A COMPARATIVE STUDY OF THE METHODS OF PREPARATION USED IN QUEBEC AND ONTARIO FOR THE CHARTERED ACCOUNTANTS' UNIFORM FINAL EXAMINATION AND THE RELATED PROBLEMS OF EDUCATING ACCOUNTANTS

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A Thesis

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ABSTRACT

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MAURICE GOLD

This thesis was designed to examine the pre-C.A. qualification programmes of the Order of Chartered Accountants of Quebec and the Institute of Chartered Accountants of Ontario and the problems involved in educating accountants. A comparative study was made of the different educational approaches and methods of academic preparation of each province as well as the role of the universities, the role of the order/institute and the role of the C.A. firms. The 1978 and 1979 Uniform Final Examination results of "first-time" writers were analyzed and compared. The historical background and general organizational structure of the profession in Canada was also reviewed.

The educational problems related to curriculum development, examination content, staffing of university departments of accountancy and the establishment of a proper mix between academic training and practical experience were discussed and examined.

Our study showed that although the educational approaches differed substantially between the two provinces with Quebec requiring no practical training in a C.A. office by comparison with Ontario, an analysis of the 1978 and 1979 Uniform Final Examination results of "first-time" writers with a university degree showed only a .2% differential. It would appear that the practicum does not contribute anything towards the training of accountants as far as this can be tested by the UFE.

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INTRODUCTION

"When I started work on this paper it was going to be very factual and analytic. It has turned out to be very personal and impressionistic. As I look back over the gestation period for this paper two points stand out above all others. The first is that there is a dearth of facts. Hard data relating to accounting education is almost non-existent in publicly available form. The second point is that there has been and continued to be a dearth of personal committment to accounting education."

So wrote Prof. Daniel McDonald of Simon Fraser University in his introduction to a paper entitled "Accounting Education in Canada: An Evaluation" delivered at a plenary session of the May 1979 Annual Conference of The Canadian Academic Accounting Association held in Saskatoon, Saskatchewan.

In November of that same year, the Canadian Institute of Chartered Accountants (CICA) held a "Symposium on Education and the Professional Accountant" in Toronto, Ontario. Three general themes emerged in the Symposium that transcended specific suggestions for action. The first was that the problems the accounting profession and universities face are severe and there is, not unnaturally, a great deal of impatience to get on with solving them. The second had to do with the attitudinal problems affecting the relationships between the profession and the universities. The third theme, which was raised by several speakers, concerned the general paucity of data upon which the profession could base its educational decisions. The Symposium papers contain a clear

consensus that much more effort would have to be put to gathering data, analyzing it and keeping it current.

During the Symposium, several educational alternatives were raised, including various concepts of professional schools of accounting, profession-run education programmes and co-operative efforts among accounting firms. Although no consensus was reached, it was clearly understood that consideration of them was both very complex and most timely.

In 1978, after a two-year study, the Ontario Institute's Special Committee on Educational Planning recommended some revisions to an education system it found to be basically sound. The Quebec Order has been carrying out extensive discussions with the universities. Similar studies are being carried out by the Atlantic Provinces Association of Chartered Accountants, the Alberta Institute and the British Columbia Institute. Unfortunately, no attempt has been made to focus these individual provincial efforts on a national solution which the provinces could implement or not, as is their right, since education is a provincial prerogative.

This thesis will examine the "CA Programme" in Quebec and Ontario. A comparative study will be made of the educational approach and method of academic preparation of the Order of Chartered Accountants of Quebec and the Institute of Chartered Accountants of Ontario.

Included will be the role of the universities, the role of the order and institute and the role of the CA firms.

We will also look at an analysis and comparison of the 1979 Uniform Final Examination results of "first-time" writers. A similar analysis and comparison will be made over the past three years. The major objective, however, will be to examine the problems involved in the process of educating public accountants.

The paper will be divided into five distinctive categories or chapters:

- Historical Background which will include the general organizational structure of the profession in Canada;
- 2) Analysis of the Data;
- 3) The Educational Approach of the Quebec Order and the Ontario Institute;
- 4) The Problems of Educating Accountants;
- 5) Conclusion

However, it should be pointed out, at the outset, that there are limitations to the scope of this study. The first and most important one is the dearth of data regarding the candidates writing the Uniform Final Examinations. Their academic history, age, employment backgrounds and environmental upbringing is unavailable. Obviously, each could have some impact on the final results. Another limitation is the lack of information on the calibre of the faculty involved. A third limitation is that there is no readily available data on the depth level of the topics covered in undergraduate and graduate

level courses. Therefore in our comparisons and analyses, it will be assumed that the writers have similar backgrounds, equivalent faculty and have taken courses of equal depth.

Although the sources of information are very limited and "hard data" almost non existent, this study will still have some value. Besides comparing the two distinctive educational approaches, the analyses will tell us, based on certain limitations, if the educational approach has any impact on the results of "first-time" writers. It should also tell us if the new Graduate Diploma Program in Public Accountancy in Quebec has improved the Uniform Final Examination results.

As stated earlier, the objective of this thesis will be to highlight the major "educational" problems involved in the pre-CA qualification programme. Problems related to devising an examination to test the capacity to theorize and the ability to practice; developing a relevant curriculum for the creation of 'successful' practitioners; attracting and retaining staff of the highest quality; establishing a proper 'mix' between academic training and practical experience will be discussed and examined.

CHAPTER 2

HISTORICAL BACKGROUND

Last year marked the centennial year of professional accountancy in Canada.

"The honour of being the first formal association of accountants in Canada and, for that matter, in North America, belongs to the Association of Accountants in Montreal. This group held its founding meeting on June 11, 1879 and received its charter from the Quebec Legislature on July 24, 1880. Closely behind was the Institute of Accountants and Adjustors of Canada, which first met on November 11, 1879 and, after some difficulty, was incorporated as the Institute of Accountants of the Province of Ontario on February 1, 1883". (1)

Like all learned professional organizations, both groups immediately set out to restrict entrance to their profession and protect the public by ensuring that all members had sufficient competence and knowledge.

In Canada, under the terms of the British North America Act, education is at all levels a provincial responsibility. Each province has the right and the obligation to educate and examine its own fesidents and to set standards for academic qualification. This, naturally, applies to professional education as well as to general education. Just as each province has guarded the rights of its jurisdiction, so has each provincial institute jealously guarded and retained its educational perogative. Not surprisingly, each tackled the educational problem in its own way.

* There are now 12 independent Chartered Accountants organizations in Canada (2) which, with the Institute of

Chartered Accountants of Bermuda as an affiliate member, work together under the umbrella of the Canadian Institute of Chartered Accountants (CICA).

"The Canadian Institute of Chartered Accountants does not grant the C.A. designation, nor does it have any direct responsibility for establishing the syllabus for the Uniform Final Examination, setting questions, marking papers, approving results or admitting new members. A C.A. becomes a member of the CICA only through membership in a provincial institute". (3)

The CICA was originally incorporated by a federal charter on May 12, 1902 as the Dominion Association of Chartered Accountants (DACA). In 1951, the name was changed to the Canadian Institute of Chartered Accountants (CICA) but, the duties and authority remained as defined in the original documents (4):

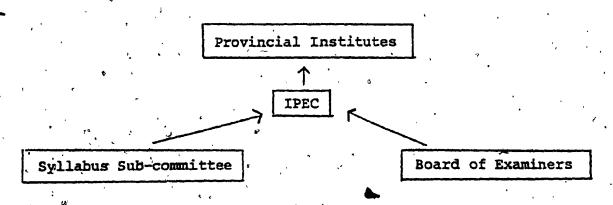
One of the major duties of the CICA is "to secure the adoption by Provincial Societies of uniform standards of examination and membership" (4-c.). This was finally accomplished in 1939 when all the existing provincial institutions agreed to co-operate in setting an annual Uniform Final Examination for all C.A. candidates across Canada. These Uniform Final Examinations (UFE) are now written simultaneously in almost every major city of every province usually during the third and/or fourth week of September. They consist of 4 four-hour examinations having a total value of 400 marks with 240 required to pass.

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It is interesting to note that since 1939 all students have been required to take the same examinations to qualify for their C.A. designation. However, since education is a provincial responsibility, there are considerable differences between the various provinces' approaches to the accounting educational preparation for these exams. Not only has each province approached the education of accountants in its own way, but each university in each province seems to have its own unique approach,

The provincial institutes co-operate in setting and administering the Uniform Final Examination through the Inter-Provincial Education Committee (IPEC) and two IPEC subcommittees, the Board of Examiners and the Syllabus Subcommittee. The following diagram outlines the relationships among these committees:



The CICA, as a national body, has no authority over educational policy. This is the domain of the provincial institutes. In order to ensure this autonomy, avoid regional bias and guarantee equitable treatment of all candidates, IPEC was

established. It is the committee at which all pre-qualification educational matters of common concern are discussed and voted upon by the delegates representing all the provincial institutes. All decisions taken by IPEC must be unanimous.

The Board of Examiners was set up for the specific purpose of administering the Uniform Final Examination on behalf of the institutes in accordance with the policies set by IPEC. Members of this Board are appointed directly by the provincial institutes with the exception of the Chairman and one French-speaking member who are appointed by IPEC.

Th Syllabus Sub-committee is charged with the responsibility of reviewing the UFE Syllabus and recommending to IPEC any changes it considers appropriate.

Because education is a provincial matter, the institutes have the exclusive responsibility for the students' actual preparation for the examinations. It is their prime responsibility for ascertaining that all their candidates for the UFE have been examined previously on each of the syllabus topics either at the provincial institutes level or within the universities.

the academic procedures presently, in use by the anglophone sector in Quebec differ very substantially from those in Ontario. Although the curricula and course content in both adequately cover the requirements of the UFE Syllabus, the method of studies, topic emphasis, academic responsibility and control are at variance with one another.

"The syllabus sets forth the level and breadth of knowledge required of candidates seeking admission to the provincial institutes/order of chartered accountants in Canada and Bermuda" (6)

The main objective of the UFE is to ascertain that candidates possess the professional knowledge and competence required in order to practise public accounting.

They are expected to demonstrate their facility with written communication and their ability to:

- a) apply accounting and auditing skills;
- b) analyze situations, define problems and identify related issues
- c) \develop and evaluate alternatives;
- d) exercise judgement in applying the skills of a professional accountant; and
 - e) keep abreast of current literature in financial accounting and auditing drawn from the sources listed in the syllabus.

The UFE Syllabus (see Appendix A) provides a framework for the Board of Examiners and a guide for those concerned with the development of switable courses of instruction. It also informs the students of those areas in which they can expect to be examined.

Each of the six sections of the Syllabus are divided into distinct areas containing subsections and subdivisions. The Syllabus then indicates the levels of knowledge required for each of these subdivisions. Categories one, two and three are used to indicate the breadth and depth of knowledge expected.

The Uniform Final Examination consists of 4-four hour papers totalling 400 marks and containing 3 categories of questions. The "comprehensive question" is usually 1-four paper ranging from 80 to 100 marks. a major problem situation embracing several of the syllabus sections. The candidates are expected to identify the central issues, evaluate the information and recognize the specific application of accounting concepts and information in solving business problems. The "multi-subject questions" range from 130 to 200 marks and cover at least two syllabus sections. Unlike the comprehensive question, irrelevant information is not included to the same extent. The requirements are more specific and the candidate is again required to apply accounting concepts to solving business problems. The "single-subject questions" have a value of between 100 and 170 marks and are limited to one syllabus section with no irrelevant information and highly directed requirements.

