

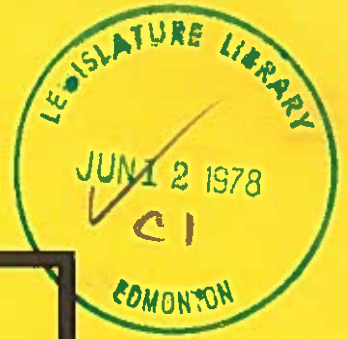
CA2 ALED 60  
77A42

C. 1

CA2 ALED 60 1977A42  
Alberta Education and Diploma Requirements - a Discussion Paper Prepared For 1



3 3398 00132 1198



**ALBERTA EDUCATION  
AND  
DIPLOMA REQUIREMENTS**

**A DISCUSSION PAPER  
PREPARED FOR THE  
CURRICULUM POLICIES BOARD**

**Revised Fall 1977**

**LIBRARY  
VAULT 19**

M

## F O R E W O R D

Recent years have seen an increasing public interest in the programs of study being offered in schools. In that context, much time has been spent in developing goals for basic education. These goals are to be debated in the legislature, and the Minister of Education has received recommendations with respect to them from the Curriculum Policies Board. Additional submissions from interested groups or individuals were encouraged.

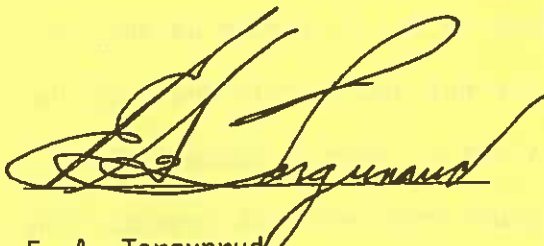
To assist in a systematic debate on these matters the Curriculum Branch developed this discussion paper. The paper takes a position with respect to goals and then reviews current programming in light of those goals. It also suggests an alternate program plan. The discussion paper concludes with some implications of the proposed changes.

In recognizing the quality of work done by Dr. J. Harder as the chief author of the paper, the positions taken are not necessarily those of the Curriculum Branch. Neither are they the views of Alberta Education or the government. The process used in the paper received high commendation by the Curriculum Policies Board which, after an initial discussion, requested that the paper be shared with other groups for reaction.

In response to that request the Curriculum Branch is pleased to provide a broad distribution of the paper and to engage interested groups in regional dialogue on the positions put forward. In so doing a number of questions are of prime interest:

- 1) Are the proposed objectives clear and inclusive?
- 2) Are the program proposals arising from those objectives appropriate?
- 3) Have the significant categories of implications been identified and necessary elements within each category adequately expressed?
- 4) What are the advantages and disadvantages of the systematic process used within this paper?

Readers will undoubtedly have other questions or comments to contribute. We welcome these in direct dialogue, by correspondence and briefs, or other appropriate means. Upon completion of the regional dialogue, the issues and reactions arising from this paper will be reviewed and recommended upon by the Curriculum Policies Board. As chairman of that board, I wish to thank Dr. Harder for producing such a fine focus for discussion and those of you who will take time to respond in one form or another.



E. A. Torgunrud  
Director of Curriculum  
Alberta Education

## TABLE OF CONTENTS

	<u>Page</u>
Preface . . . . .	i
1. INTRODUCTION . . . . .	1
2. EDUCATION FOR A PURPOSE . . . . .	2
3. THE NEEDS OF ALBERTA EDUCATION . . . . .	3
3.1 Individual Needs . . . . .	3
3.2 Societal Needs . . . . .	4
4. THE GOALS AND OBJECTIVES OF EDUCATION . . . . .	5
4.1 Goals of Education . . . . .	7
4.2 Objectives of Education . . . . .	8
5. BASIC LIFE SKILLS . . . . .	10
5.1 A Basic Life Skill Program . . . . .	11
6. THE ELECTIVE PROGRAM . . . . .	15
6.1 The Need For Choice . . . . .	15
6.11 Definitions . . . . .	15
6.12 Application of the Life Skills Matrix to Student Programs . . . . .	17
6.2 Current Status of Elective Programs . . . . .	25
6.3 Proposed Compulsory Elective and Option Courses . . . . .	25
7. MAINTAINING STANDARDS . . . . .	29
7.1 Competency Measures . . . . .	30
7.2 Documentation of Experience . . . . .	30
8. GRADUATION REQUIREMENTS . . . . .	31
9. RECOMMENDATIONS . . . . .	34
10. IMPLICATIONS . . . . .	35

## TABLE OF CHARTS

	<u>Page</u>
Chart 1 BASIC LIFE SKILLS COURSE REQUIREMENTS . . . . .	14
Chart 2 RELATIONSHIP OF CORE, COMPULSORY ELECTIVE AND OPTION COURSES IN PERCENTS . . . . .	18
Chart 3 JUNIOR HIGH ACADEMIC LIFE SKILLS PROGRAM . . . . .	20
Chart 4 GRADE TEN LIFE SKILLS . . . . .	21
Chart 5 GRADE ELEVEN LIFE SKILLS . . . . .	22
Chart 6 GRADE TWELVE LIFE SKILLS . . . . .	23
Chart 7 COMBINED HIGH SCHOOL LIFE SKILLS PROGRAM . . . . .	24
Chart 8 JUNIOR HIGH ELECTIVES . . . . .	28

## APPENDIX A

Chart 9 HIGH SCHOOL OPTIONS ACADEMIC . . . . .	44
Chart 10 HIGH SCHOOL OPTIONS FINE ARTS . . . . .	46
Chart 11 HIGH SCHOOL OPTIONS HOME ECONOMICS . . . . .	46
Chart 12 HIGH SCHOOL OPTIONS BUSINESS EDUCATION . . . . .	47
Chart 13 HIGH SCHOOL OPTIONS INDUSTRIAL EDUCATION . . . . .	48
Chart 14 HIGH SCHOOL OPTIONS OTHER . . . . .	55

## PREFACE

*This is the second draft of the paper on Alberta Education and Diploma Requirements. The first draft was generally well received by the ten groups to whom it was presented. Some revisions have been made in response to suggestions, particularly in the wording of the goals and objectives; however, the philosophical rationale of the original paper has been maintained.*

The paper is a response to requests for changes in our education programs from many segments of our society. In the main, these requests stem from the general dissatisfaction of the public with what they feel are short falls in the education system and the high costs of what they term mediocrity.

There is a movement across this continent and in parts of Europe encouraging an increased specificity of knowledge and more concentration on skill development in both academic and career areas. There is concern for the development of more positive attitudes to work and civic responsibilities. There is a concern to establish standards that are realistic and can be reached by teaching through a systematic approach.

A resolution of all these aspirations cannot be attained quickly. It will take careful planning over a long period of time. It will require consistency on the part of the leaders and continuing support from the constituency.

The position taken in this paper is that many of the developments in Alberta Education are good and should be maintained or strengthened.

It suggests:

- (1) that curriculum writers be more specific in spelling out content and that such content be carefully sequenced through the years of schooling,
- (2) that certain areas of a student's education for future well-being be made mandatory with adequate time provided,
- (3) that the amount of time for free choice options be reduced,
- (4) that the objectives of education be confined to what the school can do.

# ALBERTA EDUCATION AND DIPLOMA REQUIREMENTS

## 1. INTRODUCTION

In the past five years several major changes have occurred in Alberta Education. These changes, among which were the move from departmental superintendents to local appointment and the removal of departmental examinations (first at the grade nine and later at the grade twelve level), have left the general public with the feeling that standards have been lowered and that student competencies are deteriorating. In a time of high inflation and the cost-price squeeze, the feeling of helplessness becomes more pronounced and people turn on the field of education, the savior, as having let them down. This then is an opportune time to review the current status of the high school diploma, how it is earned and what it stands for. Such a review calls for a re-examination of schooling and its function.

It is the purpose of this paper to:

- (1) give a definition of schooling and to suggest objectives that schools can meet in achieving survival level competencies,
- (2) identify core levels of learning along with a selective approach to electives,
- (3) suggest ways of maintaining standards for quality education and organizational structures that validate a high school graduation diploma.



## 2. EDUCATION FOR A PURPOSE

A normal society attempts, through its institutions and conventions, to perpetuate itself. To do this it needs individuals who have respect for and cooperate in the maintenance and enhancement of its values and aspirations.

