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ABSTRACT

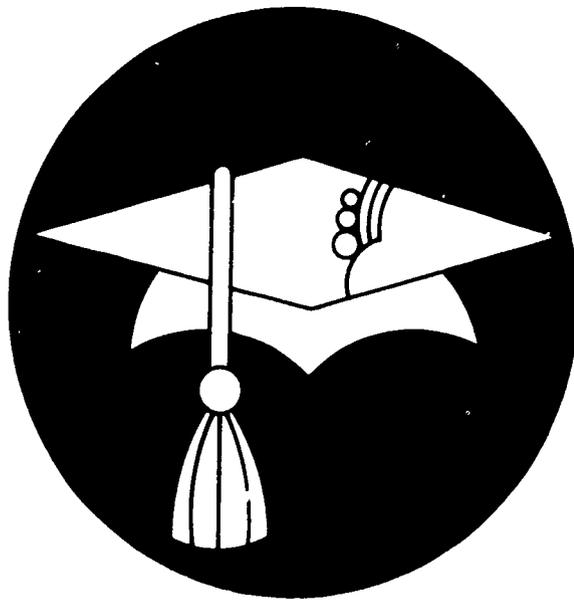
This paper outlines some initiatives taken to change and improve senior high school programs and diploma requirements in Alberta, Canada, as originally stated in the June 1985 policy statement, "Secondary Education in Alberta." It is intended to assist educational groups planning to revise a senior high school program. It also presents proposals for the allocation of course credits, time lines for program implementation, and the structure of courses. Outlined in part 1 are steps to be taken in the review process of the basic goals of secondary education as stated in the 1985 policy. Course changes and requirements for graduation are specified, with a proposed implementation date of September 1988. In part 2, the requirements for the General High School Diploma, the Advanced High School Diploma, and the Certificate of Achievement, are delineated with the specific course credits required for each one. Finally, part 3 reviews program content and course sequences with an effort towards making these more innovative, challenging, and future-oriented. Basic content in the areas of Career and Life Management, Social Studies, Sciences, Mathematics, English Language Arts, Physical Education, and the Integrated Occupational Program have been mandated, but many of these course descriptions are subject to further modifications.

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PROPOSED DIRECTIONS FOR SENIOR HIGH SCHOOL PROGRAMS AND GRADUATION REQUIREMENTS



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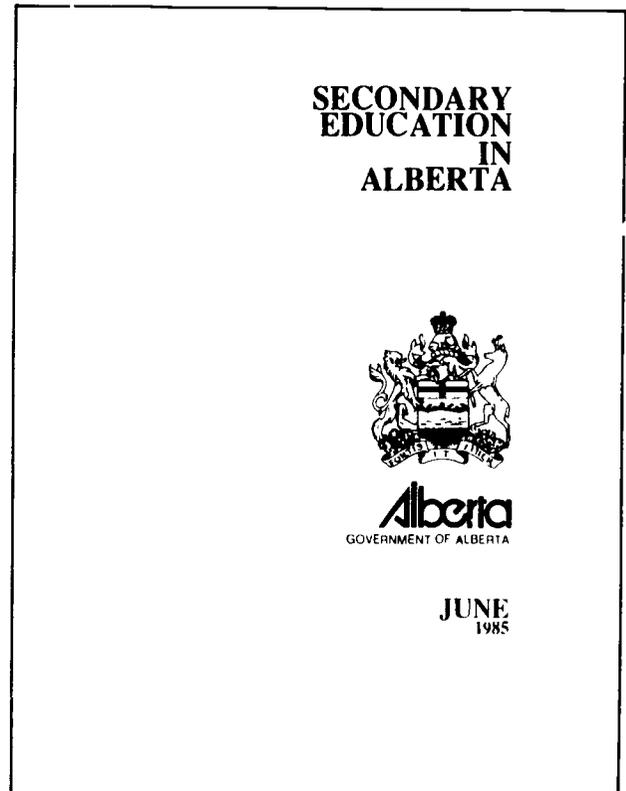
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INTRODUCTION

Released in June 1985, the Secondary Education in Alberta policy statement reflected a commitment to improving secondary school programs, classroom instruction, and student learning. It described the context for educational change, the new directions to be pursued, and the changes to be effected in the senior high school program. Since 1985, Alberta Education has taken several initiatives to realize the intent of the policy. This paper outlines some of those initiatives, and is intended to assist educational groups plan for the implementation of a revised senior high school program.

