

THE UNIVERSITY OF MANITOBA

A SURVEY OF THE INDEPENDENT LEARNING  
PRACTISED AND PLANNED IN NON-UNIVERSITY  
POST-SECONDARY INSTITUTIONS IN CANADA

BY

CYRIL H. HOWARD

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## ABSTRACT

The objective of this study was to conduct a survey of the independent learning practised and planned in non-university post-secondary institutions in Canada. The data collected were to be compiled in a manual which would become a resource document and form a communication link among the institutions.

The study was undertaken because of the expressed desire of many educators to meet individual student's needs. Presently there are few known sources of information on current practises and planned activities on independent learning in Canada.

The data for the manual was solicited by the survey questionnaire technique. The questionnaire was mailed to one hundred sixty-five non-university post-secondary institutions in Canada. The survey instrument collected information related to:

1. demographic characteristics of the institutions;
2. current independent learning along with identifiable features; and,
3. projected independent learning along with planned features.

The current independent learning was solicited to determine which activities were presently occurring. This section of the questionnaire requested methods information on all subjects and courses which were operating on a format that was related to the given independent learning definition.

As well, the study collected data related to projected activities

in independent learning over the next four years. This component of the study was undertaken to "open the door" to inter-institutional cooperation and sharing in the development of independent learning.

The data were submitted by sixty-five institutions and were tabulated into Tables I, II, and III in Appendix C. The manual lists the independent learning by subjects, courses, and institutions.

The analysis of the responses indicated that the overall return rate of the questionnaire was below the anticipated level. This was due largely to the:

1. extremely poor response rate from the largest potential source (Quebec); and,
2. because of the relatively weak response rate from one other source (Saskatchewan).

The findings indicated that the participants had a positive attitude toward the study. The respondents identified three hundred sixty-nine different subjects and courses from a broad range of academic and skill development disciplines as those being designed or planned for independent learning.

Empirical definitions, based on actual and planned practises for independent learning were gleaned from the data. The functional definitions for subjects and courses were based on the popularity of features identified in the survey instrument.

The study concludes with recommendations for:

1. modification to the study;
2. further development of the methodology; and,
3. the desirability of further studies of this type to complete and update the kinds of information solicited.

## TABLE OF CONTENTS

	Page
LIST OF TABLES .....	ix
 Chapter	
I. THE PURPOSE OF THE STUDY .....	1
Significance of the Study .....	2
Limitations .....	7
Delimitation .....	8
Definition of Terms .....	8
Organization of the Study .....	9
II. REVIEW OF THE LITERATURE .....	11
The Development of Canadian Community Colleges .....	13
Student Population Characteristics .....	20
Independent Learning .....	23
Community College Faculty, Administrators and Advisors.	28
Independent Learning in Canada .....	37
Criteria for the Manual .....	42
Summary .....	44
III. THE METHODOLOGY OF THE STUDY .....	46
Development of the Study Design .....	46
Format of the Compiled Output .....	47
Description of the Instrument Used .....	48
The Sources of the Data .....	50
Collection of the Data .....	51
Treatment of the Data .....	52
Summary .....	53
IV. THE STUDY: RESULTS, FINDINGS AND IMPLICATIONS .....	54
Participation by Canadian Community Colleges .....	54
Provincial Response Rates .....	57
Subjects and Courses Delivered by Independent Learning.	58
Unique Applications of Independent Learning .....	60
Extracted Definitions of Independent Learning .....	61
Summary .....	65

Chapter	Page
V. DISCUSSION, MODIFICATIONS, CONCLUSIONS AND RECOMMENDATIONS	66
The Problem .....	66
The Procedure .....	66
Internal Validity of the Study .....	66
Modifications .....	71
Independent Learning Study .....	71
Further Study .....	71
Conclusions .....	72
Recommendations .....	74
APPENDICES .....	76
A. STUDY CORRESPONDENCE WITH NON-UNIVERSITY POST-SECONDARY INSTITUTIONS .....	77
B. THE SURVEY QUESTIONNAIRE .....	87
C. THE INDEPENDENT LEARNING ACTIVITIES MANUAL .....	95
BIBLIOGRAPHY .....	265