It should also be noted that between 60 and 80 marks are devoted to current literature topics drawn from sources published within 24 months prior to the examination date.

What is equally important to note is that both the comprehensive and multi-subject questions "seek to test professional judgement and both measure the integration of knowledge learned within a variety of subject areas and/or through relevant practical experience" (7). These questions range between 210 and 300 marks. The "comprehensive question" is a simulated real life situation intended to test the

candidate's ability to solve a practical unstructured problem situation. The candidate is therefore required to:

- a) apply diagnostic skills to identify problem areas within a context of complex interrationships;
- b) apply judgement in establishing priorities;
- c) organize and analyze quantities of data;
- d) prepare a logical, consistent and coherent report with meaningful recommendations and/or conclusions where appropriate.

The UFE candidate must have a varying degree of knowledge of Financial Accounting and Reporting, Auditing and Professional Practice, Managerial Accounting and Control, Finance, Taxation and Electronic Data Processing. He must also have an in-depth knowledge of the accounting and Auditing recommendations of the CICA Handbook as well as being "au courant" with the current literature and have a sufficient background in Law, Economics, The Management Process and Statistics. Other requirements include diagnostic skills, organizational and analytical abilities as well as being capable of making judgemental decisions and solving problems.

As stated earlier, education is a provincial responsibility. This thesis will examine the educational approach, curriculum and method of preparation for the UFE of the Order of Chartered Accountants of Quebec and the Institute of Chartered Accountants of Quebec and the Institute of Chartered Accountants of Ontario. Each tackled them in their own way in the past and the

academic procedures in use by the anglophone sector in Quebec differ very substantially from those of Ontario.

CHAPTER 3

THE QUEBEC AND ONTARIO APPROACHES

"The (Quebec) profession left determination of the curriculum completely to the universities; little attempt was made to coordinate university and on-the-job training; few financial resources were committed by either the universities or the profession; and...monitoring systems set up by the institutes/order broke down after only a few years."

(8)

Gentral to qualification for the CA designation is the examination. This has been the case almost from the beginning of the profession although the UFE only became a reality in 1939. "Successful completion of the final examination, plus formal election to membership in an institute, entitled the candidate to a certificate permitting him (and eventually her) to...use 'chartered accountant' after his name." (9)

At the outset students in Quebec, were expected to gain the knowledge needed to pass the examinations on their own. However, before too long the need for a more structured educational format became apparent.

University (10) by which students would be granted membership in the Association if they were over 21, had completed three years of courses at the school, had served as clerks during this time and for the 12 subsequent months in the office of a member of the Association and passed the final examination. (11) This was later modified to require a Bachelor of Commerce

degree plus a two year period of more advanced evening courses.

At about the same time, a parallel program developed at McGill "whereby a student could qualify to write his final examination by attending night courses exclusively and serwing a longer apprenticeship period (five years by 1935)." (12) This was an evening school for high school graduates. In 1940, this evening program was formalized in a new contract which made it obligatory for students entering the profession directly from high school to take a five year evening course supplemented by an equal term of apprentice—ship in a Chartered Accountant's office. (13)

During the 1960's, special accelerated evening courses were established to attract university graduates from non-commerce disciplines.

Until 1977 McGill was the only anglophone university in Quebec recognized to offer preparatory courses for the Chartered Accountant's exam. Students, upon graduating from Sir George Williams, Loyola and Bishop's universities, had to take their qualifying courses at McGill. Similarly, high school graduates entering the parallel evening program also had to attend McGill University.

In 1977, the Order of Chartered Accountants of Quebec (14) approved the Graduate Diploma Program in Accounting at Concordia University. During that same year the Bureau of the Order (15) changed the educational format for the UFE.

It also changed the admission requirements.

An individual seeking membership in the "Ordre des comptables agréés du Québec" must now meet the following requirements:

- possession of a university degree from a recognized institution
- 2. possession of a Graduate Diploma in Public Accountancy
- 3. passing of the Uniform Final Examinations
- 4. completion of an articling period with a firm of chartered accountants which is registered with the Ordre
- 5. have a working knowledge of French
- 6. be a Canadian citizen or have landed immigrant status.

In the anglophone sector only McGill and Concordia universities have a 'Graduate Diploma in Public Accountancy' program. Although both programmes are similar in the courses and their content, McGill's program is administered by the Centre For Continuing Education and the Faculty of Graduate Studies while the one at Concordia is the responsibility of the Department of Accountancy and the paculty of Graduate Studies. Each has eight advanced courses of one semester in computer auditing, managerial accounting, taxation, financial accounting theory, specialized topics in accounting, corporate and bankruptcy law, specialized auditing and an accounting case course. They both offer, as a joint venture, a C.A. Examination Prep School in mid-August which runs for three weeks. It is an intensive UFE review program which is optional, but highly recommended.

As stated earlier, the Quebec Order had left the determination of the curriculum completely to the universities. It literally handed over the UFE Syllabus and left them to structure the courses. Its input had been minimal, being primarily concerned with the UFE pass/fail results. The policy has consistently been to leave the pre-C.A. qualification education to the universities. From the very beginning, the courses were structured and given by the institutions. Unlike some of the other provinces, where qualification courses were given by the institutes, Quebec firmly believed that the universities were better equipped, better qualified and better organized to prepare the candidates.

However, today, the Education Committee of the Order is equally concerned with both the overall educational approach and the curriculum content. This is due, in large measure, to the passing, in 1973, of the Professional Code. Section 178 of the Code established a formal structure for the preparation of candidates:

"The Lieutenant-Governor in Council, after consultation with the Office, the Council of Universities, the teaching establishments and the corporation concerned, may, by regulation:

a) determine which diplomas issued by the teaching establishments he indicates give access to a permit on a specialist's certificate;

b) fix the terms and conditions of cooperation by the corporation with the authorities of the teaching establishments in the Province of Quebec contemplated in subparagraph (a), particularly in preparing curricula leading

to diplomas giving access to a permit or a specialist's certificate and in preparing examinations or any other means of evaluating the person's pursuing such studies."

past, the universities, and not the Order, have the responsibility for training the candidates. They will, henceforth, have to grant a "diploma" in recognition of satisfactory completion of the program of studies. However, the universities must now "cooperate" with the Order in determining the curriculum and the evaluation process. It is now a joint responsibility of the Education Committee and representatives of the institutions.

In an effort to aid the universities in their planning, the Order proposed the following criteria for the evaluation of such programs:

- The program is defined as comprising a framework of subjects in accounting and business administration at the undergraduate level, completed by advanced courses of a professional nature at the post-graduate level, the entire program corresponding to the standards of professional knowledge and competence set by the Order.
- 2) It will be a significant factor in the assessment of a program designed to prepare students for the C.A. Final Examination if the student body at the post-graduate level is composed mainly of candidates for the profession and the majority of the teaching staff are members of the profession." (16)

This new diploma program, called the Graduate Diploma in Public Accountancy, has given Quebec the most structured. pre-C.A. qualification program in Canada. Although the organization looks very good, the monitoring system leaves much to be desired. The responsibility for meeting the requirements for the Syllabus lies with the individual faculty member teaching a particular course. The body-of-knowledge in accounting has increased very substantially during the past If the teacher is not "au courant" with the latest pronouncements and current literature, the candidate may not be properly prepared. (17) Although IPEC analyzes the results by provinces and universities, it is difficult to actually pinpoint the cause of the poorer results. The only recourse available to the Order is to withdraw its approval of a particular program. Their students would then have to obtain the diploma at another university.

However, the Graduate Diploma program does have many advantages. The quality of the student body can be assured. The admission standards require demonstrated ability in accounting at the undergraduate level as well an obvious interest in the field. The type of faculty attracted to such a professional program would obviously be interested in it and desirous of interacting with it. This not only benefits the program, but the students and the profession as well. Similarly, the interaction between the Order and the universities could only enhance the statu re of the profession.

It is interesting to note that Section 178 of the Professional Code has become the vehicle through which the Order substantially upgraded the qualifications for the UFE. Unlike the other provinces, each potential C.A. must now have a Graduate Diploma in Public Accountancy before being permitted to sit for the exams. The intent, of course, is to have these programs identical in serveture and content in all the Anglophone and Francophone universities in the province.

Ontario followed an entirely different route for the education of its students. Initially it held regular meetings at which papers were read and textbooks were recommended. Then, around 1894, arrangements were made to affiliate Upper Canada College, Northern Business College and Ontario Business College with the institute (18) These colleges were all headed by CA's and were permitted to provide accounting courses and give the preliminary examination. At about the same time a student's association was formed and it organized lectures to assist its members through the examinations.

"Much of pre-CA qualification education was turned over to the universities almost a decade ago, after the profession agreed that its reliance on correspondence courses was inadequate both for training and attracting good students" (19)

Finally, in 1921, the institute, in collaboration with Queen's University at Kingston, Ontario, set up a three year correspondence course program that students were required to complete before sitting for the examination. Eventually, these courses were extended to a five-year program similar to the five year evening program at McGill. Students had to be high school graduates and serve a five-year indentureship period in the office of an 'approved' Chartered Accountant while taking the correspondence courses(20). They proved most effective for the next 43 years. In 1964, they were however, deemed inadequate to meet the increasing body of knowledge and the UFE Syllabus requirements. As a result, institute-sponsored summer schools were held at six Ontario universities to replace some of the correspondence courses.

With the belief that "face-to-face instruction by way of degree credit lecture courses is preferable to the correspondence approach" (21), the institute revised and upgraded its educational program in 1970. The increasing body of knowledge, the continuously changing income tax rules and regulations and the new legal and professional responsibilities of the public accountant required the instant feedback and dialogue of a teacher who is up-to-date on his current literature, pronouncements and regulations. Regardless of how well prepared the correpondence courses were, university lectures would be more beneficial to the candidate from a preparation point of view.

Before being granted permission to write the UFE, the student must, now, satisfactorily complete the following educational programme.

- 1) A staff training programme this is an Institutesponsored staff training course to be taken within
 nine months of registration date. It is offered
 at least ten times a year by the Ontário Association
 and consists of 35 hours of classroom time during
 five consecutive days.
- 2) The semester hour requirement the formal instruction requirement based upon 45 semester hours of instruction of university degree credit courses (22)

The school of accountancy-concentrates on areas of advanced auditing, professional practise, advanced and specialized accounting and taxation. To be eligible to attend the school, the student must have completed all the prescribed semester hour requirements and be eligible to write the UFE in the same year.

An integral part of the pre-CA qualification educational programmed in Ontario is the employment with a CA firm.

"Professional experience, under actual working conditions in the office of a practicing chartered accountant approved to train students, is an important part of the CA student's training. This experience includes, exposure in various core areas of accounting, auditing and taxation." (23)

The minimum professional experience required is three

years. Only those students who have passed the School of

Accountancy and are generally in their last year of practical experience with a CA firm are permitted to sit for the UFE. (24)

The Ontario Institute has been directly involved in the pre-qualification education from the outset. It has consistently been involved with the course offerings, be it the preparation of the correspondence courses with Queen's University, the Summer School and even the 45 semester hour requirement at the undergraduate level. The Institute annually prepares a schedule of approved requisite courses at 16 universities on 19 campuses in 27 programmes for its

students. (See Appendix B). This schedule gives the university name, university degree program and the course number in each of the areas of financial accounting, advanced accounting elective, management accounting, auditing, taxation, computer science, quantitative methods, finance, economics, law and management. In a supplementary schedule, it actually advises the student of the timetable of each course in each university.