It is through education that society attempts to achieve these purposes. Its primary vehicle for educating its members is the school. The school provides the formal and perhaps major aspect of education, but other institutions have an impact on the character of the emerging "person" as well. The influence of these institutions, namely, the family, church, community and communication media may or may not reinforce the work of the school, or vice versa.

Over the centuries societies have developed descriptions of the desirable citizen. These have varied somewhat from nation to nation and according to political philosophies. However, one description of the educated man has stood for more than 23 centuries. The characteristics that Isocrates identifies are still valid.

*"Whom, then, do I call educated \_\_\_\_\_? First, those who manage well the circumstances which they encounter day by day, and who possess a judgment which is accurate in meeting occasions as they arise and rarely miss the expedient course of action; next, those who are decent and honorable in their intercourse with all with whom they associate, tolerating easily and good-naturedly what is unpleasant or offensive in others and being themselves as agreeable and reasonable to their associates as it is possible to be; furthermore, those who hold their pleasures always under control and are not unduly overcome by their misfortunes, bearing up under them bravely and in a manner worthy of our common nature; fourthly, and most important of all, those who are not spoiled by successes and do not desert their true selves and become arrogant, but hold their ground steadfastly as intelligent men, not rejoicing in the good things which have come to them through chance rather than in those which through their own nature and intelligence are theirs from their birth. Those who have a character which is in accord, not with one of these things, but with all of them--these I contend are wise and complete men, possessed of all the virtues."*

"Panathenaicus" (436 - 338 B.C.)

This statement captures the description of the ideal type of person our society would like to see emerge from our schools. To achieve it there are many intermediate objectives that need attention. To begin this task, an identification of needs, both individual and societal, has to be made. Fortunately, we have sound evidence as to what these needs are.

### 3. THE NEEDS OF ALBERTA EDUCATION

Education is based on two sets of needs. First are the needs of the individual, and secondly, the needs of the society.

Individual needs are drives which arise from within the person and impel the individual toward goals. Societal needs arise from outside the person and have their origin in custom, tradition and successful past experience. The latter gives society its cohesiveness and purpose, being present and future-oriented but prescribing acceptable behaviors and actions.

#### 3.1 Individual Needs

Individuals, although characterized by a broad range of differences, have common needs. Maslow's theoretical model proposes a hierarchy of individual needs, the most basic of which must be satisfied at least to a minimal degree before the higher ones can be met. Beginning with the most basic and continuing through successively higher level needs, the hierarchy is as follows:

- (1) Requirements for food, shelter, clothing, rest, health and recreation.
- (2) A feeling of safety, security, and trust in relationships with important others, such as family, friends and teacher(s).

- (3) A feeling that one is cared about by others, that they are sensitive to one as a person and respond to one's ideas and feelings; a feeling of belonging and acceptance by others, such as group, family, school class, team and peers.
- (4) A feeling of positive achievement, success and pleasure; a feeling that others recognize one as an individual in one's own right with unique interests, feelings, ideas and skills.
- (5) Becoming more self-directing and less dependent; assuming more responsibility for one's own actions; feeling more adequate, confident, self-sufficient and good about oneself; wanting to learn on one's own, to create and express one's ideas and feelings; becoming more able to take hard knocks and disappointments.

These physical, intellectual, social and emotional needs are the motivating forces within the individual. In addition, there appear to be critical periods and relationships in the developmental sequence of individuals, many of which occur in early life. Therefore, careful attention must be given to meeting individual needs if school programs are to be effective and relevant, for it is believed that children who see themselves as worthy, wanted and desirable normally will learn more readily.

### 3.2 Societal Needs

This feeling of being worthy, wanted and desirable can be realized only in relation to the society in which one lives. Since the individual and society are constantly interacting with each other, each is being shaped by the other. The dynamics of this interaction demand that the

objectives of education consider both the needs of the individual and the needs of society. Society rightfully expects the school, in cooperation with other agencies, to make its contribution to the fulfillment of certain basic needs. Among them we find the following:

- (1) Nurturing a safe and productive environment.
- (2) Preparing members to assume useful roles and perform necessary services.
- (3) Developing modes of effective communication among its members.
- (4) Developing a set of common ideas, meanings, and procedures.
- (5) Limiting through law and convention the range of behavior of its members.
- (6) Establishing procedures to ensure its continuity, maintenance and improvement.

Finally, recognition is given to the fact that those who spend a significant portion of their day in the school society are members of the larger society as well. For the school this means recognizing the pupil as a member of society who is not only being prepared for life outside of and after school but who is also living life while at school. For the pupil it means responding to the opportunity to accept increasing responsibility to the school and to the larger society of which he is a member.

#### 4. THE GOALS AND OBJECTIVES OF EDUCATION

The earlier reference to the educated person as described by Isocrates is congruent with our modern day aspirations. We have an advan-

tage over the Greeks in that we have a formalized public system to prepare persons with life and career coping skills, communication skills, skills of self-expression; a system that fosters the development of emotional stability and feelings of self worth as well as responsible attitudes to work and to the community.

While the school makes a very important contribution to education, it is only one of the agencies involved in the education of youth. The home, the church, the media, and community organizations are very significant influences on children. It is useful, therefore, to delimit the role of schooling in education. Education refers to all the learning experiences the individual has as he interacts with his physical and social environment; it is a continuing and lifelong process. Schooling, which has more limited purpose, refers to the learning activities planned and conducted by a formally structured agency which influences individuals during a specified period. There is, of course, a very close relationship between schooling and education--the learning which occurs in school influences and is influenced by what is learned outside the school.

Goals of education can be classified at different levels ranging from the general order of societal goals to specific competency objectives related to course content. Within this range the Goals of Education are placed at the top of the hierarchy and defined as those learning activities the responsibilities for which are shared by the various agencies and institutions in the community such as the home, school, church, continuing education agencies, the media, recreational organizations and others.

4.1 Goals of Education                      Society's responsibility for education through its various agencies is to:

- (1) Develop intellectual curiosity and a desire for lifelong learning.
- (2) Develop the ability to get along with people of varying backgrounds, beliefs and lifestyles.
- (3) Develop a sense of community responsibility which embraces respect for law and authority, public and private property, and the rights of others.
- (4) Develop self-discipline, self-understanding, a positive self-concept through realistic appraisal of one's capabilities and limitations.
- (5) Develop the ability to understand and respond to change as it occurs in personal life and society.
- (6) Develop skills for effective utilization of financial resources, community agencies, and leisure time.
- (7) Develop an understanding of the role of the family in society and promote satisfying family relationships.
- (8) Develop an interest in participating in the cultural pursuits of creative expression and appreciation.
- (9) Develop a commitment to the careful use of natural resources and to the preservation and improvement of the physical environment.
- (10) Develop a sense of purpose in life which is consistent with one's ethical and/or spiritual beliefs.

The ultimate aim of education is to develop the abilities of the individual in order that he might fulfill his personal aspirations while making a positive contribution to society.

4.2 Objectives of Education      The next order of objectives relates to what the school should do as its specific contribution to achieving the broader goals identified earlier.

Schooling, as a part of education, accepts primary and distinctive responsibility for specific objectives basic to the broader goals of education. Programs and activities shall be planned, taught, and evaluated on the basis of these objectives in order that students:

- (1) Develop competencies in reading, writing, speaking, listening and viewing.
- (2) Develop basic knowledge and skills in mathematics, the sciences, and the practical and fine arts.
- (3) Develop the learning skills of finding, organizing, analyzing, and applying information in a critical and objective manner.
- (4) Develop knowledge, skills, attitudes and habits which contribute to physical, mental, and spiritual health and safety.
- (5) Develop basic knowledge and skills in social studies and an understanding of the meaning, responsibilities, and benefits of active citizenship at the local, national and international levels.
- (6) Develop the knowledge, skills, attitudes, and habits required to respond to the opportunities and expectations of the world of work.

Because the above objectives are highly interrelated, each complementing and reinforcing the others, priority ranking is not being suggested.

It is recognized that in sequencing learning activities for students some objectives are emphasized earlier than others; however, in relation to the total years of schooling, they are of equal importance.

In working toward the attainment of its objectives, the school will strive for excellence. However, the degree of individual achievement also depends on student ability and motivation as well as support from the home. Completion of diploma requirements is expected to provide the graduate with basic preparation for life long learning. Dependent on program choices, the diploma also enables job entry or further formal study.

