontario to teach courses in Personnel Administra-
tion. The courses promised to "cultivate understanding and skill, 1) in judging what is and what is not sound personnel administration, and 2) in applying techniques used in administrative work and specialized work related to administration." Fraser introduced students to the field of personnel administration using his friend, Thomas Spates' definition. To this Fraser added, "personnel administration, as an integral part of total administration, is an art which requires practice to obtain proficiency."

Modelled after the professional experience, the course provided students with an opportunity to gain some experience and to practise Fraser's principles under his "objective" tutelage. For their correct work, they were awarded points depending on performance in field work, ability to apply the general schemes outline, and practise the art of handling workers.

In his own practical experience, Fraser developed criteria of what he called a "good scheme" of personnel management and taught the course around this scheme. Workers' objections, he argued, "can be overcome by setting up a sound scheme and calling the scheme to the employees." The course outlined the advantages and disadvantages of wage and incentive plans to workers and management but concentrated upon plans producing maximum production efficiency with minimal resistance by workers and their organizations. In general, the course related the idea that as long as the plan was appropriate for a particular labour pool and job function,
it would eventually be accepted even under the early objections of a difficult workforce. Thus, the "art" of personnel management was based on educated judgment and the skillful marketing of personnel procedures.

Pleased with Fraser's performance as an instructor at University of Western Ontario, W.A. Thompson, head, Department of Business Administration, wrote to Fraser expressing his "very great appreciation" of Fraser's "good work" and invited him to "work out a scheme whereby [Fraser] could supervise a Personnel Administration course" on an ongoing basis. Although Fraser refused the offer, indicating that he preferred to supervise students more closely than his schedule would allow, he maintained close connections with the university especially through his continued membership on the Academic Advisory Committee.

In proposing that Western adopt the "administrative practices approach of the Harvard Business School", Fraser argued that this style "accepts responsibility for action--for doing something effective with what is known." While other approaches--"the group dynamics approach of research social scientists" and "the informal organization approach of Mayo, Roethlisberger, etc." were useful and attractive in the social sciences, business, he argued, required a curriculum capable of translating theory into practice. Starting at the second year level he suggested that undergraduates be introduced to social psychology and sociology "with the instruc-
tors preparing the students to go on into practical application through administrative practice sessions in later years." Emphasis was to be placed on the Chicago School's community approach and "Mayo, Roethlisberger ... for the industrial setting." This theoretical introduction would be developed practically in fourth year when students would be required "to sit in with management training sessions in human relations companies where these are going on, to get closer practical situations." As business problem solvers, future managers would observe the operationalization of various principles and this classroom activity "would parallel surgical and medical clinics attended by medical students."

With respect to collective bargaining, Fraser doubted that this subject "should appear in the curricula, either at the graduate or undergraduate level." Because its presence in the business school "may readily be misunderstood" because it applies to only a "minority of the people in Canadian business and industry" and since it is a topic of concern in economics and political science, Fraser preferred "to see it dealt with within the framework of human relations under administrative practices." Within this framework, not only would it constitute more suitable curriculum for business students but he felt assured that it would be supported by "top management of many companies", such as Standard Oil, Harvester, Bell Systems. Following this suggestion the Academic Advisory Committee recommended that a seminar in collective bargaining
be offered as an optional course for M.B.A. students. Graduate students would at least "be aware of the more obvious pitfalls in collective bargaining." 82

Upon examination of the recommendations of the Academic Advisory Committee's subcommittee on Industrial Relations, it is clear that Harvard's administrative approach was adopted and thus human relations and management became the central focus of the business curriculum. The committee recommended that a compulsory course in Human Relations in Business and Industry be established for third or fourth year students. The committee's expectations were thus presented:

This course is recommended because it is my conviction that leadership is not a skill which is born in us, but a skill which we acquire. Since it is the business of the universities to endeavour to train leaders, more attention should be given to the fundamentals of good leadership. 83

In proposing such a subject of study, the committee argued that not only does the university have a responsibility to "give her [sic] students very real, practical assistance, but, moreover, there is a more general responsibility to benefit our society by turning out young men and women who have acquired some understanding of human relations problems which they encounter, and the philosophy which has been found helpful in approaching these problems." 84

In maintaining this philosophy a compulsory seminar in human relations was proposed for graduate students. The purpose of this course was to search for "means of achieving
equilibrium in the social adjustments in business." Students would be provided with opportunities to test problem-solving theories "in an actual working situation." Such courses in the art and practice of handling people and situations provided important skills and experiences not only for those who chose personnel work as a specialization, but significantly, the human relations area was defined within the framework of general administration.