Unlike Quebec, which simply accepts the Bachelor of Commerce degree with a major in accountancy, Ontario Iooks at and requires specific courses. There is a more direct involvement with the course content and calibre of the faculty.

The School of Accountancy is set up and administered by the Ontario Institute (25) whereas the summer programs in Quebec are run entirely by McGill and Concordia with no input from the Order.

However, the Quebec approach, although far more structured, is relatively "clean" and simplistic. The Ontario approach is just the opposite. It is quite complicated and comparatively unstructured. The provinces are also at variance with regard to emphasis. Ontario places considerable emphasis on practical or professional experience before

writing the UFE, while the other permits the candidate to sit for the exams without having worked in a Chartered Accountant's office.

Having reviewed both the Quebec and Ontario approaches to the pre-CA qualification education and noted their differences, we will now look at their impact, if any, on the UFE results.

There is a tendency to measure the success of the pre-CA qualification educational system in terms of performance on the UFE. We expect it to measure readiness to practise, screen out people unsuited for the profession and examine the adequacy of educational systems.

UNIFORM FINAL EXAMINATION RESULTS

(Table 1) 🕨

Geographic Distribution of Candidates (with % of passes),

Province	سمم	1975	1976	1977	1978	1979
B.C.	(a)	190	165	206	216	231
	(b)	69.5	60.6	54.4	67.1	74.9
Alberta	(a)	273 · .	296	287	250	264
	(b)	46.5	42.6	47.7	59.2	59.1
Sask.	(a).	53	71	69	102	121
	(b)	50.9	62.0	46.4	41.2	33.1
Man.	(a)	85	97	91	107	117
	(b)	82.4	85:6	67.0	70.1	62.4
Ont.	(a)	1029	1065	1041	1139	1205
	(b)	61.5	61.3	58.1	8.9	56.1
Qué.	(a)	800	913	911	1181	1317
	(b)	45.4	42.0	47.3	45.6	45.0
N.B.	(a)	40	33	47	45	48
	(b)	57.5	51.5	61.7	44.4	52.1
n.s.	(a)	92	89	79	81	, 52
	(b)	53.3	56.2	54.4	58.0	63.5

P.E.I.	(a)	11	10	. 12	12	9
Newf.	(a) (b)	23 60.9	35° - 45.7	42 31.0	45 15.6	41 68.3
Bermuda	• i		1	2	4.	6
TOTAL		2596	2775	2787	3182	3411
MN	•	55.7	53.2	52.7	53.4	53.0

a) Number of candidates writing the exams.

Table No. 1 tells us the number of students who wrote the UFE in the years 1975 to 1979 inclusive, both by provinces and in total. It also gives us the percentage of candidates who passed, both by provinces and the national average for each of the five years.

A quick examination informs us that in 1979 Quebec had the largest number of students writing, with 1,317 candidates. Ontario had 1,205 persons sitting for the examinations. However, in that year, only 45.0% of Quebec candidates passed, as compared to 56.1% in Ontario. Would this indicate that the Ontario C.A. programme is more successful than the Quebec one? Not necessarily. At first glance, it would appear that it is more success-

b) Percentage of candidates passing in the province.

MN - National average of candidates passing.

ful. After all, the 1979 national average was 53.0%. Ontario was above this figure by 3.1% while Quebec was below by 8.0%. Also, Quebec was consistently below for each year from 1975 to 1979 inclusive while Ontario was above every year.

In order to establish if the differences between the percentage of candidates passing in Quebec and Ontario differ "significantly" from the national average of candidates passing, we must look at the analysis of percentage of candidates passing using "Chi Square" (Table No. 2) (26)

TABLE NO. /2 - CHI SQUARE DISTRIBUTION

	1975	1976	1977	1978	1979
National Average- Percentage Passes	55.7	53.2	52.7	53.4	53.0
Quebec: Percentage passes Chi Square Distribution	45.4 1.9	42.0 2.35	47.3 .55	45.6 1.14	45.0
Ontario: Percent. passes Chi Square Distribution		61.3	58.1.	58.9 .56	56.1 .18

One can readily see that using Chi Square analysis, there is no "significant" difference between the percentage of candidates passing in Ontario, in the years 1975 to 1979 inclusive, with the national average percentage of passes. The range of .18 for 1979 to a high of 1.2 in 1976 is certainly not considered significant and, therefore, we may assume that the Ontario deviances from the national average are normal in the circumstances. Similarly it can be said

that the Quebec deviances for 1977, 1978 and 1979, of .55, 1.14 and 1.2 Chi Square are "normal" and therefore acceptable. The 1.9 for 1975 and 2.35 for 1976 may be considered "significant" and this would constitute evidence for rejection. There would appear to be some question of the validity of the national average percentage of passes for 1975 and 1976. Therefore our analysis of the data available will concentrate on the years 1977, 1978 and 1979.

Table No. 1 deals with "all" candidates writing the "UFE and experience has shown that the pass rate diminishes very substantially with each attempt. For students writing for the second time, it is considerably less than the first. Similarly, the third and fourth attempts diminish even further. (27).

If we look at Table no. 3 (page 30) we see that Ontario had 838 first-time writers in 1979 of which 63.7% passed.

Quebec had 820 first attempts of which 54.4% passed leaving it 7.6% below the national pass rate of 62.0% for first-time writers.

The first-time writers pass rate for Ontario went from 66.0% in 1977 to 66.3% in 1978 to 63.7% in 1979. Quebec went from a high of 62.1% in 1977 to 53.6% in 1978 to 54.4% in 1979.

Although this pass rate is a much better indicator than the pass rate of total candidates in each province, it is still not satisfactory for any kind of evaluation. The problem lies in the fact that 618 of the 820 first time

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candidates in Quebec are francophones and hence write
the UFE in french. Their pass rate is generally below
the provincial average. One of the many reasons for
the poorer showing is that much of the current literature
is still not being translated into the french language.
Although all the literature, including the "pronouncements",
from the CICA are now in both languages, much of the other
literature is unavailable in french.

Table No. 4 (page 31) indicates that in 1979, the pass rate for first-time writers at Laval University was 39.3%, Sherbrooke 52.5%, U.Q.A.M. 40.0% while at H.E.C. it was 54.4%. These rates are for day students in the Bachelor's programme. In Table No. 5 (page 32) we see that the pass rate for the evening programs at H.E.C. is only 33.3% in 1979.

It should also be noted, in Tables No. 3 and No. 4, how low the pass rates are for students writing for the second, third and fourth times. In Table No. 4, the rates are as follows: H.E.C. 32.9%, Laval 24.7%, Sherbrooke 26.7%, U.Q.T.R. 36.3%, U.Q.A.C. 30.7%, U.W.A.R. 25.0% and U.W.A.M. 33.3%. At McGill's evening programme the pass rate is 43.2% compared to 75.2% of first-time writers and at H.E.C. the rate is 5.2% compared to 33.3%:

As stated earlier, the first-time writers pass rate in the Province of Quebec in 1979 was 54.4% while in all of Canada it was 62.0%. The first-time writers at McGill had a very successful 75.2% pass rate while Concordia, which wrote for the first-time, had a 58.3% pass. These candidates were

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(Table 3)

Summary of Results - First-time Writers

No. of		ļ			No. of			,		No. of				
time time		Fail	7 Pass	Z Fn11	cime eritors	Pass	Fail	Pass.	Fail	time	Pass	Fa11	Z l'ass	Fail
167	142	25	85	t	137	105	32	76.6	23.4	144	. 87	57	60.4	39.6
193	131	. 23	67.9	32.1	144	101	43	70.1	29.9	178	93	85	52.2	. 47.8
74	27	47	36.5	63.5	63	24	39 .	38.1	61.9	47	24	23	\$1,1	48.9
93	65	28	69.9	30.1	79 -	58	21	73.4	266	80	24	26	67.5	32.5
838	534	304	63.7	36.3	. 831	551	380	66.3	33.7	707	467	240	66.0	34.0
820	446	374	54.4	45.6	828	444	384	53.6	46.4	507	3 <u>1</u> 5	192	62.1	37.9
30	19	Ħ	63.3	36.7	33	ដ .	18.	45.5	54.5	31	21	10	67.7	32.3
30	21 .	49	70	30 .		39	21	65.0	35.0	50	35	15	ر و.	30.0
4	4	0	100	0	v	, w	۰,	33.3	66.7	7	٠,	w	57.1	42.9
24	20	4	83.3	16.7	26	7	. 19	26.9	73.1	· 26	. 10	16	38.5	61.5
ال	Lu	12	60	40	-	2	12	50.0	50.0	2	2	0	100.0	0.0
2278	1412	866	62.0	38.0	2214	1349	865	60.9	39.1	1779	1112	. 667	62.5	37.5
	No. of first-time vriters 167 193 74 93 838 820 30 30 30 30 30 30 30 30 30 30 30 30 30	142 142 131 27 27 27 28 446 446 20 20	Pass 142 131 131 27 65 534 446 19 21 21 20	Pass Fail 142 25 131 62 27 47 65 28 534 304 446 374 19 11 21 9 20 4 1412 866	Pass Fail Pass 142 25 85 131 62 67.9 27 47 36.5 65 28 69.9 534 304 63.7 446 374 54.4 19 11 63.3 21 9 70 4 0 100 20 4 83.3 3 2 60 1412 866 62.0	Pass Fail Pass Fail writers 142 25 85 15 137 142 25 85 15 137 131 62 67.9 32.1 144 27 47 36.5 63.5 63 65 28 69.9 30.1 79 534 304 63.7 36.3 831 446 374 54.4 45.6 828 19 11 63.3 36.7 33 21 9 70 30 60 4 0 100 0 9 20 4 83.3 16.7 26 3 2 60 40 41 1412 866 62.0 38.0 2214 3	Pass Fail Pass Fail uriters 142 25 85 15 137 131 62 67.9 32.1 144 27 47 36.5 63.5 63 65 28 69.9 30.1 79 534 304 63.7 36.3 831 446 374 54.4 45.6 828 19 11 63.3 36.7 33 21 9 70 30 60 4 0 100 0 9 20 4 83.3 16.7 26 3 2 60 40 4	Pass Fail Pass Fail Cime 142 25 85 15 137 105 131 62 67.9 32.1 144 101 27 47 36.5 63.5 63 24 65 28 69.9 30.1 79 58 534 304 63.7 36.3 831 551 446 374 54.4 45.6 828 444 19 11 63.3 36.7 33 15 21 9 70 30 60 39 4 0 100 0 9 3 20 4 83.3 16.7 26 7 1412 866 62.0 38.0 2214 1349	Pass Fail Pass Fail Cine Cine Cine 132	Pass Fail Pass Fail time 7 131 62 67.9 32.1 144 101 43 70.1 27 47 36.5 63.5 63 24 39 38.1 28 69.9 30.1 79 58 21 73.4 534 304 63.7 36.3 831 551 380 66.3 446 374 54.4 45.6 828 444 384 53.6 19 11 63.3 36.7 33 15 18 45.5 21 9 70 30 60 39 21 65.0 4 0 100 0 9 3 6 33.3 20 4 83.3 16.7 26 7 19 26.9 3 2 60 40 2214 1349 865 60.9	Pass Fail Pass Fail crime 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	Pass Fail Pass Fail crime 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	Pass Fail Pass Fail crime 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	Pass Fail Pass Fail victors Pass Fail Pass Fai