Translated into practice this means that each course in the Program of Studies would contribute in a direct way to the achievement of the overall objectives. Each course would be designed to include core content that every student should master in order to proceed to the next level. Content would need to be graduated and sequenced in a logical progression from grade one through grade twelve. The standards of mastery would be set by curriculum committees at the provincial level.

Students not capable of achieving the set standards would be given additional time or routed to alternate programs where the objectives would be less rigorous.

There is a growing recognition that what the school is able to accomplish with youth is highly dependent on the degree of support it receives from other educating influences in society. The role of the family, the most basic unit of society, is critical in this regard. Parents open doors to learning, not only by the home environment they create for children, but also by determining the role to be played by



other educating influences such as the church, the media, and community groups. With the support of the home in matters of motivation and discipline of children, the school has a better chance of attaining its goals and making a significant contribution to the broader goals of education.

## 5. BASIC LIFE SKILLS

The term "Basic Life Skills" as used in this paper refers to those elements of knowledge, skill and attitudes in the social, physical and emotional realms a person in western society needs to cope with the environment in order to maximize his chances for a full and rewarding life.

The basic assumptions upon which the program advocated is designed are:

- (1) Objectives must be stated in such a way that they are understood and can be achieved in a school environment.
- (2) Much of the content must be specific and mandatory for the measurable achievement of the objectives.
- (3) Students must demonstrate mastery of content to a prerequisite level before moving ahead.
- (4) Monitoring must be carried on to assure that mandatory content is taught.
- (5) A "systems approach" can be used in education.

*By the "systems approach" is meant that while all the courses, modules or elements will be interdependent, together they form a unified whole. In the systems approach the interaction or interrelationship of individual courses or elements are analyzed for their contribution to the*

*major objective. Then the courses or elements are taught in such a way and at such a time as to maximize the performance of the system as a whole.*

The Basic Life Skills program lays out a definite series of courses for every grade. Each course has been selected on the assumption that it will include the learning materials designed to meet a major objective. While current course titles are used in the matrix, these may be changed in time, or revisions of content may be required to conform to the stated objectives. The position taken in this paper is that most of the content for a sound educational program is currently in place but that some reorganization is required along with mandated standards for levels of achievement.

Educators in cooperation with members of the larger community need to sort out and identify those skills and areas of knowledge that every student graduating from high school should have in order to survive in modern society.

The procedure in this paper is to take each educational objective and identify the courses that teach the competencies which must be learned by everyone sometime during the years of schooling in order to produce the "unified whole". It is outcome skills that are the concern here--not detailed curriculum guides identifying content scope and sequence.

#### 5.1 A Basic Life Skill Program

The Basic Life Skill program is designed to achieve the school's objectives and help produce the ideal person. It is recognized that the school is limited in its influence and that all kinds of uncontrolled factors can and will intervene. However, the school can and must help prepare students for responsible citizenship.

The charts that follow start with the objective statement in the first column. This is followed by the courses that serve to achieve the objective and the time spent. Additional columns give the recommended allocation of time as part of the new proposal.

The overall philosophy is that every one of the objectives should have mandatory courses that relate to it. It follows, then, that if cultural elements are a focus of an objective then courses in art, music, or drama should be taught not as free options but as compulsory electives. This same reasoning applies to the spiritual element as well as the practical arts. The program requires that core content be identified for a group of mandatory courses. The compulsory proportion of courses ranges from 100% in the elementary grades to 24% in grade twelve. As students gain competence in the basic skills needed for learning, their choice of what to learn becomes wider. It is assumed that by the end of grade nine the average student will have acquired adequate skills in reading, writing, numeracy and cultural and practical appreciations to begin making responsible decisions as to the type of high school program most appropriate for him or her.

The time allocations have been apportioned to achieve a balance amongst the objectives as well as attending to the importance of the content for each subject. The time allocations have been based partly on (a) past experiences and tradition (b) studies done on how much students can achieve in specified time blocks, and (c) on the assumption that a systematic approach and a structured course will increase learning efficiency.

A ten year longitudinal study on the teaching of elementary French in Britain identified the conditions necessary for successful learning of a language. These conditions probably apply to every subject area. A number of these conditions are noted as follows:

- (1) Principals must have a positive attitude toward the subject.
- (2) Teachers need a generalist training.
- (3) Good learning materials must be available.
- (4) Teachers must have reasonable competence in the subject and know appropriate methodology.
- (5) Parental support must be positive.
- (6) There must be a practical use for the knowledge obtained.

It would seem logical that if students and parents understand the purpose of the courses taught, with content that was carefully structured and taught by knowledgeable and competent teachers, the time requirements could in fact be reduced or the program enriched.

Chart 1, page 14 gives an overview of the total school program. This is expanded in more detail following the section on electives.

Total of 12,000 hours in 12 years of school.  
Total of 1,000 hours per year.

CHART 1  
BASIC LIFE SKILL COURSE REQUIREMENTS

OBJECTIVE	ELEMENTARY	TIME Hours/Yr		CHANGE in Hours	JUNIOR HIGH	TIME Hours/Yr		CHANGE in Hours	SENIOR HIGH	TIME Hours Per Year		CHANGE in Hours	AGGREGATE CHANGE IN HOURS	TOTAL		% of Total Hours Rec			
		Now	Rec			Grade 10	Grade 11			Grade 12	Now			Rec	Now		Rec		
1. Develop competencies in reading, writing, speaking, listening and viewing.	Language Arts Reading Spelling Handwriting	420	375	-270	Language Arts	150	200	+150	English	125	125	125	125	0	3345	3225	28	27	
2. Develop basic knowledge and skills in mathematics, the sciences, and the practical and fine arts.	Mathematics Science & Environment Art Music Second Lang. Practical Arts	160 100 50 50 50 ---	120 50 50 50 50 ---	-240 -240 0 +450 ---	Mathematics Science Art Music Drama Second Lang. Business Ed. Home Ec. Ind. Ed. Practical Arts	100 100 75 75 ---	125 75 75 100 ---	+75 0 0 +225 ---	Mathematics Science or Land & Life Fine Arts Second Lang. Practical Arts	125 75 75 100 ---	125 75 75 100 ---	---	0 +75 +200 +675 ---	-165 -175 +200 +675 ---	1385 975 825 675 ---	1220 810 1025 675 ---	12 8 6 9 6	10 6 9 6	
3. Develop the learning skills of finding, organizing, analyzing, and applying information in a critical and objective manner.																			
4. Develop knowledge, skills, attitudes and habits which contribute to physical, mental and spiritual health and safety.	Health Physical Ed. Safety Ed.	50 80 ---	50 100 20	0 +120 +20	Health Physical Ed. Religious Study	75 50 ---	50 100 ---	+225 +50 ---	Health and Physical Ed. Religious Study	50 100 ---	100 ---	---	+150 +75 ---	+495 +20 +125	1055 1550 125	1550 20 125	9 13 1	9 13 1	
5. Develop basic knowledge and skills in social studies and an understanding of the meaning, responsibilities, and benefits of active citizenship at the local, national, and international levels.	Social St.	90	100	+60	Social Study, Guidance	100 25	100 ---	0 -25	Social Study, Modern Living	125 ---	125 ---	---	0 +100	+60 +100	1090 1150 25	1150 100 25	9 10 .2	9 10 1	
6. Develop the knowledge, skills, attitudes, and habits required to respond to the opportunities and expectations of the world of work.																			
JOH '77		1000	1000			700	975			500	850	250	700	125	250	8325	10500	72.2	88

## 6. THE ELECTIVE PROGRAM

### 6.1 The Need For Choice

The purpose of options or elective courses is to give students an opportunity to study or work in an area of their own choice. The assumption is that in this way students will broaden their understandings and increase their abilities in cultural, practical or academic activities of their interest. It is important that as students master the basic rudiments of communication, computational and social skills they have the chance to use this knowledge or skill in a practical way. In order to do this a variety of electives have been introduced over the years.

Some of the courses have been developed at the local level to meet specific needs, all with the objective of enriching the students' lives. The major point that can be made in respect to options is that they do provide a way to meet the variety of needs and interests of individual students.

#### 6.11 Definitions

Election or option suggests that students have a choice in the learning experiences in which they wish to engage. For the purposes of this paper the terms will be defined as follows:

- (1) Content Elective will refer to content within a course from which a selection can be made by the teacher, by the students or through mutual cooperation.