This broad training in solving industrial and hence social problems was eventually covered by the term "industrial relations." Industrial relations was a "broader concept" used to embrace "all aspects of employer-employee relationships" and did not merely apply to labour relations or the collective bargaining relationship."85 The time had come for the business curriculum to provide insight into "global and conceptual rather than technical" problems and industrial relations departments were set apart to accomplish this task. This task represented, according to Queen's Principal W.A. Mackintosh, the university's contribution to the solution of complex modern problems. Describing the role of the Industrial Relations Centre at Queen's, Mackintosh said:

A university by definition must be interested in all phases of learning, ... Industrial relations are a part of life--an important and increasingly critical phase of modern life. It remains true that in no field do the significant problems of social control arise more sharply and in a more complex form than here. Whether one assesses it by the intellectual effort required, or by the worthwhileness of results achieved, university
work in this field is amply justified. It is not the subject matter nor the technique employed, but rather a philosophical and where possible the scientific approach, which makes the subject worthy of intellectual effort. 86

Thus, in incorporating the human relations approach and procedures from sociology and psychology, management and management education raised its general profile with ideas of social responsibility and the promise of social harmony.

The Management Movement, The Universities, and Responsible Management Practice

Perhaps due to the perception of "crisis" in higher education and the society at large, informal networks among businessmen and university personnel grew during the 1950's. Fraser's private papers and correspondence files are filled with examples of such networking, ranging from letters seeking advice on business matters for friends87 to university matters and policy related issues. It was this very network that led to Fraser's invitation to plan for University of Western Ontario's Graduate School of Business Administration. On April 21, 1948, L.W. Sipherd, Treasurer, Hobbs Glass Ltd. and later dean of Western's Business school, wrote to Fraser with the following request:

As you are undoubtedly aware, the University of Western Ontario is presently laying the groundwork for a Graduate School of Business Administration. ... There is an important job to be done in shaping up the academic policy of this new Graduate School and we are hoping
to have the interest and counsel of quite a number of businessmen in this endeavour. Because it is felt that you have a sincere interest in this new programme, we should like to ask you to act as a member of this committee. ... The task lying immediately ahead of this committee is to shape the programme for the special four-weeks' course to be held at the University early this fall. This will be the University's first step towards providing special instruction for businessmen. 88

Five days later Fraser replied to Sipherd accepting this prestigious offer. 89 Using means within the management network, a few months later Fraser wrote to W.A. Thompson to report the following information:

The other day ... I ran across an old Ottawa friend, Jim York. He is head of York and Bates, Barristers ... He represents a large number of U.S.A. companies who have Canadian subsidiaries and has a keen interest in the Stokely-Van Camp Co. in Western Ontario. He referred to Edward G. Stokely, President of the company and a graduate of the University of Tennessee, as one who could be interested in the development of the Business School at Western ... 90

Hence the Canadian management movement was formally and informally linked to the Business School and various channels for members' input were readily available.

During the 1950's Canada's leading executives gave more serious thought to the coordination, centralization, and planning processes involved in business and management education. Education had become a matter of concern not only for the young student desirous of beginning a business career but for the executive to keep abreast of research and technology in the field. In order to solve some of the difficulties of the current system, Western's comptroller, R.B. Willis proposed
the establishment of a Canadian based centre of education and research on business which he hoped would be housed on the Western campus. Willis, Fraser, and others held numerous discussions on this issue. In a letter dated December 1, 1959, Fraser recounted his work and plans to Willis, indicating that he had the endorsement of several key Canadian executives—Bill Horsey, Claude Richardson, Bob Taylor, Harvey Cruikshank, John Riegel, Dick Hinton—for this project.\textsuperscript{91}

In his early writings Fraser wrote on the merits of developing satisfaction among employees and its contribution to harmonious relations. It was essential, he argued to develop loyalty to the employer among employees and this, he said, could be accomplished simply by providing employees with some information—for example, "on how contacts are to be kept up on the job between worker and worker and between employee and supervisor; on whether or not the employee is to be permitted to sell the company's product;--all these bear heavily on the desire of the worker ... to be 'on the team'."\textsuperscript{92} In his later career, Fraser moved from considering organizational stability through the process of measuring employee satisfaction and loyalty and began to study the organization more generally within the framework of modern organization theory. He described a guide entitled "The Hub of the Administrative Process and Business Operation", usually referred to as "The Hub Chart", from which an administrator can point at a glance to possible problem areas within
an organization. As Fraser himself said, the chart diagram amassed all relevant organization questions regarding functions, administrative operations, administrative actions, human relationships, and business survival, security, and change and "keeps them in perspective and in relation to the various aspects of the common question 'how is this business being run, and what is needed in manager development to run it better'?" The purpose therefore was to find areas in which leadership development defaulted and to search for ways in which to correct such shortcomings.

Fraser's emphasis on leadership and performance in business organizations gave him critical license to examine the curriculum in this regard. In a letter to L.W. Sipherd in 1949, he expressed this approval of Western's emphasis on leadership training. The letter read:

It was clearly demonstrated to me in my teaching experience with the 4th year group from 1944-46. My personal experience with Western business grads who have worked with me in recent years satisfies me that no major change is needed, insofar as cultivating an expression of leadership is concerned. 94

Fraser did note, however, that students and young managers required a "basic course in conference leadership ... with opportunities for practice." With this training, he argued, "young men entering such companies would find it easier to adjust themselves, and be more highly regarded if they were effective in conference activity before they face the hurly-burly of modern business and community life." 95 By providing
lessons in leadership practice the university would perform a further valuable service by eliminating the need for the more elementary training in leadership responsibility during the executive's early work years.