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ETUDE DES RESULTATS DE L'EXAMEN PAR INSTITUTION - 1979

ORDRE DES COMPTABLES AGREES DU QUEBEC

Diplomes spécialisés en administration (Table 4)

•	Ţ	<u>, , , , , , , , , , , , , , , , , , , </u>	1979			1 9 7 8	
	I	Total	Succès	%	Total	Succès	%
	I	, ,					
B.A.A., H.E.C.	- 1	424	193	45.5	365	160	43.8
(1)	248	135	54.4	313	137	43.7
(Z)	176	58	32.9	52	23	44.2
	.	0.50	0.5	20.5		ا سرا	
B. Adm., Laval		252	85	33.7	199	65	32.6
,	1)	155	61	39.3	131	51	38.9
	2)	97	, 24	24.7	68	14	20.5
B.A.A. Sherbrook	e	134	56	41.7	149	61	40.9
	1)	78	41	52.5	84	47	55.9
•	2)	56	15	26.7	65	14	21.5
`	_,						
B.A.A., UQTR	- 1	59	26	44.0	54	26	48.1
	1)	37	18	48.6	34	22	64.7
•	2)	22	8	36.3	20	4	20.0
·				,		1	
B.A.A., UQAC	- 1	31	9	29.0	23	9	39.1
(1)	18	5	27.7	14	7	50.0
. (2)	13	4	30.7	.9	2	22.2
	•	٠.	, !	!	,		
B.A.A., UQAR	}	ľO	5	50.0	47.	10	58.8
•	1)	6	4	66.6	8	. 7	87.5
((2)	4 ·	1	25.0	9	3	33.3
	}		!	!		1	
B.A.A., UQAM	l	45	17	37.7	28	9	32.1
-	1)	30	12	40.0	24	8	33.3
((2)	15	5	33.3	4	1	25.0
- 4 A CDTT-CC 4	,,,	,		1 25 4		1	
B.A.A., CEUOQ ((1)	4	1	25.0		i	
•			<u>.</u> k	1	 	 	;
Résumé - Diplômes		959	392	40.8	835	340	40.7
-	(1)	576	277	48.0	608	279	45.8
	(2)	383	115	30.0	227	61	26.8
· ·	,-,		1		'	-	
·		مسيسلسيسيا					

^{(1) 1}st Time Writers

⁽²⁾ Others

ETUDE DES RESULTATS DE L'EXAMEN PAR INSTITUTION - 1979

ORDRE DES COMPTABLES AGREES DU QUEBEC

Programmes du soir et divers (Table 5)

			1 9 7)		1 9 7 8	
•		Total -	Succès	%	Total	Succès	%
McGill	-	2 4 5	163	66.5	244	161	65.9
4.	. (1)	178	134	75.2	176	141	80.1
	(2)	67	29	43.2	68	20	29.4
H.E.C.		56	8	14.2	76	23	30.2
,	(1)	18	6٠	33.3	29	15	51.7
1	(2)	38	2	5 . 2	47	8	17.0
Concordia	•	24	14	58.3		, ,	
	(1)	24	14	58.3		! ° ! ! . !	
	(2)	o	0 -	0.0		\$ 1 1 1	
Divers		33	16 `	48.4	26	14	53,8
•	(1)	24	15	62.5	15	9	60.0
	(2)	9	1	11.1	11	5	45.4
•			₽,				\ ·
TOTAL		358	201	56.1	346	198	57.2
	(1)	244	169	69.2	220	165	75.0
	(2)	114	32.	28.0	, 126	33	26.2

^{(1) 1}st Time Writers

⁽²⁾ Others

THE INSTITUTE OF CHARTERED ACCOUNTANTS OF ONTARIO

عم	•	19	79	1978	1977
		No. Writing	% Paşs ·	Pass 🗢	Pass
ALL	CANDÍDATES	·			
i)	Canada Total Candidates	3411	53.0	53.4	52.7
ii)	Ontario			~	
	First Attempt Other Attempts	838 367	63.7 38.7	66.3 39.0	66.0 41.4
	Total Candidates	1205 •	56.1	58.9	58.1
	B. Comm/MBA/BA (2 year requirement first Attempt	273	77.3	77.5	70.9
•	Other Attempts Total Candidates	385	36.6 65.5	40.0 64.7	46.8
ii)	Other Graduates (3 year requiremen First Attempt Other Attempts		57.2	60.7 41.5	64.2 39.7
	Total Candidates	758 `	52.4	57.0	58.3
iii)	Grade XIII and Oth Non-Graduates First Attempt Other Attempts	er 32 30	56.3 30.0	53.3 25. 7	· 35.3
	Total Candidates	62	43.5	38.5	29.9

the first group of students receiving the Graduate Diploma in Public Accounting at these Universities. In 1978 the pass rate for first-time writers at McGill was 80.1% - almost 5% higher than the 1979 rate.

Ontario had 838 candidates attempting the UFE for the first time. Of these 63.7% passed. This compares with 66.3% in 1978 and 66.0% in 1977. However, if we analyze these figures further, we find that 273 of the 838 first attempters had B. Co., M.B.A. or B.A. degrees and their pass rate was 77.3% in 1979, 77.5% in 1978 and 70.9% in 1977. If we look at academic background as the major criteria, then this group compares most favorably with the 1979 first attempters at McGill and Concordia in Quebec since having a university degree is a requisite for admission to the Ordre and the Graduate Diploma Program.

Therefore, if we compare these "first attempters" with university degrees from Ontario with "first attempters" with university degrees from the anglophone sector of Ouebec, we find the following:

Ontario - 1979 pass rate - 77.3% Quebec - McGill - 1979 pass rate - 75.2% Quebec - Concordia - 1979 pass rate - 58.3%

Unfortunately, there is no data available giving us the pass rate for "all" "first-time" writers with university degrees for 1979 or even prior years.

However, we do have comparable figures for the Province of Alberta (see Table No. 7). We can see that in 1979, first-attempters with the B. Comm in Accounting had a 61.0% pass rate. This is considerably below Ontario and McGill University.

THE INSTITUTE OF CHARTERED ACCOUNTANTS OF ALBERTA

	PASS:	PASS: PERCENTAGES ON UNIFORM FINAL EXAMINATION										
• •		1972	1973	1974	1975	1976 .	1977	1978	1979			
B. Comm Accounting: - first attempt		67.12	56.02	55.52	44.8%	. 44.0Z	50.2X	61.92	61.0%			
- all attempts		64.22	58.62	55.92	41.67	47.3X	\$5.0Z	72.8%	67.42			
Other Degrees: ,- first attempt	3	67.32	56.92	60.0%	50.0%	43.5%	45.02	51.07	58.6%			
- all attempts		78.9%	64.4Z	61.2%	50.92	47.5X	43.27	57.62	68.82			
Senior Matriculants: - first attempt		63.12	58.92	60.5%	46.32	40.02	, -	_				
- all attempts		69.7%	69.72	67.92	52.0%	31 .0z	16.72	33.37	14.3%			

Our study of the pre-C.A. qualification
educational programmes in Quebec and Ontario and the
data related to the UFE results confirms the view of
Prof. Daniel McDonald: "... there is a dearth of facts.
Hard data relating to accounting education is almost
non-existent ... "However based on the limited data
available, certain conclusions can be drawn.

The first is that the educational approaches differ very substantially between the two provinces. The Quebec Order, which tends to leave the curriculum course offerings and course content completely to the universities has a highly structured format for its C.A. qualification programme. It also de-emphasizes the value of practical experience with the C.A. firms as an aid to the UFE candidate. The Ontario Institute, on the other hand, places considerable emphasis on the practical aspect of employment with a C.A. office. "Professional experience under actual working conditions in the office of a practicing chartered accountant is an important part of the C.A. student's training." It is directly involved in curriculum, course offerings and runs both a staff training programme, and the School of Accountancy at Ryerson Polytechnical. The Ontario approach is quite complicated and comparatively unstructured.

The second conclusion is that, although the approaches differ substantially, their impact on the results of first attempters with university degrees is relatively insignificant. For the years 1978 and 1979 the pass rates were 77.5% and 77.3% for Ontario and 80.1% and 75.2% respectively for McGill University (28). The McGill two year average is 77.6% while for Ontario it is 77.4%. However there is a temptation to attribute the 4.9% increase at McGill to the newly instituted Graduate Diploma in Public Accountancy programme. Personally, I consider this evaluation pre-mature.

It is most unfortunate that there is such relatively little data available. In my discussions with the Director of Education of the Ontario Institute and the Registrar of the Quebec Order, both deeply regretted the lack of information regarding the candidates. It is conceivable that our findings might have been different had we known the candidates ages, years of practical experience and academic background.

However, based on the factum presented, certain other conclusions are apparent. Firstly, the Ontario pre-qualification programme, which has been referred to by academics, students and professionals as "a chaotic jungle," could be upgraded by simply restructuring the format. The Institute should leave the undergraduate courses to the universities and concentrate on its graduate school of accountancy. Like the new Graduate Diploma in Accountancy Programme, it could simply specify the admittance requirements from the applicants. The universities would be forced to meet them or lose their students to other institutions.

Second, and foremost, is that although education is a provincial prerogative, it is most unfortunate that each institute/order "goes his own way". Each province appears to approach the pre-qualification programme as differently as Quebec and Ontario. Considerable benefits could accrue to the UFE candidates if some organization such as IPEC would be set up to improve the educational programmes.

Joint studies of results, courses, formats, etc.

could be undertaken. Each could learn from the other's
experiences. The end results would be upgraded pre-qualification programmes and higher pass rates. All this without
diminishing the provinces' educational rights under the
British North American Act.

CHAPTER 5 THE PROBLEMS OF EDUCATING ACCOUNTANTS

"Let us first face the fact that the bodies of specialist that now dominate the creation, adjudication and implementation of needs are a new kind of cartel. They are more deeply entrenched than a Byzantine bureaucracy, more international than a world church, more stable than any labour union, endowed with wider competencies than any shaman, and equiped with a tighter hold over those they claim as victims than any mafia" (29)

Illich sees specialists as professionals who not only determine how work shall be done, but also decide what shall be made, for whom and how their decrees shall be enforced.

"They claim special, incommunicable authority to determine not just the way things are to be made, but also the reason why their services are mandatory".

In "Disabling Professions" he further argues that the public acceptance of these domineering professions is essentially a political event.

"Each new establishment of professional legitimacy means that the political tasks of law-making, judicial review and executive power lose some of their proper character and independence. Public affairs pass from the layperson 's elected peers into the hands of a self-accrediting elite". (30).

This is not necessarily so. Wolff (31) sees professions as socially defined occupational roles. "Such occupational roles are organized as self-regulating, self-certifying groups of men and women who possess and exercise a special skill or body of technical knowledge". These groups receive

their "powers" from the legislative bodies. However, this does not mean that the "proper character and independence" of the law-makers has been diminished. They have simply used the professional body as a vehicle to regulate the profession in a manner similar to a government using a Crown Corporation to regulate a particular agency.

"Roughly peaking, a profession comes pretty close to what Plato called a 'techné' in the 'Republic' and the 'Gorgias'. Plato saw quite clearly that the notion of 'techné', resting as it did on an objective theory of the good for man, was deeply antidemocratic". (32).