Curriculum committees generally lay out the scope and sequence of the content in such a way that a teacher can make some selection. There is a core portion that must be taught with additional materials left to

the choice of the teacher and/or the students. The Social Studies curriculum allows up to one quarter of the content to be developed locally. Language Arts provides for considerable teacher selection. The same is true for most courses.

It is advocated that curricula continue to allow for teacher selection or development of content for the non-core portions. The ratio of core to elective content would be the recommendation of the Curriculum Policies Board.

(2) Compulsory Elective refers to a choice among designated courses.

Eg., the choice between art, drama, or music.

While the term appears contradictory, the intent is that students be required to take courses from two predetermined groupings, namely, the fine and practical arts. This is in conformity with the objectives set out for the school.

The courses in this category would compare to the "A" options as now structured in the junior high school and the fine and practical arts at the high school. These courses would be structured by Alberta Education.

(3) Option refers to a free choice of any course for which the Department or the local school district has developed approved content.

The option courses would begin in grade ten and increase to more than 70% of the grade twelve program. An option course would be any course which is not compulsory. Mathematics 20 for example is an option.

The options would be selected from courses prepared by Alberta Education and a choice of up to 250 hours or 10 credits from locally developed courses.

- (4) Locally Developed courses could be prepared and approved by the local school district.

When course content developed by Alberta Education does not meet the needs of a particular student group, a school board has the freedom to develop suitable courses. Such courses should be prepared in the standard format used by the Department and in consultation with the appropriate Associate Director in the Curriculum Branch. No further approval other than a School Board resolution would be needed to implement the course.

Two courses or 10% of a student's diploma requirements could be selected from locally developed curricula. Two computer course numbers carrying a value of 3 or 5 credits would be assigned for this purpose.

Implementation of the courses would be the responsibility of the local board including any special equipment or facilities that might be needed.

Any financial requirements over and above the normal per-pupil grant would be carried by the local districts.

#### 6.12 Application At The Life Skills Matrix To Student Programs

Using this structure and applying it to specific programs by grade, the configuration of mandatory to option courses is very heavy on the mandatory side. (Chart 2, page 18)

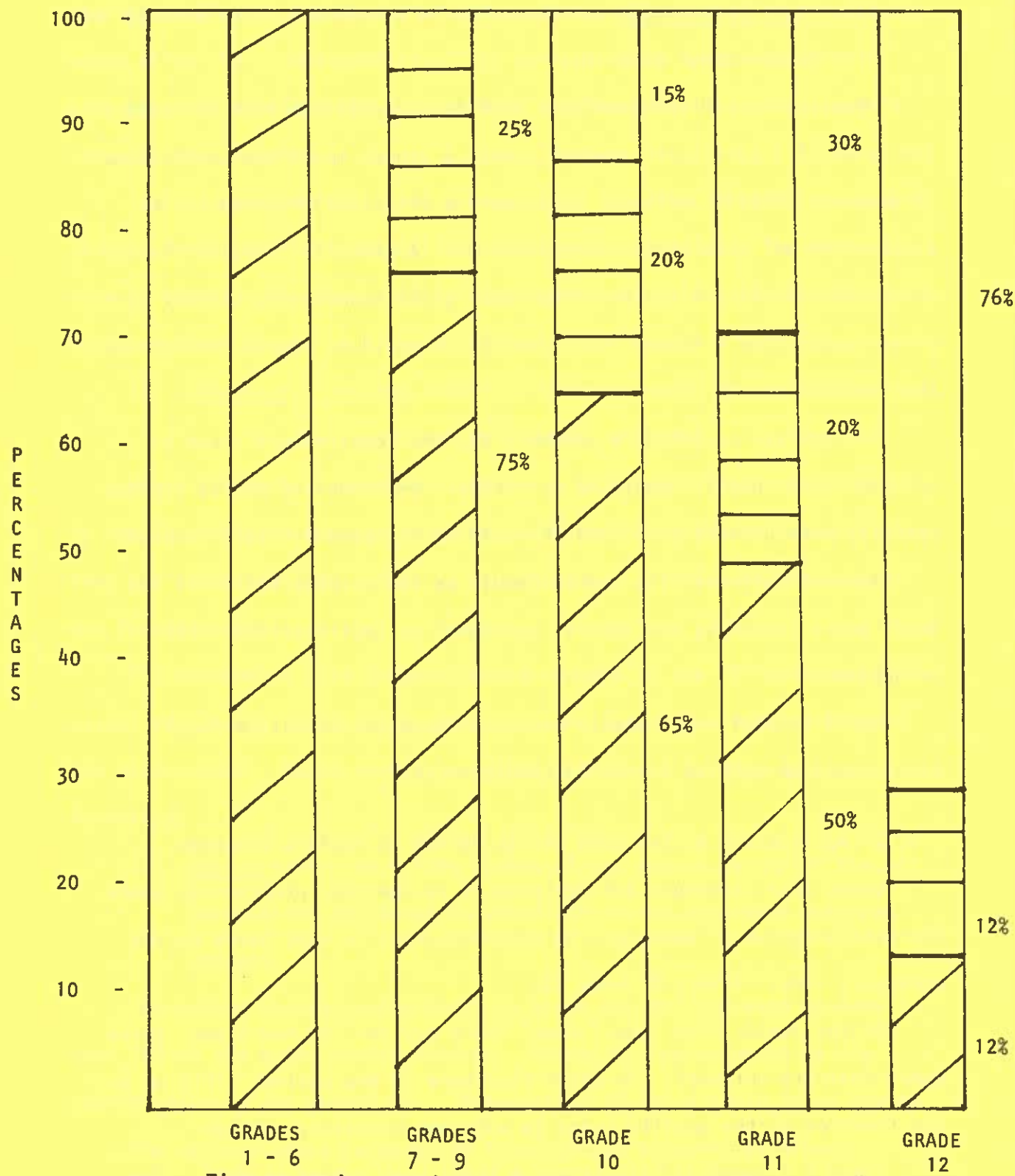
At the Junior High School level there are only 75 hours over three years that are optional. In grade ten there is one option. This weighting reverses by the twelfth grade to only two mandatory courses.

Chart 7 on page 24 illustrates a total high school program. The minimum number of credits add to 70. This includes the credits allowed

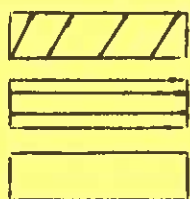


RELATIONSHIP OF CORE, COMPULSORY ELECTIVE

AND OPTION COURSES IN PERCENTS



Time spent in compulsory versus option content.



Compulsory Core (with content election)

Compulsory Elective

Options

CHART 2

for options. However, not all the time allowed for options would necessarily be used for that purpose. Students would only be required to take as many courses as required to meet the standards set by the diploma. The chart shows the combined mandatory credits for a high school program now and as recommended. The increase in mandated credits is from 35 to 70. This is not as radical as it first appears in that courses which were options in the current program are recommended as mandatory in the life skills program; for example, fine and practical arts.

CHART 3

JUNIOR HIGH ACADEMIC  
LIFE SKILLS PROGRAM

CURRENT				RECOMMENDED				Change	
Obj.	Description	Course	Time Hrs.	Total Time	Description	Course	Time Hrs.		Total Time
1	Language Arts	3	150	450	Language Arts	3	200	600	150
2	Mathematics	3	100	300	Mathematics	3	125	375	75
3	Science	3	100	300	Science	3	100	300	---
4	Health & Phys. Ed.	3	75	225	Health & Phys. Ed.	3	150	450	225
5	Fine Arts				Fine Arts	3	75	225	
6	Languages				Languages	3	75	225	225
	Religious Studies				Religious Studies	1	50	50	50
	Social Studies	3	100	300	Social Studies	3	100	300	---
	Practical Arts				Practical Arts	3	100	300	150
	Guidance	1	25	25					
	"A" or "B" Options	4	225	675	Options		25	75	
	Time to increase core or options		775	2275			1000	3000	
			225	725					
			1000	3000					

CHART 4  
GRADE TEN LIFE SKILLS

Courses	Hours Per Year	Credits *
English: { one of { 10 13	125 hrs.	5 credits
Mathematics: { one of { 10 13 15	125 hrs.	5 credits
Science: Science (11 one of Biology (10 Chemistry (10 Physics (10	75 hrs.	3 credits
Physical Education 10	100 hrs.	4 credits
Modern Living 10	100 hrs.	4 credits
Fine Arts: { one of { Art Music Drama	100 hrs.	4 credits
Social Studies 10	125 hrs.	5 credits
Practical Arts: one of { Industrial Education Home Economics Business Education	100 hrs.	4 credits
Options	150 hrs.	6 credits
	-----	-----
	1000 hrs.	40 credits

\* Credits are listed as minimum. Many courses may be taught for 4 or 5 credits.