During the 1950's with the complexity and changing technology of business, two factors became increasingly obvious. First, it was recognized that a well organized personnel department was centrally important to the success of the firm. Secondly, along with the substance of the educational programmes, business personnel were concerned with their length and qualities for enhancing professional advancement. From the point of view of the rising executive, management development programmes symbolized success, marking the individual selected by the firm as potentially achieving great rewards. From the point of view of the company, management development served to eliminate waste and ensure that present managers "do not become obsolete." Since companies had "invested" many years into "grooming" their executives, management training courses were regarded as necessary forms of "investment" protection.

Support for management development programmes was widespread. Ralph Cordiner, President of General Electric, for example, said:

There has been a growing realization in American industry that great untapped opportunities lie in finding ways to develop more fully our human resources--particularly the managers of our
business enterprises. Technological advances and the increasing complexity of managing under today's and tomorrow's conditions have made manager development a necessity as well as an opportunity. 97

The number of management development programmes grew rapidly during the 1950's. Until 1950 there were only three university executive programmes in North America--at Harvard, Western Ontario, and Pittsburgh, and 20 more were established between 1950 and 1955. 98 By 1962 30 universities in North America sponsored management development courses for senior managers and in addition, many firms such as General Electric, Standard Oil of New Jersey, and in Canada, Canadian National Railway, Aluminum Company of Canada, and Bell Telephone developed their own programmes. For the universities management development programmes attracted the much desired attention of the business sector. Through such programmes new alliances between faculty and practitioners were forged for case consultation, information sharing, and professional development.

Within the management development courses, emphasis was placed on the decision-making process. Responsible decision-making represented maturity--a necessary prerequisite to ultimate success in the field. The programmes used a variety of methods--the case method, role playing, and games in decision-making in order to concentrate on how to problem-solve within the corporate sphere. One British acting school, Method International Ltd., developed a special course for businessmen to teach them principles of self-development, pro-
jection, and inner confidence. The response was so great that the school had to open a new branch to meet the demand. As Fraser noted, "the focus has shifted to an awareness of situations in which managers must act, and away from specific skill training, except in the realm of personal communication skills." This process effectively employed information technology, advances in data processing, operations research, and other feedback and control ideas and methods. Remington Rand Ltd., in fact, developed a business game in order to teach decision-making in the sphere of marketing management. Modelled after the war game, the business game similarly presents the participant with pressures and uncertainties and "stimulates" the "dynamic force of business life" so realistically that "business students can be trained to make effective business decisions." With the promise of more effective decision-making among executives came the promise of more profitable business practice.

During the 1940's and 1950's the Canadian management movement undertook a more direct responsibility for ensuring that leadership qualities, personal characteristics, and the responsibility and judgment necessary for decision-making were developed by future executives. Their advice to the business schools regarding management development programmes and the business curricula was largely based on the assumption that stability within an organization emanated from within the higher levels and subsequently permeated the organization.
Fraser and his colleagues worked diligently with representatives of academia to ensure that this model of organizational structures was uniformly accepted. The curriculum was thus developed based on the assumption that while all business students would not end their careers within the top ranks of corporations, it was necessary that they firmly agree with the process of leadership and decision-making responsibility within the managerial sphere.

Canadian Managers and Business Education

Led by men like Clarence Fraser who were actively involved in both business and university affairs, the Canadian management movement functioned to structure the development of the managerial occupation and practice within a particular framework. While the management effort had previously been a somewhat haphazard attempt by individual businessmen to maintain stability within their organizations, through the development of the Canadian management movement and its affiliation with the university and research, this evolved into a fairly cohesive and professionalized network adhering to a rather uniform set of "basic principles."

By following the work of Clarence Fraser, changes within the management movement are documented as it addressed principles of scientific management, human relations, and theories of decision-making and leadership responsibility.
Together academics and Canadian managers made a concerted effort to promote the idea of management education. Their appeal to their colleagues and members of the wider community was couched in terms of the need for social improvement. With its "results oriented" thrust, and its grounding in scientific procedure, business and management was confidently marketed as a possible panacea.

The final chapter will review the historical developments in business education and will examine the promises of social stability and harmony supported by the business curriculum.
Footnotes


3 The biographical information was obtained from Fraser's personal resume, University of Western Ontario Archives, Papers of C.H. Fraser. There were no listings for C.H. Fraser in the Canadian biographical sources, such as Canadian Who's Who or Who's Who in Canada. His notoriety is due to his work as a practitioner, educator, and writer rather than as an owner, director, or in other executive capacities, perhaps accounting for the omissions.

4 Some of the organizations with which Fraser corresponded for purposes of consulting were: Ford Motor Company of Dearborn, Stelco of Hamilton, Dominion Stores, Western Electric Company, Union Carbide of New York, A.T. & T., Canadian Industries Ltd., Proctor and Gamble, Colgate-Palmolive, Chrysler Corporation of Canada, Socony-Vacuum Oil, Boots Pure Drug Company of England, and Westinghouse Electric and Manufacturing Company. This list was completed from personal correspondence, C.H. Fraser Papers. Correspondence with Western Electric was concerned with the Hawthorne experiment and Roethlisberger's work.