The paper highlights the prescribed changes to senior high school programs and diploma requirements. It also presents proposals for the allocation of course credits, timelines for program implementation, and the structure of courses. Final decisions on these proposals will be made after responses have been received and carefully considered.

Individuals, groups and organizations including students, parents, teachers, administrators, the Alberta Teachers' Association, Alberta School Trustees' Association, Conference of Alberta School Superintendents, Alberta Federation of Home and School Associations, and members of the post-secondary community will be invited to comment on the proposals contained in this paper. The department has already held preliminary meetings to discuss issues related to the articulation of programs, proposed program revisions, teacher inservice and preservice programs, and the secondary education policy's effect on the expectations which post-secondary institutions have of graduating students.



PART 1

DIRECTIONS FOR CHANGE

The Secondary Education in Alberta policy statement determines and guides the changes that will take place in secondary education over the next decade. The policy has set forth the purpose of education.

The aim of education is to develop the knowledge, the skills and the positive attitudes of individuals, so that they will be self-confident, capable and committed to setting goals, making informed choices and acting in ways that will improve their own lives and the life of their community.

(Policy statement, p. 7)

Within this broad aim, the goals of secondary education are to assist students to:

- develop the ability to think conceptually, critically and creatively, to acquire and apply problem-solving skills, to apply principles of logic, and to use different modes of inquiry
- master effective language and communication skills, including the ability to use communications technology
- acquire basic knowledge, skills, and positive attitudes needed to become responsible citizens and contributing members of society
- learn about the interdependent nature of the world, through a study of history, geography, and political and economic systems
- become aware of the expectations, and be prepared for the opportunities of the workplace – expectations that will be faced as employees or employers; expectations that will be faced as entrepreneurs or volunteers
- assume increasing responsibility for independent and continuous learning,

and develop positive attitudes toward learning while in school, in preparation for self-directed, lifelong educational experiences

- learn about themselves and develop positive, realistic self-images
- develop constructive relationships with others based on respect, trust, cooperation, consideration and caring as one aspect of moral and ethical behavior
- develop cultural and recreational interests and realize personal aspirations.

(Policy statement p 13)

Alberta Education has taken several steps to ensure that the review and development of the instructional program is directed toward these goals. For example, expectations for graduation, including essential concepts, skills and positive attitudes, have been developed to ensure that the goals of secondary education are deliberately and systematically covered in compulsory courses. As existing courses are revised and new courses developed, the content will be reviewed to ensure that essential learning outcomes are incorporated.

Another initiative undertaken as part of the review process has addressed the developmental and cognitive needs of students. Future program development will ensure that program expectations are appropriate to the abilities and learning strategies of students at different ages and stages of development.

Such initiatives will result in senior high school programs that provide students with opportunities to

- complete [their] development of basic skills, if necessary through modified instructional activities or through alternative programs

- extend and refine [their] intellectual and other skills in preparation for post-secondary education
- choose courses which will lead to the fulfillment of personal aspirations
- acquire specialized knowledge, skills and positive attitudes required for direct entry into the work force
- become confident, competent and responsible individuals ready to assume the role of a contributing member of society

(Policy statement, p. 14)

PROPOSED PROGRAM AND GRADUATION REQUIREMENTS

Several changes are being made in the senior high school program and diploma requirements Alberta Education will:

1. maintain the higher expectations for student performance as reflected in the increased pass standard from 40% to 50%
2. increase the number of specified courses required for the General High School Diploma and Advanced High School Diploma
 - 2.1 for the General High School Diploma, course requirements for graduation will be increased by the inclusion of career and life management, a grade 12 social studies course, and an additional course in each of mathematics and science
 - 2.2 for the Advanced High School Diploma, career and life management and a Category C two- or three-course sequence to the grade 12 level have been introduced
 - 2.3 each course specified as a diploma requirement will be offered for a minimum of three credits to ensure that students acquire the basic knowledge, skills and positive attitudes appropriate to the subject area