It is this very power of certification, that is, the ability to restrict membership into the profession, that makes it antidemocratic. However, self-certification is also the reason why the professions have such high social status. The high status, on the other hand, "serves as a permanent spur to professionalization of the most diverse occupational roles." The Professional Code of Quebec lists 38 professions including denturists, opticians, optometrists, public accountancy, legal profession, notarial, teaching, medicine, dentistry, etc.

Generally speaking, an occupational role becomes a profession when its members claim that "the activity rests upon a body of knowledge and technic which is capable of being formulated in principles and taught in the classroom." Once

this argument is proven then it is naturally concluded that only an expert practitioner can teach the activity to others and judge whether the student has mastered it. The self-regulating and self-certification are a direct result of this latter argument. After all, who is best qualified to judge if the student is adequately trained to enter the profession - only the members of the profession. To maintain the level of competency and expertise, only the most qualified should be permitted to practice. Because of this, the professions are considered by many as being very restrictive and, according to Illich, "a new kind of cartel".

The professionals see self-certification and self-regulating as vehicles through which the public may be protected from the poorly trained and incompetents. Being a member of a profession assures the user of a certain level of competency because of the acquisition of specific skills and knowledge. True it is restricted. Only those qualified are admitted to practice. However, the public is protected from those incapable of meeting the standards set by the professional body.

Public Accountancy is such a body. It is broadly defined to mean "financial accounting, auditing and any other activity that in some way lends credibility to financial information".

(33) Financial accounting is defined by Skinner (34) as "a

medium of communication of pertinent economic information by those responsible for managing an/entity to other parties (owners, investors, creditors, and the public generally) having an interest in it but who do not have access to its internal information". Financial accounting standards govern "disclosure" and "measurement" - i.e. what entities must report and how their economic operations must be described. Auditing standards govern the rules for validating the economic information that appears in the financial standards. Both "standards" are the direct result of the pronouncements in the CICA Handbook which are an integral part of "generally accepted accounting-principles" and "generally accepted auditing standards".

The CICA and the provincial institutes/order set most of the accounting and auditing standards. However, other regulatory bodies in both Canada and the United States also have a considerable impact on these standards. The Canada Business Corporations Act of 1975 has regulations directly pertaining to financial accounting and auditing standards particularly regarding financial disclosures, legal and professional responsibilities of the auditor and which companies must be audited. In the United States, the Securities and Exchange Commission have made similar rules and regulations pertaining to financial disclosure and the auditor's responsibility.

What has happened to the accounting profession is that because of a "laxness" on the part of the profession itself,

other regulatory bodies such as the Securities and Exchange Commission have been forced, by public outcry, to step in and issue certain specific regulations. During the 1960's and early 1970's, the U.S. and Canada had a number of major frauds in public companies (35). As a direct result and in order to protect the investing public, these regulatory bodies set minimum financial accounting and auditing standards of their own.

.These "public accounting standards" not only influence the behaviour of practitioners but also have an affect on economic behaviour.

"It seems clear to us that public accountants, by dint of the scope of their activities, have the opportunity to influence economic behaviour". (36)

The auditor, through his attestation function, adds a considerable degree of credibility to the Financial Statements prepared by management. His judgement regarding the use of alternative financial accounting methods and disclosure requirements could have a substantial impact on the economic results of the company as disclosed in these financial statements. Naturally, the results could influence the users of the statements - the investors, creditors, bankers, unions, governmental agencies, etc. One could say that the auditors, as a result of the attest function, could influence the economic behaviour of these individuals and groups.

Lazar, Sievers and Thornton go even further. They argue that the influence of public accounting standards on economic

behaviour may even give rise to a redistribution of wealth. Changes in standards governing disclosure and measurement could have such an impact on the tax liability of both the company and its stockholders as to transfer substantial sums of money to the government. In this way, wealth is transferred from the individual to the public bodies.

As our society and our lives grow more complex, we are forced to develop a variety of skills. It becomes more and more important to develop, not only our cognitive abilities, but also our "relational" abilities. We cannot afford to educate on a purely "content" level. We must begin to educate for the "application" of knowledge. Engineers no longer design in solitude but rather are required to work in project groups. Accountants are not simply auditors, but are very frequently involved with management as consultants. More than 60 percent of all Chartered Accountants are in industry, usually as part of the managerial team. Even a history professor or a surgeon may suddenly find himself promoted to an administrative position which requires managerial skills.

"...experience of higher education, it is commonly held, has better prepared them (students) for a career and life. Yet soon after embarking on their new careers and lives, these graduates discover that the knowledge and ability acquired in school are not enough, that something is missing in their preparation that prevents them from translating what they have learned into effective performance. Actual work experience is part of the answer, of course, but neither experience nor knowledge is a guarantee of individual success." (37)

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Klemp, in his research, found "that the amount of knowledge one acquires of a content area is generally unrelated to superior performance in an occupation and is often unrelated even to marginally acceptable performance." Although a minimum level of knowledge is required in many occupations, most require only that the individual be willing and able to learn new things. "It is neither the acquisition of knowledge nor the use of knowledge that distinguishes the outstanding performer, but rather the cognitive skills that are developed and exercised in the process of acquiring and using knowledge." The cognitive skills referred to are those that involve the ability to conceptualize—that enable individuals to bring order to the informational chaos that constantly surrounds us. For managers, it is "the ability to see thematic consistency in diverse information and to organize and communicate this perception."

Wolff (38) argues that it is the "characteristics of professional training, and not the degree of generality or specificity of the material learned, (that) set professional training off from other forms of education."

"What matters is that the material should engage the student's intellect and sensibility, and that he should be held to the highest possible standards of thought, and that his activity be free of the extraneous career consequences of the professional school. Only by such genuine experimentation, sharply different from both the dilettante's superficiality and the professional's career commitment, can a young man discover who he is and who he wants to be."

The difference between intellectual creations and professional activity is that the former "are judged by the criterion of truth, ...not only fidelity to reality but also theoretical simplicity, explanatory power, conceptual elegance and logical coherence." Professions, unlike intellectual creations, "are social roles whose content and significance are defined by norms operative in the society."

Education is frequently thought of, not only as a process of changing the behavioral patterns of individuals, but also as a process of imparting knowledge, enhancing the powers of reasoning and judgement as well as developing skills. In accountancy, it is the ability to apply accounting, auditing and taxation principles, analyze situations, define problems and identify related issues. The final test, after evaluating the alternatives, is exercising the proper judgement necessary in the circumstances. A practicing Chartered Accountant requires both the theoretical background and the ability to make judgemental decisions. It is this very situation which creates one

of the major problems in educating accountants: devising an examination to test such diverse and dissimilar things - the capacity to theorize and the ability to practice.

"...a tendency to measure the success of an educational system in terms of performance of the Uniform Final Examination: We've put a lot of eggs in the UFE basket. We expect it to measure readiness to practice, screen out people unsuited for the profession, examine the adequacy of educational systems. The ultimate measure of success is the quality of the individuals the system produces. We may be devoting too much of our efforts and resources at pushing accounting students through the UFE as quickly as possible.... Our efforts may be better devoted to enhancing the quality of of accounting education and the quality of practical experience." (39)

Plaxton also states that "the education of an accountant should not only be concerned with training people to develop and interpret financial information that is reliable and relevant, but also with the training of people to use such information to find and implement solutions within the management process," (40)

The goals of our educational delivery system (according to this highly respected Professional Accountant) must be to provide the student with the tools (an appropriate body of knowledge plus practical accounting skills) and with the capacity to use them with integrity, sensitivity to needs, imagination and flexibility.

McDonald (41) regards the subject "accounting" as a mechanism for gaining an "education." Getting educated through the accountancy stream means acquiring knowledge and skills of a kind which not only enables the accountant to do specific jobs requiring this expertise, but it also makes him a creative individual - it gives him insight and foresight, adaptability and the desire to discover.

"The subject itself is not the end. If it were the end, then once 'known' nothing remains to be done. The subject itself expands and changes. The 'continuing to know' depends upon a capacity to detect relevant changes, anticipate their impact, critically evaluate alternative action plans and viewpoints, and integrate all of this into the previously 'known.' The university years should be focused on this 'capacity to continue to know.' If it does so the prolonged...debate over generalist vs specialist education becomes pointless."

Some individuals will, of course, choose to be concerned with a broader range of knowledge. During their university years, they will select a variety of subjects to develop the perceptions and analytical capacity which will serve those broad interests.

Other students will be more concerned with a narrower range of knowledge. By taking a more limited set of subjects, they will apply their education to a more specific aspect of life.

Both have value in the field of accounting. The former will evaluate the impact of accounting alternatives on the economy while the latter will be concerned with how to account for them. This is how it should be. Those with a fairly narrow concern will be interested in the accounting for foreign exchange gains and losses. Others should be concerned with whether the exchange rates should be fixed or permitted to float freely and the impact of the alternatives on the economy.

university and professional accounting curricula have come about as a result of research undertaken in the early 1960s which suggested that the accounting curriculum be broadened to include such subjects as: organizational behavior, management processes, quantitative methods, information systems, etc. This was done while retaining a specialized knowledge in accounting. It was intended to show how accounting integrated with these other disciplines so that accountants could better appreciate the needs of these other individuals when preparing financial information.

"This complexity of modern structures means that problems of comprehension and understanding of modern knowledge now exist which we in education have barely recognized. The diversity of modern structures means that we must look, not for a simple theory of learning-teaching structure for our schools, but for a complex theory leading to a number of different structures, each appropriate or 'best' for a given discipline or group of disciplines." (42)

What we have in accounting is a body of knowledge that has increased very substantially in the last two decades. Not only is it continuously increasing, it is also in an almost constant state of change. Current research is focusing more and more on determining the needs of users of accounting information. An increasing number of questions are being asked about the usefulness of financial statements to "predict" such events as future profitability and risk of the enterprise. As a result, there is an expanding amount of research to determine what accounting and reporting alternatives are best in terms of forecasting the future performance of the firm. This research plus the current literature frequently result in new "generally accepted accounting principles" and "generally accepted auditing standards."

The accounting field is fast approaching the point where the amount of material available to read will exceed the time or absorption ability of all readers. The result will be that the accounting content of the curricula will put less emphasis on description and procedures and more on selecting the appropriate accounting techniques to match decisions and then analyzing the results, since no student will be capable of "knowing" the full body of knowledge.

"The UFE Syllabus is primarily concerned with a 'readiness to practice public accounting' and rightly so. It embodies the expectations of new entrants to the CA profession. The Syllabus Sub-Committee faces constraints concerning the inclusion of new research in the Syllabus, due to the many pertinent topics concerning accounting as it is practiced today. (43)

THE RESERVE AND ADDRESS.

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ness to practice public accounting," then it is also concerned that the practitioners be successful ones. Therefore a proper curriculum must be a correct, complete and effective instrument for the creation of successful practitioners — individuals not only possessing the required knowledge and skills but also the creative qualities of insight and foresight, adaptability and the desire to discover.

"To create such a curriculum in fact would require, first, identification of successful practitioners...; second, correct and complete discovery of the powers, habits and bodies of knowledge which make the practitioner successful; third, determination of the learning 'experiences' which would inculcate or evoke these powers, habits and bodies of knowledge; fourth, determination of ways in which these 'experiences' could be instituted; fifth, development of facility in the staff in the application of such ways."