## LIST OF TABLES

Table	Page
A. Responses to Independent Learning Survey Questionnaire ....	56
B. Scoring of the Elements of the Survey Questionnaire for Agreement Responses .....	62
C. Percentage Responses - How Independent Learning has been Designed and is Planned to be Designed .....	63
I. Independent Learning Activity - Subjects .....	112
II. Independent Learning Activity - Courses .....	148
III. Independent Learning Activity - Institutions .....	182



## CHAPTER I

### THE PURPOSE OF THE STUDY

This study was motivated by two primary concerns that are raised when community college educators meet to discuss effective learning processes.\* These are:

1. The latent questions that have been of pressing concern to many faculty and administrators in community colleges about how to meet the individual needs of students in an academic setting geared to masses of students.
2. The dearth of information about the independent learning activities in community colleges across Canada. Fragmented amounts of information have become available when educational/vocational journal articles are published. However, a comprehensive and readily accessible compilation of current and planned activities on independent learning is not available.

It is probably safe to assume that most, if not all, Canadian community colleges have provided learning opportunities by independent learning. However, the magnitude of these activities has been an unknown quantity.

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\*Though the terms are not synonymous in Canada, the name "community college" will be used interchangeably with "non-university post-secondary institutions" in the body of this document.

Therefore, this study undertook to produce a manual of independent learning. The identified activities are designed to meet the individual needs of students within educational institutions that have had the task of providing educational and training opportunities to a complex and diverse population.

#### SIGNIFICANCE OF THE STUDY

The study dealt with the many different techniques used by educators in Canadian community colleges to facilitate educational and training opportunities for adults. New delivery approaches are constantly being sought to meet effectively and efficiently the training objectives of students. This is a never ending task since the personal characteristics and expectation profile of the students varies so much that the efforts to meet the needs of some falls significantly short of the goal of meeting the individual needs of all.

The education and training of community college students is a complex problem for many reasons. The following list, although not inclusive, identifies some of the difficulties. The community colleges are working with:

1. Adults who have, in many cases, previously rejected the traditional educational system and the educational process.
2. Adults who are socially and economically disadvantaged and who are skeptical of the ability of any educational process to assist them in changing their plight.
3. Adults who have a goal in mind and are searching for the shortest practical route to achieve that goal.

4. Adults who wish to learn only what is necessary to get a "good" job.
5. Many faculty and administrators who have developed with the community college movement yet only understand the group instruction approach and resist instructional process changes designed to meet the special needs of the individual.

The gap which exists between the traditional group instruction process and the methods which would serve students on an individual basis is, in many cases, very wide. Recent years have seen demands by society for an improvement in educational performance and in the productivity of the educational system.

The notable growth of the community colleges in Canada over the past 15 years and the support provided this movement by the federal and provincial governments is ample evidence that the two senior levels of government felt some dramatic "in-roads" had to be made in the upgrading of the human resources within our country.

All forecasts estimate that the notable growth of community colleges (from an enrolment of 53,000 to 239,000 in 15 years) will continue at least until 1980.<sup>1</sup>

Educational analysts and critics such as John Goodlad refer to the years 1957-1967 as the "education decade".<sup>2</sup> Goodlad's description of this decade was a general statement; but, it is very appropriate to the growth of the community colleges. The major growth in Canada occurred in

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<sup>1</sup>The Organization for Economic Co-operation and Development (OECD) External Examiners' Report on Educational Policy in Canada. (Toronto: Canadian Association for Adult Education and the University of Toronto Students' Administrative Council, 1976), paragraph 270.

<sup>2</sup>John I. Goodlad, Speaking on Change. (New York: Educational Resource Associates, Inc., McGraw-Hill Book Company, 1973), First tape of a 5 tape Audio Cassette Album.

the latter half of this decade in response to the desires of governments to have an adequate supply of workers in all segments of our industry and commerce.