CHART 5  
GRADE ELEVEN LIFE SKILLS

Courses	Hours Per Year	Credits
English: { one of { 20 23 21 A and B	125 hrs.	5 credits
Science: Land & Life 10 one of { Biology 20 Chemistry 20 Physics 30	75 hrs.	3 credits
Physical Education 20	100 hrs.	4 credits
Fine Art: { one of { Art Drama Music	100 hrs.	4 credits
Social Studies: { one of { Social Studies 20 Social Science 20	125 hrs.	4 credits
Practical Arts: { one of { Industrial Education Home Economics Business Education Work Experience	100 hrs.	4 credits
Religious Study	75 hrs.	3 credits
Options	300 hrs.	12 credits
	----- 1000 hrs.	----- 40 credits

CHART 6

GRADE TWELVE LIFE SKILLS

Courses	Hours Per Year	Credits
English: { one of } 30 } 33	125 hrs.	5 credits
Practical Arts: { Industrial Education one of           } Business Education	100 hrs.	4 credits
Options	775 hrs.	31 credits
	-----	-----
	1000 hrs.	40 credits *

\* While each year of high school is set out as 40 credits, students need to complete the core areas and enough of the options to make a grand total of 100 credits for a high school diploma.

CHART 7

COMBINED HIGH SCHOOL LIFE SKILLS PROGRAM

Current	Credits	Enrol.	Recommended	Credits
English	10 13 20 23 30 33	* 25878 10153 20134 9217 20222 7946	English 10 or 13 20 or 23 30 or 33	5 5 5
Mathematics	10 13	19277 11073	Mathematics 10 or 13	5
Science	11	9141	Science 11 or Biology 10 Chemistry 10 Physics 10 Land & Life 10	5,6
Social Studies	10 20	25279 23234 13455	2 of Social Studies and/or Social Science Physical Education	5 5-6
Physical Education	10	34627 22122 33014	Modern Living Fine Arts one of { Art } Music } Drama	4 4 4 4 4
		35-37	Religious Studies Practical Arts one ) Ind. Ed. each ) Home Ec. year ) Bus. Ed. } Work Exp.	3 4 4 4
*All enrolment figures 1975-76.				70-72

## 6.2 Current Status of Elective Programs

Elective programs formally begin in junior high and continue through high school. Two groupings are used. The "A" options are courses selected from the cultural and practical arts. A minimum of one "A" option should be studied each year to a maximum of four.

The "B" options are courses that are intended to enhance the opportunities for the extension of core areas. The content for these is developed by teachers at the local level. Students need not take any "B" option or as many as three each year.

In summary, a student should take four option courses each year which should include one "A" option with the other three selected from "A" or "B" courses. Chart 8 identifies option titles currently used and lists the recommended options under the new proposal (page 28).

High school options total 276 courses and range over the broad spectrum of academic, cultural and practical arts areas.

In addition to the Department courses, a total of 56 locally developed courses have been approved for use in designated schools or school districts.

## 6.3 Proposed Compulsory Elective and Option Courses

It is recognized that some freedom of choice based on student interest is an important motivation for learning. It is further acknowledged that students should be introduced to new areas of knowledge and provided with enough time for them to recognize and begin to understand its structure.



### Elementary

The first six years of schooling prepare the student with basic tool (academic) skills of reading, writing, and arithmetic so that these can be applied to a variety of practical and academic fields. This too is a period when social skills are developed and the base is laid for cultural tastes. Thus the electives become a practice ground for the application of the basic communication skills.

### Junior High

In the Junior High School students select from a range of structured Compulsory Electives in such a manner that the objectives can be achieved. Consequently, they will select a fine arts course each year from art, drama or music. A second language will be compulsory. The language may be any one from an approved list. One course each year will be chosen from the practical arts areas of Home Economics, Industrial Education or Business Education. This is illustrated on Chart 8 page 28 .

Enough time (100 hours) will be spent in each of these courses so that students can learn to appreciate and develop some skills in the area.

### Senior High

The senior high school option program provides a progressive increase in the choice of courses as the student advances through the grades.

The first year of high school is a year of orientation. The skills learned thus far become the basis for more rigorous development.

As the student advances through high school the compulsory program continues the expansion on the objectives by requiring at least two courses selected from the fine arts (art, music or drama) and one from religious studies.

The course on religious studies or ethics speaks to the spiritual needs of man. It is a dimension that has received little time in current school programming.

The practical arts require a minimum of three courses to help students come to a tentative resolution about a career choice.

The option courses provide a broad range of courses which can lead to preparation for a job, provide the prerequisites for entry to formal post high school education or continuing education later on.

In grade ten, one option course may be selected. In grade eleven from two to three options are available and in grade twelve, five to six option courses may be selected. In total a student may select a minimum of six to nine options to complete a high school diploma.

These options may be selected in the fields of Fine Arts, Practical Arts or the Academics. Courses may come from two sources; those developed by Alberta Education and those developed by school districts. The local option would be limited to a total of ten credits.

(see appendix "A" for current status of courses and enrolments)

CHART 8  
JUNIOR HIGH ELECTIVES

CURRENT					RECOMMENDED	
Description	No. Courses	Enrolments			Description	No. Courses
		7	8	9		
<b>"A" Options:</b>						
Agriculture	1	1965	830	762	A. Cultural	
Art	3	18414	16244	13883	Art	3
Music (General)	3	2384	1553	1104	Music	3
Music (Choral)	3	2570	2050	1760	Drama	3
Music (Instrumental)	3	8230	6184	4698	B. Practical	
Drama	3	10331	10021	9027	Home Economics	3
Home Economics	3	9432	14904	13772	Industrial Education	3
Industrial Education	3	9920	15484	14237	Business Education	3
Typewriting	1	1815	3464	8503	C. Languages	
French	3	15668	11345	8960	French	3
German	3	504	428	405	German	3
Latin	3	8	8	33	Ukrainian	3
Ukrainian	3	727	569	356	Spanish	3
	35				D. Religion	1
<p>Students may now take 12 options over 3 years. Of these a minimum of 3 could be "A" options and the rest can be "A" or "B" options.</p>						
<b>"B" Options:</b>						
Science					Ethics	1
Language Arts					<p>Students must take one course from each of categories A and B in each grade for a total of 6. They must take 2 courses in category C during the junior high school years and one course in category D. The total number of option courses to be taken is <u>9</u>.</p>	
Social Studies						
Physical Education						
Second Languages						
<p>The number of courses in any one area is limited only by the interests, resources and persuasions of the system, school, teacher and student.</p>						

## 7. MAINTAINING STANDARDS

The effectiveness of schooling depends on how successfully the objectives are being achieved in the eyes of the public. Success or failure is judged on how well the graduates of schools, institutes of technology or universities do in the world of direct employment. This suggests that there are standards of expectation out there and that these can be defined in terms acceptable to the majority. History suggests that this is only partially true.

Fortunately, however, experience also teaches that standards must and can be set, and that by careful sequencing most students can achieve them. There are many forms of evaluation of which the written tests are the most common.

There are two general categories of tests. These are the norm-referenced tests and the criterion-referenced tests. Norm-referenced tests determine how a student ranks on a scale with other students. Most of our provincial tests were of this type. The criterion-referenced test determines what a student knows about the prime elements of the subject. Criterion-referenced tests require:

- (1) a clear definition of the objectives.
- (2) test items that directly reflect the content to be learned.
- (3) levels of achievement or standards that are common to all.
- (4) remedial work to be undertaken if students fall short.

Criterion-based tests are instruments that help the teacher and the student determine how well they have achieved in various elements of a course. Criterion-based tests appear to offer the best device for measuring proficiency.

## 7.1 Competency Measures

It seems natural then that in order for a school to have proficient graduates it will have to administer a series of competency tests at various levels so that students have time to overcome deficiencies. The purpose of such tests is to identify weaknesses, not only on the part of the student, but in respect to content and teaching strategies as well, and to suggest changes so that students can reach the desired levels.

The criterion levels set are based on experience and their absolute-ness is always related to a specific time and situation. As society changes and situations change so may the criterion levels.