2.4 a minimum of 100 credits for both the General High School Diploma and Advanced High School Diploma will be maintained

3. develop alternative course sequences in Social Studies 13-23-33 and General Science 10-20-30 programs. New diploma examinations will be introduced for Social Studies 33 and General Science 30
4. introduce the Certificate of Achievement as an alternative for students who are not expected to meet the General and Advanced High School Diploma requirements
5. commencing in September 1988, introduce an "incomplete standing" in circumstances where course expectations are not completed
6. emphasize technological literacy and the use of technology in instruction; community partnerships; developmental and cognitive needs of students; and continuity and articulation of programs from junior high to senior high, and from senior high to post-secondary institutions
7. increase specificity of course content in the required component of courses
8. accommodate individual differences through the elective component of all courses, as well as through alternative course sequences and student selection of complementary courses
9. revise program content to prepare students to live in a complex and changing society
10. stress the development of communication, critical thinking, social relationships and citizenship skills
11. emphasize the use of technology in the delivery of educational programs
12. explore alternatives to the Carnegie unit (the relationship between course credits and instructional time) and ensure that all students have access to at least

minimal instructional time to realize course expectations

PROPOSED IMPLEMENTATION SCHEDULE

It is proposed that the revised graduation requirements and core courses will be phased in as follows:

1. September 1988 - General High School Diploma and Advanced High School Diploma Requirements

1.1 The revised requirements for the General High School Diploma and Advanced High School Diploma will be introduced beginning with students who register in grade 10 in September 1988. Students must complete all mandatory programs and diploma requirements for graduation in 1991

1.2 Students registered in grades 11 or 12 in September 1988 will follow the present diploma requirements for graduation, but could take advantage of new provisions and new courses (for example, career and life management). Should circumstances prevent these grade 11 and 12 students from completing graduation requirements by 1990, they will be granted a reasonable period to complete non-diploma examination course requirements. Any deficiencies in diploma examination courses shall require the writing of diploma examinations that may reflect new program content

2. September 1988 - New Courses and Course Sequences Required for Graduation

2.1 Development priorities are: new core courses (for example, career and life management), new course sequences which will satisfy diploma requirements (for example, Social Studies 13-23-33, General Science

12-22, General Science 10-20-30), and existing core courses that require content revision

2.2 All new courses or course sequences which may be applied for diploma purposes will be phased in beginning at the grade 10 level. For example, Social Studies 13 will be implemented in September 1988 and General Science 10 in September 1990

3. Extended Timelines for Present Core and Complementary Courses

3.1 Revisions to existing core and complementary courses required to meet the intent of the policy (including courses to be available in the French language) will be made over an extended development and implementation timeline

3.2 Revisions to complementary programs will extend over time with priority placed on Category C courses for the Advanced High School Diploma, and on complementary courses which have high enrolments

4. September 1989 - Certificate of Achievement Requirements

4.1 Graduation requirements for the Certificate of Achievement will be phased in starting with students who register in their first year of high school courses in the Integrated Occupational Program in September 1989

4.2 Alberta Education will introduce guidelines for accommodating Academic-Occupational (A-O) students to ensure a smooth transition of these students into the Integrated Occupational Program.

The proposed implementation schedule for senior high school programs is outlined on the following page.