Clearly the greatest and most expensive achievements during the last 15 years have been in the tertiary (post-secondary) sector. There are.....140 community colleges (many with satellite campuses). The practical work-oriented training courses of the community colleges are enjoying a growing popularity, especially.<sup>1</sup>

Community college educators, with this mandate, have responded to the federal and provincial governments' desires to develop a well-trained work force from within Canada in a variety of ways. New efforts to reform educational and training programs in various fields have been and are being initiated. In fact, in many institutions extensive program development exercises are being undertaken to revamp the entire delivery approach. A great deal of time and effort is being expended in the study of such matters as discipline structuring, diagnostic testing, objective setting, module building, individualizing instruction, educational television (mediated group instruction), team teaching, peer teaching and many other modifications too numerous to mention.

Another response has been the involvement of many outside agencies in the field of education. Dr. Frank Keppel who states that "..... the business of education is too important to be left to professional educators,"<sup>2</sup> probably never suspected the degree to which economists, trade unionists, social psychologists, businessmen and industrialists

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<sup>1</sup>OECD report, op. cit., paragraph 61.

<sup>2</sup>Emil J. Haller, Strategies for Change, quote from Frank Keppel. (Toronto: Department of Education Administration, Ontario Institute for Studies in Education, 1968), p. 8.

would turn their attention to the training institutions. The contributions made to the development of practical training by supportive members of society is reflected in the degree of refinement and relevance of the courses to the field of work. This sense of direction provides a source of assurance to the individual trainee and the training institution that the offerings are current.

Some educators have responded to demands for renewal by turning their attention to the design of models for innovation, the preparation of materials and equipment to facilitate new programs and the organization of in-service programs to prepare instructors to handle these programs. New methods of training instructors, new university courses and new methods of professional development for instructors in innovative design have been some of the concepts used to improve the learning environment in community colleges.

To varying degrees innovative changes designed to accommodate the individual have been undertaken at every community college in Canada. In many instances this activity has gone unnoticed, and in other instances the activities are being duplicated in other community colleges at a high price in human resources and related research and developmental costs.

The isolation of experienced individuals from each other at the different community colleges, and of communications, is a disturbing under-utilization of our resources. Communication links must be established which will assure more efficient use of shared experiences and available resources.

This study attempted to identify the efforts of community college educators who have used non-educational agency experts and transformed staff development and program development activities into environments

which are conducive to the learning needs of the individual students. As well, in some cases, these efforts have resulted in opportunities for students to learn away from institutions and within their own time frame using correspondence courses.

#### STATEMENT OF THE PROBLEM

This study was undertaken because of the:

1. lack of organized and compiled data which described independent learning in Canadian community colleges;
2. desire to facilitate independent learning for the diversified community colleges population.

To overcome these two problems this study attempted to collect and record in manual form the independent learning from each community college in Canada. The collection is current because past, present and projected activities, for four years into the future, were solicited.

The information is compiled in accessible tables shown in Appendix C. The first two compilations were made under the title of "Subjects" and "Courses" and are presented in Tables I and II. In these tables the subjects and courses treated are listed alphabetically at the top. The institutions which use independent learning for the subjects and courses are listed in rows in the body of the table. The independent learning features are listed in the column headings. An indicator in the grid identifies the independent learning characteristics which are unique to the subject or course at each institution.

The contents of Tables I and II can be cross-referenced with the complete course/subject listings of each institution in Table III. When

a researcher has located a particular subject or course, the institution which practices independent learning in this area, can be identified and a reference can be made to Table III. In addition to providing relevant independent learning activity features in the body of the table, the contact person, the telephone number, the size of the student population, the operational divisions, and the mailing address of each institution are provided.

The information presented in Tables I, II, and III should provide adequate data for any researcher to follow-up on the lead provided. The information in Appendix C provides a communication link among community colleges and should result in a sharing of expertise and a reduction in duplication of effort in developing independent learning.