The problems of constructing such a curriculum are obvious. Firstly, how does one define a "successful" practitioner? Is it by the size of the practice, i.e. the gross revenue, number of clients, the "size" of the clients or the number of employees in the firm? Would a chartered accountant who is held in "high regard" by the members of the profession be considered "successful?" Would an innovative practitioner with a "small" practice be considered "successful?" The word "success," in itself, is extremely difficult to define. Secondly, which "knowledge" is

most useful to the student? The "nature of judiciousness" in its use, the habits and abilities which constitute it. These are all indeterminate factors.

Another major consideration is the "quality" of the faculty - their competence as teachers, as well as the extent of this knowledge and practical experience.

"...the classroom practices which are supposed to realize curricular programs and intentions are valid only to the extent permitted by the competence, the experience and the state of health possessed by the teacher at the moments when he teaches." (45)

What we have is a curriculum continually subject to change, with a faculty wrestling unsystematically (46), and as best they can, with an ever-increasing body-of-knowledge, "the preconditions for its achievement and the means for evoking and inculcating these means in students." At all these points validation is the UFE results. As things now stand, the higher the percentage of passes, the more successful the program. The more successful the program, the more valid is the curriculum. No consideration is given to the "grading" policies of the universities. Since all emphasis is on the "percentage" of candidates passing, some universities, seeking special recognition for their curriculum, will only permit their "top" students to write the UFE. This is achieved by either "failing" or giving poor grades to the "borderline" cases. With only the "top" students writing, there is a much greater probability of a higher percentage of passes.

According to Plaxton, there is a distinct "tendency to measure success...in terms of performance of the UFE." Is this proper? Should "success" be related simply to passing exams?

- Duff (47) lists the following five "Objectives of a Professional Program:"
 - 1) To provide a curriculum that is relevant to the needs of the profession and of a standard appropriate to the profession. There must be a blend of theory and practice.
 - 2) To attract and retain staff of the highest quality whose interests are directed towards teaching and applied research. Such faculty should be professionally qualified and have had practical experience.
 - 3) To attract outstanding students.
 - 4) To instill in staff and students a strong commitment to the profession.
 - 5) To obtain support of the program by practitioners and to actively encourage interaction between staff, students and practitioners.

The first major problem of "educating accountants" is developing a "relevant" curriculum. It must be "relevant" in the sense that it meets the requirements of the UFE Syllabus which, it is assumed, is concerned not only with "a readiness to practice public accounting" but also that the practitioners be "successful." The cufficulum must be "a correct, complete and effective instrument" for the creation of individuals "possessing the required knowledge and skills" as well as the "creative qualities of insight and foresight, adaptability and the desire to discover." Obviously, the "body of knowledge"

which is continually expanding and changing, must be covered in its current form in the curriculum.

The second major problem is "attracting and retaining staff of the highest quality."

"The supply of accounting academics remains critical. Best estimates are that there are 10 available positions for every available Ph.D. in accounting. This is not just a Canadian phenomenon. It is true in the U.S. as well. It is not just a short-run phenomenon. It has held true for at least the last 10 years." (48)

The same situation exists throughout the management schools. "While other disciplines try to cope with a Ph.D. surplus, graduates with doctorates in business are scarce. During the seventies only about 100 management Ph.D.s were granted in Canada compared with 10,000 in the United States." (49) The consequence of these shortages is that over the past few years the management schools have relied heavily on part-time teachers and have not been adequately staffed in terms of full-time

This raises an important question: why should a Ph.D. be relevant? There are certainly "good" academics without a doctorate. Would the professional designation (like "C.A.") in itself not be sufficient to teach accounting? In the teaching of accounting, there is unquestionably a place for professionals who have had significant practical experience rather than having taken the academic route through a Ph.D.

However in order to understand the relevancy of the latter, we must first look at the concept of the American university of today - the "multiversity."

"The American university of today...is no longer a single-purpose institution dedicated to the attainment of one goal only, it has become a 'multiversity," a multipurpose organization trying to achieve a number of objectives at the same time. The objectives can be summarized as follows:

- 1) Teaching: the transmission of those characteristics which make men truly civilized. This involves the provision of general education not the education of specialists and it covers what is commonly called a 'liberal education.'
- 2) Training: the transmission of expert knowledge required for the performance of high-level occupations.
- 3) Research: the creation of knowledge through scholarship and basic scientific research.
- 4) Public Service: the provision of useful knowledge and service to the rest of society.
- 5) Equalization of Opportunity: the removal of all factors limiting a person's chance to receive higher education on grounds other than interest and ability."

 (50)

The first three goals are the "autonomous functions" of the university. The two last ones are considered the "popular functions," the external goals which the university has been asked to take on by the rest of society.

It is in the "research" objective of the university that the Ph.D. becomes relevant. The general belief is that the doctoral designation adds a substantial degree of credi-

bility to the research findings. After all, "the creation of knowledge through scholarship and basic scientific research" should warrant a "terminal" degree like the Ph.D.

In most Canadian and United States universities, the teaching of accounting is the responsibility of the faculty of management and is, therefore, subject to its rules and regulations. Like most other faculties, there is strong emphasis on "research" - hence the relevancy of the Ph.D. Frequently, promotions and tenure are also tied to a doctoral degree. This usually means that unless the professor has his Ph.D. or is working toward it, he is not eligible for promotion or tenure. Therefore, after a certain fixed period, his contract will not be renewed.

Unlike medecine or dentistry, which are almost always faculties unto themselves, accountancy is a part of the faculty of commerce or management. As such, it is subject to "their rules and regulations." Whereas the faculties of medecine and dentistry place greater emphasis on practical experience and achievement rather than the Ph.D., accountancy is forced, by faculty regulations, to place the emphasis on the doctoral degree and de-emphasize the practical experience. (51)

The end result is that there is a continuous turnover of faculty, not only to the profession, but to industry as well. McDonald states that his university (Simon Fraser) experienced a 100 percent turnover in the last five years. However it should be pointed out that the demand for the

Ph.D. is only one factor in the problem of staff retention.

A major consideration is that the financial rewards in the profession and in industry are substantially higher than in the university. Unfortunately, because it is tied to the faculty of management, accountancy, unlike medecine and dentistry, cannot offer competitive or different salary scales.

Ironically, the Ph.D. problem has entered the "vicious circle" stage.

"With insufficient faculty there is an understandable reluctance to begin new Ph.D. programs. With few Ph.D. programs, few Ph.D.s are produced, and the vicious cycle continues." (52)

A third problem lies in the area of establishing a proper "mix" between the academic training and practical experience.

The business or graduate professional schools are only a part of the "delivery system." They represent the academic arm of the educational process. In accounting, as in many other professions, practical experience is an important part of the system. Recent graduates and leaders in industry and government value this part as an essential component in the education of a professional accountant and an effective manager. Plaxton, however, believes that "we may be forgetting the importance of experience and professional maturity as a component of the educational delivery system."

"If educators, institute policymakers and large accounting firms put the same value on experience as a prequalification necessity of our graduates past and present, our system of educating professional accountants and managers might be in better shape. When we turned over the academic preparation to the business schools, we reduced the experience requirement to the extent that it has limited significance in the education process. We have diminished the value of practical experience and professional maturity as components of the educational experience prior to the writing of the interprovincial qualifying exams."

In our discussion of the Quebec and Ontario approaches to the pre-C.A. qualification educational programs, we saw how the Quebec Order de-emphasizes practical experience while the Ontario Institute requires a minimum of two years of professional experience prior to writing the UFE. It is difficult to understand Quebec's position regarding the importance of "practical experience." As stated in Chapter 2, the comprehensive and multi-subject questions, which represent between 55 percent and 75 percent of the total marks, "seek to test professional judgement and both measure and integration of knowledge learned within a variety of subject areas and/or through relevant practical experience." These questions are related to practice and, therefore, professional maturity. The Ontario Institute, obviously, took cognizance of Northrup Frye's views on "maturity"

"Maturity is not a thing you find in people, it is a thing that you find only in certain mental processes...the mental processes of reason, as distinct from rationalization, of experiment, of considered evidence, of the precise and disciplined imagination that appears in literature and the arts..." (54)

The fourth major educational problem is concerned with
"the lag in the transfer of new knowledge from empirical research
to accounting education and practice." It is not unique to
accountancy but is common with most of the academic disciplines
which are related to public practice. The problem stems from
the coziness and indifference to change of both the practitioners and the faculty. In 1973, Robert R. Sterling wrote in the
American Journal of Accountancy:

"Education and practice seem to be complimentary in that educators teach accepted practice and practitioners accept and practice what they are taught. This complementary relationship excludes research from the chain of events that determine what is taught and what is practiced. Research is an isolated activity in accounting." (55)

In the last two decades the thrust of accounting has moved from data collection and earnings measurement towards communication with users. The problem is to determine what information the users require. Also, one must consider new knowledge arising from empirical research in accounting as a subset of all new knowledge available for implementation in practice.

From an academic point of view, one of the major problems is the failure of accounting education in Canada to transfer this new knowledge to students for later implementation in practice.

"...the syllabi of professional accounting bodies, university course content, authoritative standards, accounting textbooks and professional magazines all contribute to this educational problem by failing to incorporate empirical research findings on a timely basis." (56)

However, it should be noted that the "primary concern" of the UFE Syllabus is the candidate's "readiness to practice public accounting." It embodies the expectations of new entrants to the C.A. profession. As such, new topics less central to today's practice tend not to receive strong emphasis in the Syllabus. The problem, therefore, is one of finding the "proper mix."

"In order to continue to hold its place in the professions of the world, the accounting profession must...endeavour to speed up the transfer of new empirical knowledge to learning and practice." (57)

CHAPTER 6

CONCLUSION

Our study of the pre-CA qualification programmes in Quebec and Ontario have shown that the educational approaches differ ' very substantially between the two provinces. The Quebec Order tends to leave the course content and offerings almost completely to the universities and does not require practical experience . as an aid to the UFE candidate. The Ontario Institute, on the other hand, is directly involved in the course offerings by running a staff training programme and the School of Accountancy. It also places considerable importance on the practical aspect of employment with a C.A. office. However, our analysis of the UFE results in the two provinces has also shown that, although the approaches differ substantially, their impact on firstattempters with university degrees is relatively insignificant. The average pass rates for 1978 and 1979 differed by only .2% between the two provinces. It would appear that the practicum does not contribute anything towards the training of accountants as far as this can be tested by the UFE. Wolff (58) has stated that "Professional training aims at the achievement of 'qualification' through the demonstrated mastery of a body of material and a repertory of skills." At first glance it would appear that once the 'body of material' is mastered, the practicum has little impact. However, because of the paucity of data, we cannot come to such a conclusion.

Several other factors have to be taken into account when assessing the contribution of practical experience to professional

qualification. Success in a theoretical examination may not identify the successful practitioner. Thus, a trainee accountant without practicum, might score highly in the UFE without demonstrating the competence, when qualified, displayed by a less successful examinee with the benefit of practical training. As in the preparation for other professions, a major educational problem remains that of devising examinations which test both the capacity to theorize and to practice effectively. The UFE must be constructed to ensure that the candidate has the capacity not only to theorize about public accountancy but also to practice successfully. Since a candidate may, in Quebec, succeed in the examination without benefit of practice, it cannot be assumed that the UFE, at present, provides evidence of competence as an accountant in practice.