Table 1

**PROPOSED IMPLEMENTATION SCHEDULE
SENIOR HIGH SCHOOL PROGRAMS**

	COURSE	87-88	88-89	89-90	90-91	91-92	92-93	93-94	94-95	
C O R E	CAREER AND LIFE MANAGEMENT			20						
	SOCIAL STUDIES		10/13	20/23	30/33					
	MATHEMATICS			10/13/12	20/23/22	30/33/31				
	SCIENCE General Science Biology Chemistry Physics		12	22	10	20 8-20 C-20 P-20	30 8-30 C-30 P-30			
	ENGLISH LANGUE ET LITTÉRATURE		10/20 30			10/13	20/23	30/33		
	PHYSICAL EDUCATION		10							
C O M P L E M E N T A R Y	DRAMA			10/20/30						
	ART	31								
	MUSIC				10/20/30 11/21/31					
	PHYSICAL EDUCATION			20/30						
	BUSINESS EDUCATION							10/20/30		
	INDUSTRIAL EDUCATION					GENERAL COURSES		CAREER COURSES		
	SOCIAL SCIENCES					20/30				
	HOME ECONOMICS			10	20	30				
	READING 10	10								
	PRINCIPLES OF TECHNOLOGY			10	20	30				
	AGRICULTURE, FORESTRY, HORTICULTURE					10	20	30		
	SECOND LANGUAGES			10	20	30				
I. O. P.	ACADEMIC AND OCCUPATIONAL COURSES			14/16	24/26	34/36				

NOTE: Optional implementation of courses may be available prior to the proposed implementation schedule

PART
2

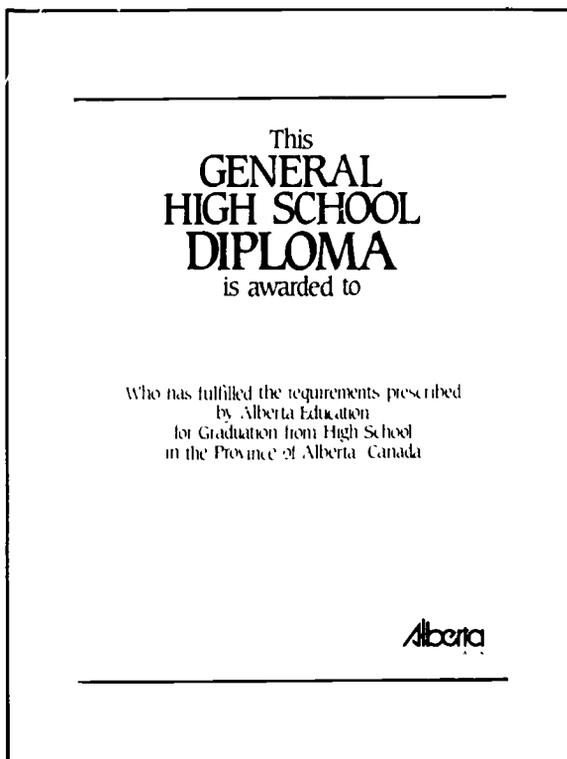
PROPOSED GRADUATION REQUIREMENTS

Under the new policy, three routes have been established to recognize achievement at the senior high school level: the General High School Diploma, the Advanced High School Diploma, and the Certificate of Achievement. Pursuit of a particular credential is a matter of student and parental choice. The choice is guided by such considerations as likelihood of personal success, career aspirations, and the learning needs of the individual student.

The two diploma routes are intended to meet the credential needs of the majority of high school students. Both routes ensure that the students receive a broad general education, and both fulfil the objectives for secondary education described in the policy statement. However, the General High School Diploma provides more opportunities to pursue and develop individual aptitudes and interests in a variety of complementary program areas. Both diploma routes allow students to meet varying requirements for post-secondary entrance. By itself, a diploma does not guarantee admission to post-secondary programs. Entrance requirements are specified by each institution and are determined, at the present time, by achievement in courses that usually consist of the core areas - English, mathematics, the sciences, and social studies. Complementary courses such as the fine arts, languages other than English, and the practical arts may also be accepted for post-secondary entrance. **Through the careful selection of courses, a student may qualify for post-secondary entrance with either the General High School Diploma or Advanced High School Diploma.**