Schools must make certain though, that the proficiency tests they use measure the behaviors that students had an opportunity to learn.

This requires that content validity of the tests be assured.

To recap then, competency measures must include agreement on:

- (1) the kinds of indicators to be used to get evidence on accomplishment.
- (2) how the achievement will be documented.
- (3) the levels of outcome desired.
- (4) procedures to be followed in judging performance.
- (5) what remedial processes will be used if needed.

## 7.2 Documentation of Experience

While many skills can be measured by tests of competency, there are many complex behaviors especially in the realm of feeling and appreciation (affective) that cannot at this stage of the art be adequately evaluated by such tests. To fill this gap verification of experience through documentation is required. The objectives state that the persons

leaving our schools will have opportunities to learn to work in groups; to discuss; to tolerate good-naturedly those who are unpleasant or offensive; to be agreeable and reasonable to their associates; to complete tasks and to work together on a team enterprise. All of these experiences contribute to the preparation of youth for adulthood.

It is through such activities that qualities such as maturity, dependability, and the ability to work constructively in group settings are fostered. Evaluating such experiences can be done through documentation, i.e., describing the events and the individual student's successes or failures as actually seen.

Actual experience is central to education and is the truest measure of a student's personal growth and development. Because of this, the student's record should show this component along with the competency measures derived from the specific examination of skills.

## 8. GRADUATION REQUIREMENTS

The graduation diploma must reflect the objectives of education. It should state whether the desirable competencies and behavior patterns have been achieved. The major criterion that should be applied to the inclusion of competencies as graduation requirements is their usefulness in life. The diploma should certify that the graduate has acquired the basic skills and knowledge essential to effective adult citizenship.

To graduate from a high school in Alberta a student should be able to demonstrate:

- (1) an ability to read, write and compute at a specified level of competency.

- (2) an understanding of the basic scientific and technological processes
- (3) a knowledge of personal health and the disciplines of family living
- (4) an acquaintance with the arts, philosophy, and a second language
- (5) a knowledge of: Canada's history and its economic and political structure; world relationships and environmental and consumer concerns
- (6) a knowledge of personal career options and entry level skills for an immediate job or further education.

The verification of these requirements would follow two approaches:

- (1) The use of competency measures.

Competency measures would be used in the areas of the language arts, mathematics, social studies (in part) and science (also in part).

The specific competencies to be measured would come from the course content as developed through the coordinating committees and approved by the Curriculum Policies Board. To provide for time to achieve the level of competency set, students should be tested at intervals prior to graduation. Suggested check points are at the end of grade two, five, eight and eleven.

The grade two and five check points allow time to overcome inadequacies while in elementary school. The same reasoning applies to the checks at grade eight and eleven. As further support for the grade eleven evaluation, the program as outlined indicates that by that time all the basic competencies required through mandatory courses should have been achieved. The grade twelve program provides further preparation for entry into a job or further education.

(2) The use of documentation.

Documentation refers to the description of experiences that have been successfully completed. For example, the physical education program should not be evaluated through a paper and pencil test. Daily exercising, proper diet and sleep are basic to good health. The measure here is participation in the course and observations the teacher has recorded based on experiences with each student.

Documentation also consists of the number of courses a student completes and the extent of the participation. The record should show sufficient attendance in courses and programs to ensure that the student has received the educational and social benefits identified in the objectives.

The credit system operational in Alberta since 1936 is a good one and it should be continued. The number of credits required for graduation should be sufficient to achieve the objectives set out. While the sample programs used in this paper add up to more than 100 credits it is not uncommon for students to take the extra courses.

The 100 credit program seems to be reasonable and should continue to be the minimal graduation requirement. These credits should be awarded on the basis of the two approaches described. Those courses that fall into the competency area would be evaluated on the basis of competency and not on time spent. As an example if a grade ten student met the competency requirements of grade eleven mathematics he could be awarded the credits.

Courses in the area where experience needs to be documented as in fine arts, practical arts and physical education, credits would be based on attendance as well as demonstration of the competencies inherent in the objectives.



Students leaving school before meeting the graduation criteria should be given a school leaving certificate. This certificate would state the competencies achieved in each course at the time of leaving.

The graduation diploma should indicate that the student has successfully measured up to the competency levels specified for each course and met the attendance requirements in the courses where this was mandatory.

## 9. RECOMMENDATIONS

This paper represents an effort to review current practices used to achieve the objectives of education and suggest modifications to both the objectives and the practices which could better achieve the desires of contemporary Albertans.

There are no brilliant insights or psyche shattering proposals. Nevertheless the modest recommendations could profoundly change our current system.

For your consideration it is recommended that:

- (1) The objectives for Alberta education be revised to bring them in line with what the school can do.
- (2) All courses and the attending content be sequenced so that a continuing progression of competencies and knowledge skills are cumulative. A systems approach to networking courses from one to twelve could provide the strategy to achieve this.
- (3) Courses developing the broad objectives of Personal Development, Social Responsibility, and Practical Application be mandatory until a level of competency or experience is attained that meets the standards set by Alberta Education.

- (4) Systematic monitoring be carried on in all school systems.
- (5) Four check points be mandated for a general assessment of student progress and competency. These are to be at the end of grade 2,5,8, and 11.
- (6) Students not measuring up to competency levels set be given special attention and advancement delayed until competencies are achieved.
- (7) The option program become more restrictive in favor of compulsory electives.
- (8) An individual student's high school option program allow for the inclusion of up to two, 3 to 5 credit courses developed locally. Such courses to require the local school boards approval only.
- (9) Teacher education faculties be challenged to meet the same criteria for accountability at their level as the schools are.
- (10) Following agreement on the design, the program be phased in over a period of ten years.

## 10. IMPLICATIONS

The implications of introducing the Basic Life Skills Program vary from little inconvenience to major revisions and costs. Each recommendation will be examined and the implications recorded.

Recommendation #1: Change the "Goals of Basic Education."

The acceptability for the suggested revision will determine the extent of the work involved. Accepting the objectives set out in this paper implies that a more

accountable system will emerge and that the competencies of students leaving school will be congruent with the objectives. To achieve this the other recommendations will have to be acted upon.

**Recommendation #2:** Selection of courses and content be in harmony with the general objectives and competencies and knowledge skills be sequenced in each course area to be cumulative.

This is an ongoing activity of ad hoc committees now. It would mean a review of existing courses and content to make it conform with the objectives. Staged over a period of five years this would not be a serious problem. It would provide an opportunity to set up a complete networking of courses and content along with teaching strategies that could enhance the productivity of every teacher.

**Recommendation #3:** Courses be mandatory in the three major areas of:  
(1) Personal Development

Most of the academic courses fall in this category and would be attended to under recommendation 2. Time is increased for English and Mathematics at the Junior High School. As all schools are programmed for these courses the additional time would not be added cost of instruction.

The additional 75 hours of science in high school would require additional laboratory space.

Health and Physical Education have considerable increased time, nearly twice as much as that previously required. This could result in a bind in some schools. However, the facilities of the community, Parks and Recreation, school grounds and even the classroom itself can serve various elements of the program.

There would be need for more physical education teachers or more emphasis on physical education for all teacher candidates in training.

The Fine Arts are recognized as basic to an individual's well being. These are well established in the schools and the mandatory stipulation is not likely to change current enrolments or the necessity for additional facilities.

The introduction of a second language in grades one to nine will increase the demand for teachers. Currently, about 52,000 out of 111,500 students in Junior High are taking a second language. The enrolment in elementary French is 58,122. With 200,000 students at the elementary level the demand for second language teachers could be very great. However, teacher competency in a language and teaching materials would be the only demand. Facilities are already there.

Religious education or elements of philosophy or ethics is necessary to attain the objectives. A number of courses are currently being taught, some of them being locally developed. This could be a controversial area if not carefully handled.

Modern Living needs to be reviewed with the objective of placing the emphasis on the family unit and its importance to the well-being of society. If our society believes in the family, it will have to teach students

what the discipline of family living means. No special facilities are required but teachers may be difficult to get.

(2) Social Responsibility.

The Social Studies and Social Sciences would be the major carriers of this content. The current revision could go a long way in meeting the criticisms now directed at this program.

No change in the number of teachers required is anticipated.

(3) Practical Arts.

Mandating courses in career orientation and development will have a major impact on the practical arts.