5 C.H. Fraser Papers, manuscript, March 11, 1957.

6 The first Canadian university conference on industrial relations was held in September 1936 and out of this concrete action was taken toward the establishment of the centre.

7 C.H. Fraser papers, Letter, W.A. Mackintosh to C.H. Fraser, July 8, 1937.

8 Ibid.

9 Ibid.

10 C.H. Fraser Papers, "Personnel Associations--Their Line of Development in Relation to Industrial Relations Section of Queen's University", January 24, 1939, p. 2.

11 Ibid., p. 1.
12 Ibid., pp. 1-2.
13 Fraser Papers, "The Management Movement in Canada ...", op. cit.
14 C.H. Fraser Papers, Notice from C.H. Fraser to All Members of the Administrative Conference Group of Montreal, February 3, 1939.
15 C.H. Fraser Papers, personal notes, undated.
The definition read: "To plan--to study the future and arrange plan of operation. To organize--to build up human and material organization of the business. To command--to make the staff do their work. To coordinate--to unite and correlate all activities. To control--to see that all is done according to the rules."
16 Fraser Papers, "The Management Movement in Canada ...", op. cit.
17 Ibid., p. 2
19 Ibid.
24 Ibid.
Here Fraser was referring to his interview with Person in 1932.
26 Ibid.
By the date of this letter the International Management Institute which Urwick had directed was discontinued due to lack of funds. The Institute had been, in Person's words, "the nearest equivalent of the Taylor Society in Europe."
Urwick carried out his theme of cooperation and argued that scientific management was especially important for Canada. He said: "It is a subject which should have a special appeal for Canada. Its two first and greatest pioneers were Frederick Winslow Taylor, an American mechanical engineer of British origin on both sides and Henri Fayol, a mining engineer and geologist, for thirty years the almost legendary president of a great French iron and coal combine. It is thus a subject which ... links, the two cultures on whose union depends so much that is great in Canada's past ...


47 C.H. Fraser Papers, First Meeting of the Academic Advisory Committee, School of Business Administration, University of Western Ontario, May 27, 1948.
In addition, members of the board unable to attend the first meeting included executives from Canadian General Electric, National Cellulose, General Products Manufacturing Co., Imperial Oil, and Firestone Tire and Rubber Co.

48 Ibid.

49 C.H. Fraser Papers, Meeting of the Academic Advisory Committee, School of Business Administration, University of Western Ontario, February 5, 1949, pp. 2-3.


51 Ibid., p. 3.

52 Ibid.

53 On wages, Fraser wrote: "Wage rates touch him [sic] to the quick. To repeat. If the policies of the undertaking weaken the earning power of the worker, they will not enlist his [sic] eager enthusiastic support of the enterprise, even with a gilt-edged plan of representation." On security measures, he noted, "group life insurance, employment compensation, and loan plans are the life-belts on this sea of uncertainty to him." (p. 2)
54 Harold A. Bergen was Industrial Relations consultant, McKinsey, Wellington & Co., New York City. Thomas G. Spates was vice-president, General Foods Corporation. The models Spates developed for General Foods have been used by many other companies and have been studied in personnel administration in universities.


56 Ibid., p. 4.


60 C.H. Fraser Papers, Letter, C.H. Fraser to T.G. Spates, October 31, 1944.


64 Ibid.


66 Ibid.


68 Ibid., p. 2.

70 Report ... of the Third Annual Conference of the Association of Canadian Schools of Commerce and Business Administration, op. cit., pp. 54-5.

71 C.H. Fraser Papers, Letter, J.C. Cameron to C.H. Fraser, April, 1939.


73 Ibid.

74 Ibid., p. 3.


76 Ibid.


78 C.H. Fraser Papers, Letter, W.A. Thompson to C.H. Fraser, April 27, 1946. Thompson wrote: "it occurs to me that you might be able to line up some men [sic] in this area who would carry the bulk of the load of actually handling classes if you could come down several times during the year and generally keep a firm hand on the direction of classes."

79 C.H. Fraser Papers, Letter, C.H. Fraser to W.A. Thompson, April 19, 1946.

80 Ibid., p. 2.

81 Ibid., p. 3.

82 Fraser Papers, Meeting of the Academic Advisory Committee ... February 5, 1949", op. cit., p. 6.

83 Ibid., p. 3.

84 Ibid., pp. 4-5.

85 Queen's University, First Annual Report, Industrial Relations Centre, Queen's University, December 1961, p. 1.

86 W.A. Mackintosh, quoted in Ibid.
87 C.H. Fraser Papers, Letter, C.H. Fraser to R.B. Willis, August 28, 1947. Willis requested from Fraser his opinion on Willis' friend's idea of establishing a consulting business in connection with the establishment of group pension plans and their administration. Fraser replied a few days later with his opinion and a few names among his cohorts in the management network.