THE GENERAL HIGH SCHOOL DIPLOMA

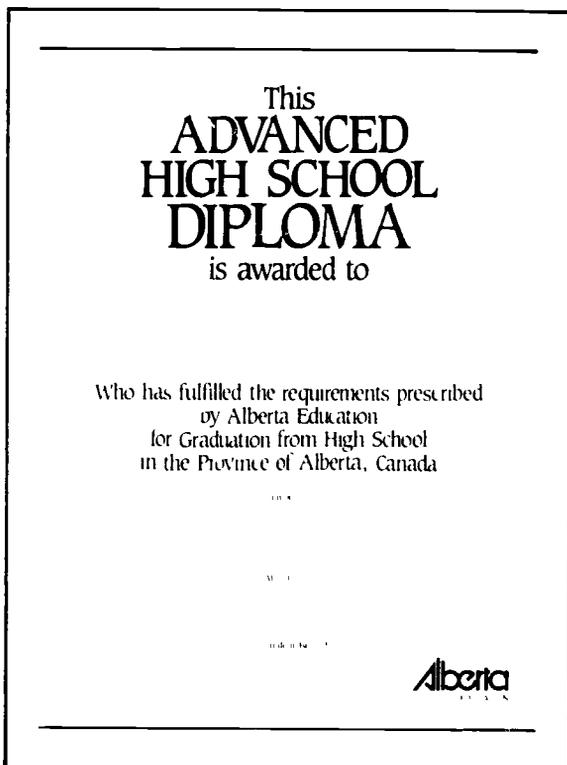
The policy statement establishes the minimum course and credit requirements for graduation. A General High School Diploma will be awarded to a student who holds one hundred program credits. The minimum requirements ensure a broadly based general education with opportunities to (i) acquire specialized knowledge for direct entry into the work force, (ii) participate in and experience a wide range of programs to fulfil personal interests or aspirations, and (iii) allow direct entry into post-secondary institutions. The proposed allocation of credits, the eligibility of courses, and other conditions for graduation are outlined on page 8.



THE ADVANCED HIGH SCHOOL DIPLOMA

The Advanced High School Diploma route is designed for students who wish to extend and refine their knowledge and intellectual skills toward achieving a more theoretical and abstract base of understanding for specific career pursuits. The Advanced High School Diploma route structures more closely than the General High School Diploma the nature and number of mandatory courses that a student would be required to complete. The number of complementary program options would be limited for students who choose the Advanced High School Diploma route. Students taking the Advanced High School Diploma would also be expected, under the Category C provision, to complete a two- or three-course sequence to the grade 12 level in a language other than English, a fine arts course, or a selected practical arts course identified by Alberta Education (see footnote 4 on page 9). The Category C requirement is designed to provide a challenging sequence of courses that complement the core program for an Advanced High School Diploma.

The course and credit requirements for the Advanced High School Diploma are outlined on page 9.



THE CERTIFICATE OF ACHIEVEMENT

The Integrated Occupational Program (IOP) is being developed for students who continue to experience difficulty in learning and who would normally be unable to achieve a General High School Diploma. Students who meet the entrance criteria and who, by parental and personal choice, opt to take this program, may enter in the student's eighth, ninth or tenth year of schooling. The program covers years eight through twelve. Completion of the program culminates in a Certificate of Achievement. Some students, because of the learning environment and modified programs, may be able in certain circumstances to continue on and eventually attain a General High School Diploma. Credits earned in a Certificate of Achievement route would be evaluated for their transferability toward the General High School Diploma.

The Integrated Occupational Program places emphasis on functional and applied skills in both academic and occupational areas. Depending on the nature of the learning difficulties they experience, students may be able to achieve success in some regular programs (for example, fine arts), but may require modified programs in other areas (for example, mathematics)

Requirements proposed for the Certificate of Achievement are presented on page 10.