At the Junior High level the situation is as follows:

Currently there are - 3,556 students in Agriculture  
38,108 in Home Economics  
39,641 in Industrial Education  
13,782 in Typewriting

There are a total of 95,088 taking courses in the Practical Arts. The total Junior High enrolment is 111,517. It would appear that with careful planning and scheduling the requirements at the Junior High level could be met with little additional expense.

The situation at the High School level is as follows:

<u>Enrolments</u>	Grade 10	Grade 11	Grade 12	<u>Total</u>
Home Economics				
Clothing & Textiles	4,136	1,629	652	6,417
Food Science	7,016	2,557	709	10,282
Business Education				
All courses	44,719	32,268	13,632	90,619
Industrial Education (5 credit module)				
All courses	25,801	20,901	7,333	54,035
				<hr/>
				161,353

This means there are 161,353 modules of 5 credits each now taught at the high school. Many students enroll in two or three five-credit courses as in Vocational Education or Business Education so this number does not represent students. Nevertheless we have the plant to provide 161,000 five credit student places. The high school population is 95,638. The facilities in place would provide every student with 8 credits of time.

The recommendation is that every student should spend a minimum of 15 credits in the practical area. This means a doubling of our current facilities or implementing an intensive community-oriented, work-experience program.

In the year 1975-76 the province's vocational facilities were used to 82% of capacity. This was based on an average class of 15. If this were increased to 18 per class, the additional students that could be accommodated would be 32,271 or 1.6 credits, making a

total of 11 credits per student. This leaves us with an increase of 1/3 over our present plant. Currently, we have approximately:

	522 Vocational Shops
	280 Senior High Industrial Education Labs
	300 Senior High Home Economics Labs
	1,200 Senior High Business Education Labs
	<hr/>
Total	2,302

The work experience program could absorb about one half of the extra demand, leaving a need for about 400 additional labs or shops. With the increase of facilities there would be a requirement for more teachers. The total teaching force would not have to be appreciably increased but the teacher mix would be different. The phasing in of the labs over 10 years would be at half the rate that they were being built in the sixties.

Recommendation #4 and #5: Systematic Monitoring.

Four major check points for monitoring were recommended. These were in grades 2, 5, 8, and 11. At the elementary level, tests would measure competencies in the areas of Reading, Writing and Computation.

At the Junior High level the same three areas would again be tested with the addition of Science and Social Studies. The Fine and Practical Arts would have a documented evaluation based on experiences the students had completed. The documentation might take the form of a student profile indicating his/her interests, strengths

and weaknesses. Such a profile would serve as a major counselling tool for the selection of high school courses.

The last formal monitoring would be in grade eleven. This would consist of a battery of tests designed to measure basic competency levels for all the originally set out objectives. The documentation started in grade eight would be expanded for the fine and practical arts areas.

A test development section is already in operation in the Department of Education. This could be the unit that would develop the provincial tests in harmony with approved curriculum changes.

Schools would need help in planning their programs. One or two regional office consultants would be designated to review school timetables and course schedules to make certain that each school carries through on the provincial regulations.

**Recommendation #6:** Students must pass competency levels.

The idea that students simply pass from level to level because of age will be replaced by requiring them to achieve certain standards before advancing. This may require the move to more individualized instruction as students vary in their rate of development.

Special classes will need to be set up for those that learn more slowly.



**Recommendation #7: Restrict Option Program.**

The broad range of courses we now have could well continue in existence. However, students would be required to take courses out of certain categories in order to obtain a comprehensive education.

The implications for guidance are important.

**Recommendation #8: Locally developed courses.**

The recommendation that locally developed courses not require the Minister's approval would make it much easier and quicker for a school to teach a current topic. This would eliminate the proofing and red tape such courses are now subjected to. By limiting the number of credits to a maximum of ten per student, it is felt that a student's education could be personalized without deviating from provincial standards.

**Recommendation #9: Teacher education coordination.**

Making schools accountable assumes that teachers can meet the challenge. The university Faculties of Education will have to revamp their programs to meet the requirements of the new demands on teachers.

APPENDIX A

Current Status And Enrolment For Option Courses

Charts 9 through 14 provide names, enrolments and industry requirements for most of the current option courses in high school.

CHART 9

High School Options

ACADEMIC

Department		Credit	Enrol	Local	Credit	Enrol
Science 11			9141			
<u>Science</u>						
Biology	10	3	25279			
	20	3	18384			
	30	5	14593			
Chemistry	10	3	23234			
	20	3	16594			
	30	5	4425			
	30 X	5	8431			
Physics	10	3	13455			
	20	3	9203			
	30	5	6257			
	30 X	5	458			
<u>English</u>						
Communications	21A	3	2975			
	21B	3	1330			
Literature	21A	3	2466			
	21B	3	1103			
Reading	10	3,5	2141			
<u>Mathematics</u>						
	10	5	19277			
	13	5	11073			
	15	5	8631			
	20	5	15154			
	23	5	8598			
	25	5	3519			
	30	5	15649			
	31	5	3457			
	33	5	5735			
<u>Second Languages</u>						
French	10	5	7302	French	24	5 11
	11	5	2668	Hungarian	15	5 14
	20	5	4801		25	5
	21	5	1310		35	5 12
	30	5	4173	Italian	15	5 130
	31	5	778		25	5 89
German	10	5	1626		35	5 16
	20	5	871			
	30	5	585			
	31	5	9			

## Chart 9

(Continued)

Department	Credit	Enrol.	Local	Credit	Enrol		
Latin	10	5	98	Polish	15	5	10
	20	5	30		25	5	10
	30	5	12		35	5	8
Ukrainian	10	5	385	Russian	15	5	8
	20	5	214		25	5	5
	30	5	146		35	5	
	31	5	13	Cree	15	5	47
<u>Social Studies</u>	10	5	34627		25	5	12
	20	5	22122	Spanish	14	5	21
	30	5	15019	Introduction to Modern Lang- uages	15		17
<u>Social Sciences</u>							
Geography	20	3,5	2999				
Psychology	20	3,4,5	8268				
Sociology	20	3,4,5	5916				
Personal Psychology	20	3					
General Psychology	20	3					
Religious Ethics	20	3					
Religious Meaning	20	3					
General Sociology	20	3					
Sociological Insti- tutions	20	3					
Local and Canadian Geography	20	3					
Origin of Western Philosophy	20	3					
Contemporary Western Philosophy	20	3					
Social Science	10A	3	1161				
	10B	3	677				
(these were develop- ed in 1977)	20A	3	1929				
	20B	3	1295				
	30A	3	652				
	30B	3	237				
Economics	30	5	2321				
Health & Personal Development	10	2,3,4,5	1031				
Physical Ed.	10	2,3,4,5	33014				
	20	2,3,4,5	13572				
	30	5	5479				

Chart 10

## High School Options

## FINE ARTS

Description		Credit	Enrol.	Local	Credit	Enrol.	
<u>Fine Arts</u>							
Art	10	3,4,5	8375	Cultural Studies	15	88	
	20	3,4,5	2919		25	61	
	21	3,4,5	756	General Fine Arts (pilot)	15	5	114
	30	5	1439				
	31	5	296	Humanities	15	5	12
Drama	10	3,4,5	4226				
	20	3,4,5	1625				
	30	5	867				
Music	Choral 10	3,4,5	1495				
	Instrumental 11	3,4,5	2863				
	General 12	3,4,5	439				
	Choral 20	3,4,5	630				
	Instrumental 21	3,4,5	1572				
	Choral 30	5	265				
	Instrumental 31	5	877				

Chart 11

## High School Options

## HOME ECONOMICS

Department Developed		Credit	Enrolment	Locally Developed	Credit	Enrol.	
Clothing & Textiles	10	4,5	4136	Aspects of Living	15	5	50
	20	4,5	1629	Perspectives for Living	15	3,5	425
	30	5	652				
Food Science	10	4,5	7016				
	20	4,5	2557				
	30	5	709				
Modern Living	10	4,5	869				
	20	4,5	486				
	30	5	544				