88 C.H. Fraser Papers, Letter, L.W. Sipherd to C.H. Fraser, April 21, 1948.


91 C.H. Fraser Papers, Letter, C.H. Fraser to R.B. Willis, December 1, 1959. The names listed here by Fraser were all members of Western's Academic Advisory Committee and held top posts in Canadian business and industrial circles.

92 Fraser, "Weighing Satisfaction Values ...", op. cit., p. 3.


95 Ibid.

96 As Bank of Commerce Chairman James Stewart observed: "the personnel director is becoming more important than the production director."


100 Financial Post, 54, September 10, 1960, p. 34.


102 Financial Post, 54, August 20, 1960, p. 16.

Chapter Nine

Management Education in Perspective: "Promises" and Practices

We now know that the influence of a College man in commerce and national life transcends even his value in those professions to which formerly his education was primarily and immediately directed. ... He ... will play his full part in the solution of the difficult problems which confront us. 1

Business and management education were developed at a time when social and behavioural scientists were actively searching for clues to the solution of social problems. As such the curriculum adopted a positivistic philosophical framework and therefore constituted an important link in the social reform movement along with other pragmatic forms of education. While management education itself was not identified as a solution to labour and other social problems, the association of practical behavioural science with a university discipline lent another dimension of credibility to this growing field of scientific endeavour. For the university, association with social science, social reform, and management curriculum affirmed its apparent interest in community improvement and social betterment and thus renewed its repu-
tation as an institution with a strong philanthropic thrust.

The trend toward pragmatism in schools spread from the public and high schools to the universities during the early years of the twentieth century. Pragmatic education was simply regarded as a feature of "modernizing" society. The adoption of a pragmatic university curriculum reflected the prevalent ethos of a period rife with experimentation, scientific discovery and solution, problem identification, and technological breakthrough. Businessmen, social reformers, and educators were convinced that the pragmatic curriculum would contribute positively, albeit in a rather indefinite form, to the development of social stability within organizations and generally within industrial society.

Management education was developed in response to the recognition of need for the managerial function and to the demands of businessmen for personnel trained in the art and science of "handling" workers. The process of training managers internally by means of the "corporate climb" was inefficient for twentieth century firms. Preferences for external recruitment grew as the university programmes adopted curricula covering most recent developments in the science of management. Moreover, the university programmes included "hidden curriculum" and this became an essential part of the socialization process of modern employees. Hence, just as the work relationship was gradually characterized by formality and rationality, so was the learning process as manag-
ers were trained in schools using scientific techniques rather than on-the-job by their employers.

The widespread shift toward the employment of schooled rather than "cultivated" managers is related to the shifting needs of business, industry, and the technological structure. Yet, while it is important to consider the fact that business and industry grew dramatically between 1930 and 1955, creating needs far beyond the proficiency of even the most ambitious internal promotion schemes, the phenomenon of external recruitment carries further implications. The process of schooling managers, technical experts, and administrative labour finalized the transition from pre-industrial to industrial work arrangements and the breakdown of the classic relationship between master and apprentice. Furthermore, as noted in Chapter One, this transition affected both the relationship between employer and employee as well as the nature of the work process. As the tasks of conception and execution were separated and various levels of managerial labour were employed, the work relationship was primarily based on power differences and elements of discipline and control whereas previously, while still based on a notion of power, this inequality was primarily related to differences in knowledge of the craft and skill level and only secondarily to the pattern of ownership and status differentials. Progression from Simple to Systematic Management paralleled the development of the division of labour and the eventual separation of conception and
and textbooks on the managerial discipline, most lessons on technique were taught through or in conjunction with Departments of Applied Science. Pragmatic education including business and management education was a product of the late nineteenth century social reform movement. Lessons were specific, providing both direction and skill. The period was guided by a commitment to science and this commitment was evident in pragmatic education with its inherent promises.

F.W. Taylor's principles of scientific management were universally integrated into Canadian business administration and commerce programmes. As the first specific theory of management covered by the university programmes, the adoption of scientific management as subject matter provided direction and meaning for management education. While management practice had been formerly recognized as a matter of personality and general knowledge, scientific management demonstrated that management practice indeed had a specific and concrete knowledge base. Moreover, scientific management lent suitability to the subject of management as university curriculum because it was scientific and precise. In an era concerned with definite solutions to industrial, technological, and social problems, scientific management met the requirements for consideration as a possible panacea.

The incorporation of scientific management principles into the business curriculum was a slow process. Special courses on scientific management were not offered and Taylor's
publications were not widely used as course textbooks. However, as careful examination of course descriptions and textbook content demonstrates, lessons in the scientific management of labour were inherent in many separate lessons in departments of business and commerce and applied science. In this manner, scientific management was not studied separately as one possible style of management but rather became synonymous with theory and practice in the management process.