Table 2

PROPOSED GENERAL HIGH SCHOOL DIPLOMA REQUIREMENTS

SUBJECT	CREDIT (minimum)	COURSES (minimum)	ELIGIBLE COURSES ¹ AND CREDITS ²	DIPLOMA EXAM
ENGLISH	15 CREDITS	3 COURSES	ENG 10-20-30 (5) (5) (5)	YES
			ENG 13-23-33 (5) (5) (5)	YES
SOCIAL STUDIES	15 CREDITS	3 COURSES	SOC ST 10 - 20 - 30 (5) (5) (5)	YES
			SOC ST 13 - 23 - 33 (5) (5) (5)	YES
MATHEMATICS	8 CREDITS	2 COURSES	MATH 10 - 20 (5) (5)	NO
			MATH 13 - 23 (5) (5)	NO
			MATH 12 - 22 (5) (3,5)	NO
SCIENCE General Science Physics, Chemistry, Biology	8 CREDITS	2 COURSES	GEN SC 10 - 20 (5) (5)	NO
			GEN SC 12 - 22 (5)(3,5)	NO
			Gen Sc 10 and one of Phys - Chem - Bio 20 (5)	NO
			Gen Sc 10 or 12 and one of Agriculture - Forestry - Principles of Technology - Horticulture 10 (3,4,5)	NO
PHYSICAL EDUCATION	3 CREDITS	1 COURSE	PHYS ED 10 (3,4,5)	NO
CAREER AND LIFE MANAGEMENT	3 CREDITS	1 COURSE	CALM 20 (3,4,5)	NO
A MINIMUM OF TWO GRADE 12 LEVEL COURSES OTHER THAN ENGLISH AND SOCIAL STUDIES	10 CREDITS (any combination)	2 COURSES	AS SPECIFIED IN THE JUNIOR-SENIOR HIGH SCHOOL HANDBOOK	NO ³

62 SPECIFIED CREDITS 38 UNSPECIFIED CREDITS

- Note:
1. Please refer to Part Three for further information regarding proposed course sequences (p 11).
 2. Credits are indicated in parentheses.
 3. Except in those courses where a diploma examination mark is required for credit (e g , Math 30).

Table 3

PROPOSED ADVANCED HIGH SCHOOL DIPLOMA REQUIREMENTS

	SUBJECT	CREDIT (minimum)	COURSES (minimum)	ELIGIBLE COURSES ¹ AND CREDITS ²	DIPLOMA EXAM
C A T E G O R Y A	ENGLISH	15 CREDITS	3 COURSES	ENG 10-20-30 (5) (5) (5)	YES
	LANGUE ET LITTÉRATURE ³	15 CREDITS	3 COURSES	LL 10-20-30 (5) (5) (5)	YES
	SOCIAL STUDIES	15 CREDITS	3 COURSES	SOC ST 10-20-30 (5) (5) (5)	YES
	MATHEMATICS	15 CREDITS	3 COURSES	MATH 10-20-30 (5) (5) (5)	YES
B	SCIENCE	15 CREDITS	3 COURSES	GEN SC 10 (5) and one of the following sequences	
	GENERAL SCIENCE			GEN SC 20 - 30	YES
	PHYSICS			(5) (5)	YES
	CHEMISTRY			PHYSICS 20 - 30	YES
BIOLOGY	(5) (5)	YES			
				CHEMISTRY 20 - 30	YES
				(5) (5)	YES
				BIOLOGY 20 - 30	YES
				(5) (5)	YES
C	SECOND LANGUAGES or PRACTICAL ARTS or FINE ARTS	10 CREDITS ⁴	2 COURSES ⁴	GRADES 10 - 11 - 12 ⁴ (3,4,5) (3,4,5) (5)	NO
	PHYSICAL EDUCATION	3 CREDITS	1 COURSE	PHYSICAL EDUCATION 10 (3,4,5)	NO
	CAREER AND LIFE MANAGEMENT	3 CREDITS	1 COURSE	CALM 20 (3,4,5)	NO

76 SPECIFIED CREDITS 24 UNSPECIFIED CREDITS

- Notes**
1. Please refer to Part Three for further information regarding proposed course sequences (p 11)
 2. Credits are indicated in parentheses.
 3. Students of parents identified under Section 23 of the Charter of Rights and Freedoms may present Langue et Littérature 10-20-30 as a Category A diploma requirement but must also present English 10-20-30. For these students, the Category C requirement is deemed to be met by English 10-20-30. Students whose parents are not identified under Section 23 of the charter may apply Langue et Littérature toward the Category C requirements.
 4. The number of credits taken to complete Category C may range from ten to fifteen credits. The requirement may be fulfilled by a three-course sequence to the grade 12 level where the condition of prerequisite status exists (for example, Art 10-20-30) or where a planned sequence of non-prerequisite courses (for example, Computer Processing 10 - Marketing 20 - Basic Business 30) has been approved by Alberta Education. Alternatively, the requirement may be fulfilled by two five-credit courses at the 20 and 30 level where the 20 level course forms the prerequisite to the 30 level course (for example, Office Procedures 20-30).