#### LIMITATIONS

1. The primary data collection vehicle in this study was a mail-response questionnaire survey. The major portion of the questionnaire was structured so that responses could be objectively compiled. More reliable results could possibly have been obtained if a team of observers and interviewers could have been provided to visit each institution.
2. All factors that would normally be limiting factors in a study involving the gathering of data by means of a mailed, structured questionnaire survey, would apply to this study.
3. Conclusive generalization based on the recorded data should not be made. Each program design that was reported to the

researcher has unique characteristics which were incorporated to meet a specific need in a specific setting. Any adaptation or implementation of a design into a new environment would probably require at least minor revisions.

#### DELIMITATION

1. The independent learning systems at each community college will be regarded as being equally effective.

#### DEFINITION OF TERMS

Independent Learning: This term is used to define any instructional delivery system which provides for the students to enter regularly a learning situation at his/her developmental level and progress until a pre-set learning criterion has been reached. In this setting the student relies on the teacher mainly as a resource person.

The term independent learning as used in this document could be replaced with other commonly used terms such as individualized instruction, individualized program, individual instruction, audio-tutorial, self-paced instruction or continuous progress.

John Goodlad's statements that "all learning is individual" and individualization "seeks to make learning as meaningful as possible"<sup>1</sup> assists in clarifying the intended meaning of the term independent learning as used in this study.

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<sup>1</sup>John I. Goodlad, Speaking on Individualization. (New York: Educational Resource Associated, Inc., McGraw-Hill Book Company, 1973), First tape of a 2 tape Audio Cassette Album.



Innovation: This concept is described as "any creative and risk-taking process by which new ideas, values, standards, methods or procedures are conceived, developed, introduced, and/or followed up for the purpose of meeting certain existing or possible future needs"<sup>1</sup>; a deliberate, specific change which is thought to be more operative in accomplishing a desired objective.

Non-University Post-Secondary Institutions: This term excludes all public and private degree-granting institutions. Degree granting institutions can give academic credit for approved course content delivered at non-university post-secondary institutions. Also, non-university post-secondary institutions can give credit for approved training offered in some high schools.

Subject: That part of the learning experience which represents one of the components of a student's total planned undertaking (eg. Business Education English). Success in an approved collection of subjects would be required in order for a student to complete a course.

Course: The total academic and/or related skill learning experience which a student would normally complete in order to receive a certificate or diploma (eg. Electrical Technology). A course would subsume several subjects.

#### ORGANIZATION OF THE STUDY

The thesis is divided into five chapters. In addition, Appendix C consists of the manual which delineates the independent learning

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<sup>1</sup>Ivan S. Banks, The Dictionary of Administration and Supervision. (Los Angeles: Systems Research, 1971), p. 65.

activities in Canadian community colleges. Because the objective of the study was to develop this manual, Appendix C makes up a significant part of the document.

Chapter One consists of the introduction, explains the significance of the problem and gives the statement of the problem.

Chapter Two reviews the pertinent literature and research activities related to independent learning. The focus is mainly on independent learning in Canadian community colleges.

Chapter Three describes the methodology of the study. This chapter describes the procedures used in the collection and treatment of the data.

Chapter Four offers an analysis of the data that was submitted by the respondents in the institutions. As well, this chapter extracts empirical definitions of independent learning from the submitted data.

Chapter Five is the summary of the study. It considers the modifications the author would undertake if the study was duplicated. The chapter also contains conclusions derived from the analysis done during the study, on the basis of which recommendations are made.

## CHAPTER II

### REVIEW OF THE LITERATURE

A review of some of the written and recorded material on the status of independent learning in educational settings with particular reference to the Canadian community college movement is presented in this chapter. The objective of this review will be to explain the conditions in the community college which make independent learning a viable method of providing learning opportunities to a heterogeneous community college student population. The review relates to five main areas.

First, the development of Canadian community colleges since 1960 is outlined. In addition to outlining the Colleges' physical growth, the changes that have occurred in the community college philosophy and the expected educational role are reflected.