During the Scientific Management Phase, becoming a manager meant studying the industrial process and the work of the engineering department in assembling and managing materials, machinery, and workers. The purpose of management education was to teach methodologies to achieve efficiency in work performance and production. Lessons in time and motion study, industrial layout and design, remuneration schemes, incentive systems, scheduling, work measurement, task analysis, standardization, and quality control constituted the major portion of the management curriculum. Many of these topics were first introduced in Departments of Applied Science and Engineering. With the growth of management as a separate occupational category and with the recognition of the extravagance of training engineers for administrative functions, training for administration became centralized in the business and commerce programmes. Significantly, this was reflected in the renaming of business departments to include the word "administration."
The pattern of development of scientific management principles in the curriculum differed at the institutions studied. Differences are attributable to the particular social histories and philosophical emphases of the universities and do not detract from the importance of scientific management in management education programmes. At McMaster University during the 1930's there was a detectable trend toward the adoption of more rigorous scientific methodology in the curriculum. This trend was apparent not only in the business curriculum but permeated the field of social science in general. The main concern was to solve social problems and in particular the business curriculum contributed by examining the dimensions of the labour problem. With this general thrust, the Department of Extension courses emphasized the practice of management and provided local management practitioners with the opportunity to study scientific management techniques. Through the Extension Department programmes, a greater degree of practicality was infused into McMaster's theoretically oriented programme.

At the University of Western Ontario, Taylor's influence in the curriculum was evident from the outset. The curriculum was concerned with problem solving in the industrial sphere and lessons were often taught in the industrial environment through factory trips, by businessmen or industrialists, and by case problem solving. While similar approaches to scientific management were offered at Toronto and Queen's
through the Applied Science and Engineering Departments, the Western Ontario business administration curriculum addressed the function of management as an occupational category as distinctive from both business and engineering functions and thus educated future managers in both theory and technique. The Western Ontario course descriptions often specified that subjects were taught from the viewpoint of the businessman, administrator, or executive, and thus provided specific training in the management perspective.

At the Universities of Queen's and Toronto, lessons in scientific management were primarily taught in Applied Science and Engineering Departments where production management and the achievement of efficiency were regarded as primary tasks of the engineer. Business departments at these universities focussed on the question of labour and other related problems. Gradually as curricula were offered jointly to students in business and applied science, the notion of the engineer as a technician was re-defined and engineering and management students were regarded similarly as problem solvers. Employing the framework of scientific management, management education imparted both technique and justification for the doctrine. These lessons were suited to a period characterized by an overwhelming interest in reform through science.

Through their course textbooks business students were reminded of the necessity and inevitability of management. Directing workers' movements in the shop and determining opti-
mal task completion times, "fair" wage rates, and other such aspects of the work situation were regarded as managerial prerogatives, guaranteed through their position in the organization and their specialized knowledge of the production process. Definitions of management were synonymous with the meaning of scientific management. In other words, scientific management was not regarded as a particular managerial form but rather its principles provided parameters for the managerial occupation. Scientific management provided a rational and consistent explanation for the production process and was particularly noted for its success in maximizing production efficiency. While minor criticisms of the particulars of scientific management were apparent as, for example in the debate among proponents of piece-rate versus incentive wage payment systems, its logic was overwhelmingly favourably regarded.

Generally the university management curriculum stressed the benefits of scientific management for the worker in simplifying the work process and improving wages and for the organization in maximizing efficiency. By employing this science future managers were guaranteed positive results in their attempts to eliminate labour and organization problems. The Scientific Management Phase therefore generated the positivism of managerial ideology.
Teaching the Human Relations Approach

As a particular managerial form, scientific management was increasingly criticized for its harsh consideration of the labour relationship. During the 1930's and 1940's social scientists working in industry experimented with various methods of labour management. In this process scientific management was not buried, but rather its techniques were "softened." The management effort was cloaked in paternalism as workers' social and psychological problems were addressed.

During the Human Relations Phase, 1930-1950, the subtlety of the techniques employed seemed more appropriate for a period in which the usual concrete corporate goals of productivity and efficiency were re-stated as the achievement of harmony and social happiness. Management education and practice were influenced by developments in industrial psychology and sociology. Lessons on the social psychology of workers, motivation, morale, the work environment, and scientific selection dominated the management curriculum. Satisfying the workers' need for comfort and contentment elicited obedience and cooperation and hence contributed to the maximization of production efficiency.

During this period management technique was regarded as a complex science, necessitating careful consideration of the science of industrial design and the art of motivating workers. Human relations techniques began with the assumption
that once the code of the work group and the satisfactions of the individual worker were understood, a managerial framework could be established. The content of courses in sociology and psychology overlapped with those of applied science and management. Lessons in sociology and psychology provided insights into the construct of behaviour for managers and engineers while the field of industrial management provided the behavioural scientists with a challenge for evoking cooperation, obedience, and loyalty to company goals.

As with scientific management, incorporation of the human relations approach into the management curriculum of the various institutions followed slightly different routes. At McMaster and University of Toronto most of the subject matter of management training was first developed and offered outside of the business departments. McMaster's early Political Economy Department was concerned with deviancy and social disorganization. With the development of psychology courses the groundwork was established for the managerial discipline. Yet it was the Extension Department which first taught courses on the techniques of psychology and labour management. Later courses covering personnel management and administration and incorporating human relations theory were offered through the Business School. Similarly, Toronto's human relations lessons were mainly offered through both the Social Service and Extension programmes. Both Political Economy and Applied Science Departments shared the curriculum.
of these programmes, thereby identifying management education with the perspective and practice of a curriculum specifically designed for future social problem solvers.