The "lag in the transfer of new knowledge from empirical research to education and practice" is another problem which accountants share with other academic disciplines related to public practice. This "lag" or "failure" on the part of accounting educators to transfer new knowledge to their students, for later implementation in practice, is a major educational problem. In order to practice successfully, the individual requires the most "current" knowledge and skills, that is, the current "generally accepted accounting principles" and "generally accepted auditing standards." Even if (as concluded above) a theoretical examination is not an adequate test of competence in practice, it is arguable that a thorough test of theoretical

principles is necessary for practitioners to respond to research which represents new knowledge in the field.

A third major problem is attracting and retaining staff of the highest quality in university departments of accountancy. In this area the supply of academics is particularly critical because of the great shortage of available practitioners with Ph.D.s and the substantially higher financial rewards in public practice and in industry. It is possible that if accountancy were a faculty, like medecine, dentistry or law, this problem could be eliminated through differential salary scales. Greater emphasis could be placed on practical experience and achievement, rather than the Ph.D.

"The salaries are high and the demand is strong, but there never seem to be enough chartered accountants to go around. CA firms struggle to retain their best graduates while industry offers ever-more enticing packages to lure them away." (59)

APPENDIX

UNIFORM FINAL

FINANCIAL

Organization, operation each form of profit-orien cluding the relevant businesch form of organization.	
operation (profit-orien elevant busin organization.	
Organization, operation and accounting for each form of profit-oriented organization, including the relevant business law applicable to each form of organization.	
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Knowledge Levels

Three

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Knowledge Leve TWO

Accounting:

- Theory of accounting including underly and liability valuation and income meas assumptions, concepts and principles of a
- Accounting problems relating to all a liability, revenue, expense and equity iten
- Accounting terminology.
- Generally accepted and practices; set out in the recommendatee of the CICA. tions of the Accounting Research Commitaccounting principles
- Guidelines issued by the Accounting Research Steering Committee of the CICA.
- Pronouncements of the Financial Account-The history and development of accounting ing Standards Board (US) (including its preaccounting standards generally. standards in Canada and the formulation of

decessor) and the International Accounting

Standards Committee.*

- measurement models. Alternatives to conventional historic cost cations of these alternative accounting usted current value models, including impliaccounting, including general price level adustment, current value and price level ad-
- writing the Uniform Final Examination: Current financial accounting and reporting literature from the following sources pubished within two years prior to the date of
- CA magazine;
- CICA Research Studies;
- CICA Discussion Papers
- CIOA Accounting Research Committee Exposure Drafts;
- The Journal of Accountancy.

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	Accounting in fit entities.
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10.

- 12. Bankruptcy, liquidation, receivership 11. Estate and trust accounting. creditors' arrangements.

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- Reporting to shareholders, granters, regulatory bodies and the investors, publica cradit
- 1. Objectives of financial reporting. 2. Strongths and weaknesses Š. generally
- Statement presentation of all asset, liability, accepted accounting principles and the imrevenue, expense and equity items, including pact of their selection, on the resulting Inancial statements.
- statements, changes in hanges
- Analysis and interpretation of financial
- ing principles.

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(d) tests of transactions.	(c) systems narratives;	(b) questionnaires;	(a) flow charts;	5. Basic auditing techniques and procedures for the review and evaluation of internal control:	and variables.	Judgmental sampling;	(c) specific methods of sample selection for testing:	(b) development and application of substan- tive tests;	(a) development and application of com- pliance tests;		3. Problems relating to the sudit of all asset, liability, revenue, expense, and equity items including decisions as to the nature, timing, and extent of evidence to be gathered.	(c) determination of the scope of the audit.	 (b) relationship of internal control, com- pliance verification, and substantive verification; 	(a) underlying assumptions and concepts, including materiality;	2. Theory of auditing:	menta.	levelopment;	Auditing:			· · · · · · · · · · · · · · · · · · ·
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11. Reporting to management on internal control

(f) events subsequent to the balance sheet (d) long-term intercorporate investments;

12. Current auditing Merature from the follow-

ing sources published within two years prior

to the date of writing the Uniform Final

13. Auditor's appointment and termination:

(d) The Journal of Accountancy.

Exposura Drafts;

(c) CICA Auditing Standards Committee (b) CICA Audit Technique Studies;

(a) CA magazine;

Examination;

(a) statutory requirements;

(b) professional requirements; (c) engagement letters.

10. Audit problems related to specific situations:

(a) initial engagements;

(b) verification of financial statement com-

ponents prior to year-end;

(c) unincorporated businesses;

9, The importance, content and principles of

Accountants.

documentation of audit working papers.

8. Statements on Auditing Standards issued by the American Institute of Certified Public

7. Guidelines issued by the Auditing Standards

Committee of the CICA.

Steering Committee of the CICA.

6. Generally accepted auditing standards and mendations of the Auditing Standards

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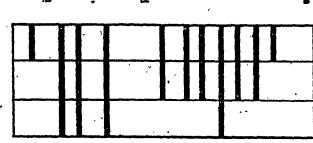
Investigations — planning the scope of the investigation; techniques and procedures to be used; reports, statements, schedules and other data to substantiate findings. Examples of the purposes for which investigations might be conducted include:

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Three

Knowledge Levels Two

- l. Feisibility studies.
- 2. Valuation of a business entity.
- 3. Purchase and sale of a business.
- Fraud.
- Insurance losses.
- 6. Credit approval.
- C Operational and management auditing.
- D Professional responsibilities of accountants and auditors:
- . Professional ethics.
- Legal rights and responsibilities (statutory, contractual, civil).
- Legal liability of accountants and auditors.
- 4. Organization of the accounting profession in



A Understanding of reli management decision techniques of manager

is accounting.	1-making and analytical	ationships between basic		`.
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- Nature of costs:
- 1. Actual costs.
- 2. Predetermined costs.
- 3. Combinations of actual and predetermin
- Cost-volume-profit relationships.
- 5. Contribution margin analysis.
- 6. Relevant cost analysis.
- Product costing information:
- 1. Cost accumulation under job order and pi cess costing methods.
- Inclusiveness of the costs accumulated:
- (a) absorption costing;
- (b) direct or variable costing.
- 3. Impact of product costing alternatives the measurement of both income and fin cial position.
- Decision-making applications including:
- 1. Product mix, pricing, and output decision
- 2. Performance measurement and evaluation
- 3. Resource expansion and contraction.
- E Analytical techniques for control and decis making:
- 1. Budgeting.
- 2. Responsibility accounting.
- Standard costing.

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- The design of management control systems, including:
- (a) profit centres and investment centres;
- (b) ROI control;
- (c) residual income;
- (d) transfer pricing.
- Capital investment decisions.
- 6. Basic concepts of decision theory linear programming, network analysis (including PERT and CPM) and simulation.
- 7. The design of managerial accounting in-(a) behavioural consideration in accounting formation systems:
- (b) internal control and audit trails.

information system design;

000 Knowledge Levels TWO Three

ISSUED 1978 - UNIFORM FINAL EXAMINATION SYLLABUS - PAGE 11 IE 12 - UNIFORM FINAL EXAMINATION SYLLABUS - ISSUED 1978 PAGE 12

- A Corporate financial theory:
- 1. Basic concepts and principles.
- Methods of financing, including leasing, commercial and banking arrangements.
- 3. Present value and opportunity cost concepts.

68

- 4. The theory of interest and the term structure of interest rates.
- 5. The calculation of yields on debt and equity instruments.
- 6. The efficient capital markets concept and the capital asset pricing model.
- B Corporate financial decision making:
- Working capital management; financial forecasting.
- 2. Investing decisions:

Capital investment decisions:

- (a) under conditions of certainty;
- (b) under conditions of uncertainty (sensitivity analysis and risk-adjusted rate of return).
- Mergers and acquisitions.
- 4. Valuation of a business entity.
- Financing decisions:
- (a) financial leverage, the cost of capital and the optimal capital structure;
- (b) dividend policy.
- C Money markets and financial institutions:
- 1. Money and banking.
- 2. Financial intermediaries.

Knowledge Levels
One Two Three
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The objectives of income tax coverage in the labus are to determine that the student posses An understanding of the philosophy, n An ability to compute personal and corp and purpose of income tax legislation; The knowledge to deal with the incomincome tax;

and in personal financial planning. implications in business decision-ma

A Taxation — General;

1. Theory and concepts of taxation.

2. Types of taxes - uses, significance, incide

B Income tax:

1. Structure of the Income Tax Act and principles of tax law.

3. Computation of taxable income - in Computation of income — individuals corporations.

. Computation of tax — individuals and duals and corporations. porations.

Deferred compensation and retirement p

8. Partnerships, including transfers from nerships to corporations.

7. Trusts and their beneficiaries.

8. Taxation of corporate distributions.

9. Corporate reorganizations.

10. Taxation of foreign source income.

11. Taxation of non-residents.

12. Returns, assessments, payments and appeals

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ax planning and decision-making implications:

Form of business organization.

Debt and equity financing.

Capital investment decisions

Lease-purchase decisions.

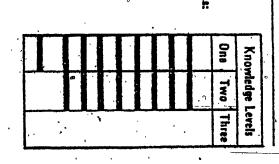
Acquisitions.

Dividend-salary decisions.

Tax deferral plans.

Income splitting.

ederal commodity taxes.



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			(iii) other advanced systems.
			(ii) on-line systems;
			(i) batch systems;
			(b) evaluation and verification testing of internal control and processing:
			impact of EDP on the auditin
		,	2. Computer auditing:
		'	(b) non-attest significance.
اسجاد			(iii) other advanced systems.
			(ii) on-line systems;
			(i) batch systems;
			(a) attest significance:
;		,	1. Computer control:
			B Professional skills in an EDP environment:
			4. EDP management.
		,	tenance.
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			(c) systems design;
			(b) systems analysis;
			(a) systems investigation;
		~	3: Systems analysis and design:
			(d) preprogrammed software.
,			(e) programming languages;
			(b) stored programmes;
•			(a) concepts of programme development;
,	,		2. Computer programming and software:
			(d) processing stages.
			(ii) computer operating procedures.
			(i) processing modes;
		ø	processing:
			(b) hardware components;
			(a) elements of processing and data;
			1. Processing and operations:
			A Principles of electronic data processing:
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(c) attest audit procedures for systems conversions;

Knowledge Levels

(d) computer-assisted audit techniques;

(i) use of computer programmes;

(II) other techniques.

(e) contractual and legal implications.

One Two Three Knowledge Levels

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APPENDIX B

THE INSTITUTE OF CHARTERED ACCOUNTANTS OF ONTARIO

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FOOTNOTES

- 1. Mann, Harvey "C.A.'s in Canada...The First Hundred Years" an article, C.A. Magazine, December 1979, Page 26.
- 2. The Chartered Accountants Association of Manitoba -May 28, 1886. The Institute of Chartered Accountants of Nova Scotia -January 12, 1900. The Institute of Chartered Accountants of British Columbia - April 8, 1905. The Institute of Chartered Accountants of Saskatchewan June 12, 1908. The Institute of Chartered Accountants of Alberta -December 10, 1910. The New Brunswick Institute of Chartered Accountants April 29, 1916. The Institute of Chartered Accountants of Prince Edward Island - April 27, 1921. The Institute of Chartered Accountants of Newfoundland -March 31, 1949.
 - The Institute of Chartered Accountants of the Yukon Territory December 3, 1971.
- CICA booklet "Information for C.A. Candidates on the Uniform Final Examinations" (1979 revision for 1980), Page 2.
- 4. "(a) To secure the incorporation of provincial societies in Provinces in the Dominion where now none exists;
 - (b) To assist Provincial Societies in securing uniform legislation for the better protection and legislation of local professional interests;
 - (c) To secure the adoption by Provincial Societies of uniform standards of examination and membership.
 - (d) To arrange for reciprocal privileges between Provincial Societies for the benefit of their members;
 - (e) To consider questions of ethics;
 - (f) To secure harmony of action in all matters affecting the common interest, and generally to act in an advisory capacity to the Provincial Societies". (5)
- 5. Taken from the Declaratory Statement, Minute Book and By-Laws of the Dominion Association of Chartered Accountants, December, 1909, page 233.
- 6. Uniform Final Examination Syllabus (Issued 1978 ca effective beginning with the 1979 UFE), page 1.
- 7. UFE Syllabus page 6.