Chart 12

High School Options

BUSINESS EDUCATION

Description	Time Credits	1975/76 Enrol.	Description	Credit	1975/76 Enrol.	INDUSTRY REQUIREMENTS	
						1975	1982 Change
<u>DEPARTMENT DEVELOPED</u>							
Accounting 10	3	13056	<u>LOCALLY DEVELOPED</u>				
20	3	7418	Advanced Business Practice	3	112	20404	28153
30	3	2401	35A	3	2		
Business Foundations 15	3,5	4867	General Business 15	5	93		
30	5	960			pilot		
Business Machines 30	5	2082	Business Machines 22	3,5	708		
Clerical Practice 20	5	2095					
(Business Procedures)							
Marketing 20	5	1706					
30	5	209					
Law 20	3,5	8153				12337	15665
Office Procedures 30	5	1756					
Record Keeping 10	3,5	2422					
Shorthand 20	5	2099				30117	42297
30	5	738					
31	5	649					
Typewriting 10	3,5	24374					
20	5	9606					
30	5	4555					
Data Processing 20	3,5	1191					
Computing Science 30	5	282					



Chart 13 Continued

High School Options

INDUSTRIAL EDUCATION

Department	Credit	1975-76 Enrol.	Locally Dev. Course	Credit	Enrol.	INDUSTRY REQUIREMENTS		
						1975	1982	Increase
Related Mechanics	22A	51	Auto Part Merch. 15	5,10	34			
	22B	38		15,20	7			
	22C	37	Service Station Op. & Management 15	5,10	56			
	32A	18		15,20	12	3908	5488	1580
	32B	17						
	32C	5,10	18					
Sheet Metal	12	165	Plastics 15	5,10	18			
	22A	9		15	7			
	22B	18						
	22C	12			3			
	32A	17						
	32B	13						
Building Const.	32C	7						
	12	1642	Carpentry 15	5,10	107			
	22A	520		10,15	15			
	22B	380	Building Const. 15	5,10	132			
	22C	266		10,15	24	8648	10765	2117
		5		35	15,20	12		



INDUSTRIAL EDUCATION

Department	Credit	1975-76 Enrol.	Locally Dev. Course	Credit	Enrol.	INDUSTRY REQUIREMENTS	
						1975	1982 Increase
Building Construct.	32A 5	218					
	32B 5	259					
	32C 5,10	157					
			Building Maint.	12	86		
				32	2		
			Painting & Decor.	15	31	3367	4334
				25	4		
Visual Commun:	4,5	1859					
Commercial Art	22A 5	220			101		
	22B 5	166					
	22C 5	111					
			Commercial Art	15		1563	2206
				25	13		
				35	7		
Drafting	10 3,4,5	1102					
	20 3,4,5	140					
	12 4,5	2306					
			Drafting	25	9	2548	3465
				34	19		
				35	9		
Graphic Arts	22A 5	423					
	22B 5	812					
	22C 5	130					
				172			
				294			
				104			
				141			
				168			
				73			

INDUSTRIAL EDUCATION

Department	Credit	1975/76 Enrol.	Locally Dev. Course	Credit	Enrol.	INDUSTRY REQUIREMENTS	
						1975	1982 Increase
Graphic Arts	5	53					
	5	62					
	5,10	17					
Electricity-Electron	4,5	1957	Photography	5,10	109	2208	918
	5	468		5,10	15	3140	
	5	154		5,10	56	8094	2172
	5	103	Electricity	10,15	22	10266	
	5	105		15,20	21		
Electronics	5	76					
	5	62					
	5	253				1962	693
	5	152					
	5	145					
	5	111					
Machine Shop	5	64					
	5	694	Appliance Serv.	5,10	108	3157	913
	5	151					
	5	128					
	5,10	70				4070	

INDUSTRIAL EDUCATION

Department	Credit	1975-76 Enrol.	Locally Dev. Course	Credit	Enrol.	INDUSTRY REQUIREMENTS	
						1975	1982 Increase
Piping	5	184					
	5	88					
	5	70					
	5	57				4442	5590 1148
Welding	5	56					
	5	56					
	5,10	53					
Welding	5	825	Welding	15	123		
	5	338		25	19		
	5	243		35	4	6138	8719 2581
	5	138					
Beauty Culture	5	135					
	5	129					
	5,10	111					
	5	1085					
Beauty Culture	5	617					
	5	381					
	5	337					
	5	306					
Fashion & Furn.	5	255					
	5,10	218					
	5,10,15	211					
	5	56					
Fashion & Furn.	5	23					
	5	8					

INDUSTRIAL EDUCATION

Department	Credit	1975-76 Enrol.	Locally Dev. Course	Credit	Enrol.	INDUSTRY REQUIREMENTS		
						1975	1982	Increase
Health Services	12		Sewing & Design	10	35			
	22			15	25		733	178
	32A			15,20	14			
	32B		Dry Cleaning	5,10	21			
	12	170		15	8	1435	1964	529
Food Preparation	5	510		15,20	7			
	22A							
	22B	197						
	22C	167						
	12	154				20139	29866	9727
Television Crafts	5	138						
	32A	110						
	32B	73						
	32C	67						
	12	38				12538	16728	3990
Television Crafts	5	16						
	22A	16						
	22B	16						
Television Crafts	5	18						
	32A	10						
	32B	9						
32C	5,10							
						699	1156	457

INDUSTRIAL EDUCATION

Department	Credit	1975-76 Enrol.	Locally Dev. Course	Credit	Enrol.	INDUSTRY REQUIREMENTS		
						1975	1982	Increase
Performing Arts	12	183						
	22A	5						
	22B	5						
	22C	5						
	32A	5						
	32B	5						
	5,10							
Forestry	12	5						
Horticulture	12	5						
	22A	5						
	22B	5						
	22C	5						
	32A	5						
	32B	5						
	32C	5,10						
Work Experience	25	5						
	35	5						
		4188						
		2671						
						4272	5810	1538
						1351	1743	392
						269	389	120

Chart 14  
High School Options  
OTHER

Departmental	Credit	1975-76 Enrol.	INDUSTRY REQUIREMENTS		
			1975	1982	Increase
Agriculture	10	4,5	547		
	20	8,9,10	40	48219	43726
	30	5,10,15	6		
Land and Life	10	3,4,5			
	20	5	NEW		
	30	5,10			
Driver Education	10	2	5368		
Occupations	10	2,3	1217		
Special Projects	10	3,5	3648		
	20	3,5	2911		
	30	5	2130		
Geology	10	5	14		
	20	5	104		

## BIBLIOGRAPHY

- Berman, Louise M., New Priorities in the Curriculum, Charles E. Merrill Publishing Co., Columbus, Ohio, 1968.
- Busstall, C. et al., Primary French in the Balance, Windsor, England: National Foundation for Educational Research Publishing Company Limited, 1974.
- "The Essential Skills Television Project," Agency for Instructional Television, Box A, Bloomington, Indiana 47401.
- Flaure, Edgar, Learning to Be, UNESCO, Paris, Harrap London, 1972.
- Hathaway, Warren E., A Network-Based Approach To Curriculum Development, Warren E. Hathaway, 16902 - 95 Avenue, Edmonton, Alberta, 1971.
- Lazaruk, Walter, Second Languages and Basic Life Skills, unpublished paper, University of Alberta, 1977.
- Lehmann, Henry, "The Systems Approach to Education," Audiovisual Instruction, February 1968, pp. 144-148.
- Marland, Sidney P., Jr., "Educating for the Real World," Business Education Forum, November 1971, pp. 3-7.
- The National Association of Secondary School Principals, Competency Tests and Graduation Requirements, NASSP, Reston, Virginia 1976.
- Parnell, Dale, "The Oregon Walkabout," Phi Delta Kappan, November 1974, pp. 205 - 206.
- Proceedings of the Alberta Chamber of Commerce, Education and Business Conference, Jasper Park Lodge, Jasper, Alberta, October 21, 22,23, 1976.
- Smith, Arthur De. W., et al., Generic Skills In The Reasoning and Interpersonal Domains, Training Research and Development Station, Department of Manpower and Immigration, Prince Albert, Saskatchewan, 1974.
- Torgunrud, E. A., "Whither Are We Tending," Banff, November 1974.
- Tyler, Ralph W., Where Learning Happens, National Elementary Principal, Vol. 54, No. 3, Jan/Feb. 1975, pp. 38-42.

Kahlil Gibran, in The Prophet, writes about the place children should have:

Your children are not your children.

They are the sons and daughters of Life's longing for itself.

They come through you but not from you,

And though they are with you, yet they belong not to you.

You may give them your love but not your thoughts.

For they have their own thoughts.

You may house their bodies but not their souls.

For their souls dwell in the house of tomorrow, which you cannot visit, not even in your dreams.

You may strive to be like them, but seek not to make them like you.

For life goes not backward nor tarries with yesterday.