At Queen's there was a dramatic growth in the number of behavioural science courses offered during the early 1930's. Major concerns included population, immigration and labour problems, and social policy. Queen's offered both social service and public service specializations. Investigations in social policy brought considerable debate over the question of socialism and the need for social reform. Like those at Toronto and McMaster, Queen's psychology department's courses were recommended or required for business students. These courses, however, were offered as part of the mainstream academic curriculum rather than through the extension programmes. The Queen's undergraduate business major, therefore, was offered a more pragmatic approach to management training, similar to that which practitioners may have acquired in evening courses at the other institutions.

University of Western Ontario's management education programme was primarily concerned with its role in socializing future executives and business managers. While there was a strong concern with developing citizenship and political astuteness among students, the curriculum aimed to develop business talents. At Western the curriculum was less concerned with solving global social problems like at the other institutions, but rather focussed on solutions to organizational
problems and especially that of labour. This difference in focus was perhaps due to its teaching methodology. While the case method demanded that the problem-solver account for broad social, economic, and political considerations in decision-making, the ultimate goal was to maximize the efficiency of the identified corporate concern.

Generally human relations practice strengthened the general social reform ethos. Although Marx's claim that man plays an important role in determining society is refuted by the business authors, even this determinism is couched in positive terms. Through behavioural science methodology, that is, by scientific selection and placement, it is argued, happiness may be created or maintained. Moreover, behaviours and attitudes may be adapted and the environment may be reconstructed to maximize comfort. The fundamental lesson of the Human Relations Phase is that individual adaptation is inevitable while social change is unnecessary. Even the overall goal is stated in positive terms as eliciting "cooperation" rather than obedience. Together the static view of society and the image of consensus strengthen the philosophy of social reform.

The behavioural sciences provided new techniques for those searching for a panacea. Managers educated during the Human Relations Phase were identified as knowledgeable in theory and skilled in the practice of gaining cooperation at the workplace. Management education was regarded as a positive step in the organization of social happiness. How to
select and place workers appropriately and how to develop and maintain an *esprit de corps* were popular lessons in the management textbooks. The essence of management education during the Human Relations Phase was technique or the practice of engineering the psychology of happiness.

**Maintaining the Stable Organization**

Just as scientific management is synonymous with the form of modern management, human relations is modern management technique. Once the techniques were universally applied, modern managers were concerned with maintaining cooperation within their spheres of authority. During the 1950's and beyond, social scientists began to examine the organizational form and thus developed a sociology of organizations. Set within the Structural-Functionalist framework, the theory of organizations examined the functions of the modern bureaucracy and the efficiency with which various practices were performed.

Structural-functionalists observed the organizational environment within which workers and managers interacted to carry out organizational goals. A major concern during this phase was with the question of leadership styles and characteristics and their relationship to efficient goal attainment. This concern was most appropriate for a period in which maintenance and stability overrode the more progressive goals of the previous phases.
The decade of the 1950's was generally a period of dramatic growth for the universities and in particular sharp increases in business school enrolments were noted. An outstanding feature of the period was the recognition of the growing need for ongoing education and in the business school this recognition led to the development of executive development programmes. Additionally, business schools were professionalized with the development of graduate business programmes following University of Toronto's leads in this regard. While both McMaster and Toronto's programmes maintained a theoretical bias in the mainstream curriculum, the number of management improvement and certificate courses continued to grow. Moving from the social reform thinking, however, courses were planned around the theme of maintaining a stable organizational structure and concentrated mainly on internal problems of management rather than on the more broadly defined political, economic, and social context.

The curriculum at Queen's and Western focussed on the art of decision-making. The programmes stressed the need for responsible executive leadership and taught students to address the organization's goals and its environment in their positions of managerial authority. The Queen's programme gained an excellent reputation as providing appropriate training for public administration. Many of its courses examined general administrative problems and in particular analyzed policy and strategies for development.
Western's business administration programme was clearly designed to prepare students for executive responsibility. Courses were aimed at developing decision-making skills from the viewpoint of top management. Its executive development programmes attracted top level managers from across the country. Attending these programmes provided these businessmen with the opportunity to interact with others functioning in top level corporate posts in Canada and internationally. Moreover, as Clarence Fraser's career indicates, the Canadian management movement evolved largely through the Schools of Business at Western Ontario and Queen's. It was at these institutions that new ideas for curriculum, training, development, and sponsorship were tested. Through these programmes top level Canadian managers contributed ideas for training future colleagues.

Drawing on human relations theory, modern management education emphasized the manager's role in maintaining the stability characteristic of a strong organization with well defined goals. Organization theorists examined leadership styles and personal qualities necessary to motivate organization participants to produce and comply with organizational demands. Managers were described as deriving their authority from lower participants who legitimized the hierarchical structure through their own obedience and deference to authority figures. Organizations were therefore characterized as "cooperative systems" and the manager's task was to strengthen
and maintain this harmony.