- Rosen, L.S. "Accounting Education: A Grim Report Card:
 C.A. Magazine, June 1978, page 31.
- 9. Mann, Harvey Page 28.
- The same agreement had been reach with Montreal's L'Ecole des Haute Etudes four years earlier in 1914.
- 11. Mann, Harvey "The Evolution of Accounting in Canada" "Touche, Ross & Co) 1972, page 30.
- 12. Mann, Harvey 2 "Evolution of 'Accounting" page 30.
- 13. A similar agreement was concluded in 1941 with L'Ecole Superieure de Commerce de Quebec of Laval University at Quebec City.
- 14. The name was changed from Institute of Chartered Accountants of Quebec to Order of Chartered Accountants of Quebec when Bill 264, the Chartered Accountants Act was assented to by the National Assembly of Quebec on July 6th, 1973.
- 15. "The Order shall be governed by a Bureau consisting of a president and twenty directors elected in accordance with the Professional Code and four other directors appointed by the Quebec Professions Board in the manner provided by that code" article 5 of Bill 264, Chartered Accountants Act.
- 16. Duff, Alistair page 16.
- 17. In the early 1970's the faculty member teaching Advanced Corporate Taxation omitted one section of the Income Tax Act. There was a 10 mark question on that particular area on the exam. A number of students seriously considered suing McGill and the professor for negligence.
- 18. Rosen, L.S. Page 31.
- 19. Mann, Harvey "C.A.'s in Canada", page 27.
- 20. It should be noted that these same correspondence courses were offered to C.A. students across Canada.
- Memo by Marian Misters, Ass't. Director of Education, Institute of Chartered Accountants of Ontario to New Students, July 1980, page 2.

22. The series totals 45 semester hours of instructions as follows:

Financial Accounting	12	hours .
Management Accounting	6	
Advanced Accounting Elective	3	
Auditing	3	
Taxation	3	. 3
Computer Science	. 3	,
Quantitative Methods	3	
Finance	3	
Economics	3	
Law "	3	,
Management .	3	
•	45	hours

- 23. Institute of Chartered Accountants of Ontario Booklet "A Career as a Chartered Accountant" 1979-1980, page 2.
- 24. It is interesting to note that in Quebec students are permitted to write the UFE before serving any of their indentureship period. Simply receiving the Graduate Diploma in Public Accountancy from McGill or Concordia will suffice. However, after writing the UFE and before receiving the designation CA, he must serve the two years of indentureship.
- 25. The Ontario School of Accountancy is held at the Ryerson Polytechnical Institute in Toronto during May and June of each year. The objectives, as stated in the School of Accountancy Release, are:

"The School of Accountancy is a professional school which is an integral and significant part of chartered accountancy education in Ontario. The professional school concentrates on areas of advanced auditing, professional practice, advanced and specialized accounting, taxation and current developments. The emphasis is on aspects of professional practice which the student should master by the time of qualification as a Chartered Accountant".

The direction and emphasis of the School are:

"The School will continue to move in a very deliberate way towards becoming a practical and professional school - a direction which has been set by the Institute's Education.

- 26. Chi Square = $x^2 = \Sigma \frac{(0-E)^2}{E}$ Where 0 = an observed frequency = percentage of passes in each province,
 - -and E = an expected frequency = national average
 percentage of passes.
- 27. Both Ontario and Quebec allow no more than 4 attempts at the UFE.
- 28. Concordia University has to be excluded since 1979 was it's first year.
- 29. Illich, Ivan "Disabling Professions" (Boyars, Burns and MacEachran) 1977, page 15.
- 30. Illich, Ivan page 20.
- 31. Wolff, Robert Paul "The Ideal of the University" (Beacon Press) 1969, page 9.
- 32. Wolff, Robert Paul page 11.
- 33. Lazar, F.; Sievers, J.M.; and Thornton, D.B. "An Analysis of the Practice of Public Accounting in Ontario" (a study prepared for The Professional Organizations Committee of Ontario) 1978, page 1.
- 34. Skinner, Ross M. "Accounting Principles: A Canadian Viewpoint" (CICA) 1972, page 367.
- The Equity Funding Co. of the U.S.A. is a prime example. Management perpetrated a fraud over a period of years of nearly \$100,000,000.00. The auditors were found negligent.
- 36. Lazar, Sievers and Thornton page 2.
- 37. Klemp, George O., Jr., "Three Factors of Success," a paper in "Relating Work and Education: Current Issues in Higher Education, "Vermilye, D.W. editor (1977).
- 38. Wolff; Robert Paul, page 20.
- 39. Plaxton, R.J. Discussant Comments (CICA Symposium on Education and the Professional Accountant) 1979, Section 3, page 16.
- 40. Plaxton, R.J. Section 3, page 12.

- 41. McDonald, Daniel "Accounting Education in Canada: An Evaluation" a paper (1979 Annual Conference of The Canadian Academic Accounting Association), page 5.
- 42. Schwab, Joseph J. "The Concept of the Structure of a Discipline" An article in Conflicting Conceptions of Curriculum" (E.W. Eisner and E. Vallance editors) 1974, page 163.
- A3. Richardson, Gordon D. "The Lag in the Transfer of New Knowledge from Empirical Research to Accounting Education and Practice" a paper delivered at The Canadian Academic Accounting Association 1979 Annual Conference, page 52.
- 44. Schwab, Joseph J. "Science, Cirriculum and Liberal Education" (University of Chicago Press) 1978, page 275.
- 45. Schwab, Joseph J. "Science, Cirriculum and Liberal Education", page 278.
- 46. Due primarily to the poorly co-ordinated methods of teaching accounting in most Canadian universities.
- Duff, Alistair "Professional Accounting Education:
 A Blueprint for the Eighties" a paper delivered at
 the 1979 CICA Symposium on Education and the Professional Accountant, page 11.
- 48. McDonald, Daniel page 8.
- "On a pro-rated 10:1 population basis, Canadian universities have awarded an average of 100 each year:
 Further, based on current enrollment trends, only
 20-25 business Ph.D.s annually are projected to the
 mid-eighties." The Thursday Report (Concordia
 University) September 11, 1980, page 7.
- 50. Harvey, Edward B. and Lennards, Jos. L. "Key Issues in Higher Education" (O.I.S.E.) 1973, page 99.
- 51. The Department of Accountancy at Concordia University has 22 full-time faculty members. Only one has a Ph.D.
- 52. McDonald, Daniel page 8.
- 53. Plaxton, R.J. Section 3, page 14.
- 54. Frye, Northrup "The Definition of a University" an article in "Alternatives in Education" (Bruce Rusk, editor) (General Publishing Co.) 1971, page 80.

- 55. Sterling, Robert R. "Accounting Research, Education and Practice" (Journal of Accountancy) September 1973.
- 56. Richardson, Gordon D. page 45.
- 57. Richardson, Gordon D. page 55.
- 58, Wolff, Robert Paul page 19.
- 59. Financial Post September 27, 1980 page 22.

SOURCES OF INFORMATION

- 1. Mann, Harvey "C.A.'s in Canada The First Hundred Years", an article, C.A. Magazine, December, 1979, page 26
- 2. Uniform Final Examination Syllabus adopted by the provincial institutes/order of chartered accountants in Canada and Bermuda issued 1978 effective beginning with the 1979 UFE.
- 3. C.I.C.A. booklet "Information for C.A. Candidates on the Uniform Final Examinations 1979 revision for 1980.
- Declaratory Statement, Minute Book and By-Laws of the Dominion Association of Chartered Accountants.
- 5. Rosen, L.S. "Accounting Education: A Grim Report Card" C.A. Magazine, June, 1978, page 31.
- 6. Mann, Harvey "The Evolution of Accounting in Canada" Touche, Ross & Co.) 1972.
- 7. Ontario Institute booklet "A Career as a Chartered Accountant" 1979/80.
- 8. Ontario Institute "Members' Handbook"
- 9. Ontario Institute "Memo to New Students", July 1980
- 10. Ontario Institute "Bulletin on Student Admission Requirements"
- 11. Inter Provincial Education Committee (IPEC) "Terms of Reference" (approved by the Coordination Committee, December 11, 1978)
- 12. Bill 264 "Chartered Accountants Act" National Assembly of Québec assented to 6th July 1973.
- 13. "Rules of Professional Conduct" Ordre des comptables agrées du Québec revised July 1st, 1971.
- 14. "Professional Code" National Assembly of Quebec assented to 6, July 1973 with amendments in 1974, 1975, 1977.

- 15. Quebec Order "Rules for Students and their Employers"
- 16. Quebec Order Booklet "Chartered Accountancy An Opportunity Profession".
- 17. The Canadian Academic Accounting Association 1979
 Annual Conference Proceedings and published Research
 Papers and Discussants! Papers.
- 18. CICA "Symposium on Education and the Professional Accountant" published Research Papers and Discussants' Papers.
- 19. Concordia University booklet on Graduate Studies .
 "Diploma in Accountancy" section (1980/81)
- 20. McGill University booklet on Centre for Continuing Education Chartered Accountancy section, (1980/81).
- 21. Discussion with Mr. Asgar Ally, Director of Education, The Ontario Institute of Chartered Accountants.
- 22. Discussion with Mrs. Constance Drummond, Registrar, Order of Chartered Accountants of Quebec.
- 23. Eisner, E.W. & Vallence, Elizabeth "Conflicting Conceptions of Curriculum (McCutcheon) 1974.
- 24. Illich, Ivan "Disabling Professions" (Boyers, Burns and MacEachran) 1977.
- 25. Wolff, Robert Paul "The Ideal of the University" (Beacon) 1969.
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- 27. Skinner, Ross M. "Accounting Principles : A Canadian Viewpoint" (C.I.C.A.) 1972.
- Plaxton. R.J. Discussant Comments (C.I.C.A. Symposium on Education and the Professional Accountant) 1979.
- 29. McDonald, Daniel "Accounting Education in Canada: An Evaluation" (1979 Annual Conference Canadian Acedemic Accounting Association).
- 30. Schwab, Joseph J. "The Concept of the Structure of a Discipline" (Conflicting Conceptions of Curriculum E.W Eisner and E. Vallance editors) 1974.

- Schwab, Joseph J. "Science, Curriculum and Liberal Education" (University of Chicago Press) 1978
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- 34. Harvey, Edward B and Lennards, Jos. L. "Key Issues in Higher Education" (O.I.S.E.) 1973.
- 35. Frye, Northrup "The Definition of a University" (Alternatives in Education Bruce Rusk, editor) (General Publishing) 1971.
- 36. Sterling, Robert R. "Accounting Research, Education and Practice" (Journal of Accountancy A.I.C.P.A.) September, 1973.
- 37. Ferguson, George A. "Statistical Analysis in Psychology and Education" (McGraw-Hill) 1971.