Second, the general characteristics of the students who make up the community college population are noted. The population characteristics must be identified and understood if a learning environment which is compatible with the students' needs and with the community college philosophy is to be provided.

Third, to match a meaningful learning process with the needs and abilities of the student population approaches which researchers have found to be appropriate are considered. Some of the arguments and concerns presented by proponents of independent learning approaches to learning are noted.

Fourth, the challenges facing faculty, administrators, and community advisors to provide learning opportunities for the given population are reviewed. In the community college setting participation in program development and delivery from this educational team is essential. The planning and output must be consistent with the students' abilities and needs, society's requirements, and with the college's philosophy.

Fifth, the case is made for a better method of sharing information about independent learning. The available sources of information on independent learning in the community colleges in Canada are identified. The limitations of each source are noted. Finally, based on the review of literature the desired criteria for the establishment of the manual are listed. The criteria delineates what information the published manual will compile in the resource document.

Canadian published literature on independent learning is quite limited. Since 1960 several of the provinces, including British Columbia, Alberta, Manitoba, and Ontario, have undertaken studies on their post-secondary educational systems. These studies, as well as published research papers on community colleges, mainly from the University of Alberta and the Ontario Institute for Studies in Education (OISE), appear to be the main Canadian contributions. However, extensive research studies have been undertaken in the community college movement in the United States, and most of the United States findings can be closely related to the Canadian scene.

The 1973 post-secondary study of education undertaken in Manitoba recognized the similarity of community colleges in the United States and Canada when it stated that:

The dominant prototype as these institutions have evolved in the United States and Canada is that of a comprehensive, post-secondary institution offering programs in both academic and vocational-technical training.<sup>1</sup>

The community college and junior college movement in the United States has been the focus of many studies. Because of the similarity between the community colleges in the two countries, some of the United States studies which relate to student characteristics, faculty, and administrative, features and delivery systems were reviewed.

#### THE DEVELOPMENT OF CANADIAN COMMUNITY COLLEGES

The community colleges in Canada, as known today, were virtually non-existent until about 1960. Prior to that time most provinces had trade schools, marine schools, agricultural schools, and technical institutes. These institutions trained Canadians to be skilled tradespersons for agriculture and for some facets of industry and commerce. In general, they did not provide for learning experiences in preparatory upgrading programs, health training or post-secondary level training in the fields of business, health, social science, or technology. At that time an increasing number of work places in Canada were requiring workers with new or highly sophisticated skills. The existing educational and training institutions were not offering training which would meet this need. Consequently, many Canadian employers were relying largely on immigration to fill their technical, technological, supervisory, para-professional, and mid-management positions.

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<sup>1</sup>Manitoba Department of Colleges and Universities Affairs, Post-Secondary Education in Manitoba. (Winnipeg, n.p., (1973)), p. 39.

In order to open the doors to these jobs for Canadians, the Federal government enacted the Technical and Vocational Training Assistance Act in 1960. This act provided direct financial support to the provinces and made it possible for the provincial governments to develop human resources to fill many "new jobs" which were opening up because of the changing job scene and technological advances.

The Technical and Vocational Training Assistance Act was very specific in identifying which forms of training were to receive assistance.

"technical and vocation training" means any form of instruction, the purpose of which is to prepare a person for gainful employment in any primary or secondary industry or in any service occupation or to increase his skill or proficiency therein.....generally, any primary or secondary service occupation requiring an understanding of the principles of science or technology and the application thereof, except where such instruction is designed for university credit.<sup>1</sup>

This act provided for generous financial assistance for the construction of many institutes of technology during the early 1960's. Shared capital construction and equipment agreements under this act were extended to 1968 by which time most of the provinces had established a network of public-non-university post-secondary institutions. Ryan quotes 1968 Statistics Canada data to illustrate the growth of Canadian community colleges in the following way:

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<sup>1</sup>Canada, Laws, Statutes, etc., Technical and Vocational Assistance Act, 1960. 9 Eliz II ch. 6, sec. 2d, Statutes of Canada, 1960, p. 37.