An important lesson for modern managers was how to inspire the acceptance of company goals. Thus, modern managers were not taught how to develop employees' creative capacities but rather were expected to motivate others more subtly to achieve pre-determined objectives. The managerial function itself is not creative, but rather the manager's job is to ensure uniformity, standardization, high morale, quality performance, efficiency, and ultimately organizational stability. Although middle management is not usually responsible for product design or the organizational blueprint, management education during the 1950's emphasized policy analysis, corporate strategy, and procedure as the framework within which responsible decisions are made. Training in management during this later phase included the study of various aspects of administration. With this background and on-the-job training in technique, the educated manager would be more suitably prepared to adopt the company viewpoint and subsequently instill others with a desire to further company goals.

Promises of Pragmatic Education

In examining the development of business and management education at four Ontario universities, differences were apparent in the emphasis of the curricula. Both McMaster and
Toronto's programmes were more theoretical with greater emphasis on philosophical questions and the arts, especially during the early period. At McMaster this was perhaps due to its religious affiliation while Toronto was designated as the provincial university. At both institutions the curriculum was addressed to social problems and their solution.

The Queen's programme developed a specialization in public administration. Perhaps as a consequence of its location in Kingston, a city of notable historical, political and commercial importance in Canada, Queen's developed the first commerce programme in Ontario and through its School of Mining developed curriculum in the area of management.

Located in a financial centre, the University of Western Ontario School of Business Administration developed an international reputation in the sphere of banking, finance, accounting, and general management. The business school's development was influenced by Harvard alumni who comprised a significant percentage of the faculty. Moreover, the case method teaching approach facilitated an open communication network with the Canadian business community.

In general the business curricula of Western and Queen's seemed to be more responsive to developments in management theory and practice. The departments of business at these universities served as a rallying point for Canadian managers and as Clarence Fraser's private papers indicate, many businessmen took an active part either directly or indi-
rectly in shaping both the undergraduate curricula and executive development programmes. With the case method and the involvement of key members of the management movement, the curricula were constantly updated.

By studying Clarence Fraser's activities, it is apparent that Canadian managers were not interested in developing one university's business programme to the exclusion of others. Rather the promoters of the Canadian management movement strove to develop an effective management curriculum to meet the needs of modern Canadian organizations. They provided "best advice" on training to meet those needs, as well as to raise the overall profile of Canadian managers in the international sphere. While work in this regard may have begun in the departments at Western and Queen's, the format was subsequently adopted as universally acceptable business education curricula. Thus, although differences in curricular emphasis are noted among the universities especially during the earlier periods and with respect to the timing of the introduction of various course contents and theoretical orientations, business and management education overall is vastly similar in both outcome and purpose.

This work provides a concrete study of the emergence of managerial theory and the process of its filtering into Canadian educational institutions. Previously there had been little evidence of the impact of specific theories on university curriculum. This work presents data on Canadian educa-
tion and training in the theory and technique of American behavioural science and concludes that ideas on the development and maintenance of efficiency, stability, and harmony specifically within organizations and generally within the wider society constitute the major emphases of Canadian business curricula.

The adoption of a pragmatic curriculum intensified the popular belief in education as a panacea. The university had been traditionally regarded as a guardian of democracy and a pillar of social stability. With the emergence of pragmatic education, university programmes were expected to graduate students equipped with an array of problem solving skills. The problem solving objective in fact became the raison d'être for education in circles such as those occupied by members of the Canadian management movement. The trend toward pragmatic higher education raised the profile of higher education in society and answered questions regarding its accountability to modern custom and technique.

With the development of the pragmatic curriculum, not only were schools regarded as important centres of socialization, teaching values, ideas, and behavioural compliance, but schools were also capable of transmitting skills and statuses to students and future workers. Practical forms of education, in particular, guaranteed ease in transition from school to work for the students while establishing a further element of predictability in labour requirements and employers'
expectations. During the late nineteenth and early twentieth centuries, business students, for example, were expected to acquire specific business skills, such as accounting, bookkeeping, record keeping, and statistical methodologies. Notwithstanding the importance of these skills during the later periods, it became apparent that a new form of business education was required for those students who would eventually manage the "skilled" business graduates. As management education developed, social scientists were enthused about their perceived proximity to a solution for social problems--and specifically labour problems--because they had now achieved the establishment of a further link in the progression toward order. With the development of management education and labour management techniques, social scientists, in fact, adopted a new and important profile as consultants to business and industry.

The idea of education and especially pragmatic education as panacea perpetuates the positivism which characterized the early twentieth century's reform movement. With this belief social scientists, educators, and other proponents of pragmatic education continue to refine curricula and teaching methodologies without critically analyzing social, economic and political constraints limiting the possibilities for social improvement. Regarding education as a possible panacea has, indeed, sustained the promise that social improvement is not only inevitable but also, in fact, imminent.
Footnotes

1 Edward Wentworth Beatty, "Inaugural Address", Queen's Quarterly, (27:2, October-December, 1919), pp. 131-2. This quote was taken from Beatty's inaugural address as Chancellor of Queen's University.
Appendix I

The books listed below constitute the sample of core management education textbooks selected for analysis from the total number of textbooks listed in the university calendars between 1900 and 1960.


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