Table 4

PROPOSED CERTIFICATE OF ACHIEVEMENT REQUIREMENTS

HIGH SCHOOL YEARS

	10	11	12	
C O R E	<ul style="list-style-type: none"> ● Physical Education 10 (3)¹ 	<ul style="list-style-type: none"> ● Career and Life Management 20 (3) 		
	<p>A Modified Series²</p> <ul style="list-style-type: none"> ● English 14 (3) ● Social Studies 14 (3) ● Mathematics 14 (3) 	<ul style="list-style-type: none"> ● English 24 (3) ● Social Studies 24 (3) ● Science 14 (3) 	<ul style="list-style-type: none"> ● English 34 (3,5)³ ● Social Studies 34 (3,5)³ 	
	<p>B. Alternative Series</p> <ul style="list-style-type: none"> ● English 16 (3) ● Social Studies 16 (3) ● Mathematics 16 (3) 	<ul style="list-style-type: none"> ● English 26 (3) ● Science 16 (3) 	<ul style="list-style-type: none"> ● English 36 (3) 	
C O M P L E M E N T A R Y	<p>Regular Complementary Courses</p> <p>e.g.,</p> <ul style="list-style-type: none"> ● Art ● Drama ● Religion 			
	<p>Occupational Patterns (minimum 50% time allocation)⁴</p> <table border="0"> <tr> <td> <ul style="list-style-type: none"> ● Agribusiness ● Business and Office Procedures ● Creative Arts ● Construction and Fabrication </td> <td> <ul style="list-style-type: none"> ● Personal and Public Services ● Tourism and Hospitality ● Transportation </td> </tr> </table>			<ul style="list-style-type: none"> ● Agribusiness ● Business and Office Procedures ● Creative Arts ● Construction and Fabrication
<ul style="list-style-type: none"> ● Agribusiness ● Business and Office Procedures ● Creative Arts ● Construction and Fabrication 	<ul style="list-style-type: none"> ● Personal and Public Services ● Tourism and Hospitality ● Transportation 			

- Notes
1. Courses such as Physical Education 10, Career and Life Management 20, Science 14 or 16, and Mathematics 14 or 16 may be taken in any one of the three high school years. Courses that follow in sequence would be taken in the usual pattern.
 2. Regular courses (13 level) may be used in place of modified (14 series) courses depending on circumstances and student ability.
 3. Must be taken for five credits to permit transfer to a General High School Diploma.
 4. Credit values for Occupational Pattern courses are yet to be determined.

PART

3

PROPOSED DIRECTIONS FOR PROGRAM CONTENT AND COURSE SEQUENCES

The Secondary Education in Alberta policy statement indicates that programs must prepare students with the necessary skills and understandings to function in and shape tomorrow's society. Consequently, educational programs and learning opportunities must be more innovative, challenging, and future-oriented.

Alberta Education has reviewed core programs to determine the changes that are required for realizing the intent of the policy. It has initiated the development of new programs, and the revision of existing ones. New and revised curricula will continue to address basic knowledge and skills. The curriculum will emphasize critical thinking, the ability to use technology, and the ability to make choices and to understand the consequence of those choices. Steps are being taken to ensure that the proposed changes to programs will be consistent with the developmental abilities of students, sound educational practices, and the interests and needs of Alberta communities.

A summary of the proposed changes to senior high course organization and content follows. Although the introduction and basic content of additional programs such as career and life management have been mandated, many of the course descriptions are open to discussion, and subject to modifications.

CAREER AND LIFE MANAGEMENT

A career and life management course (CALM) will be a requirement for the General High School Diploma, the Advanced High School Diploma and the Certificate of Achievement. CALM is proposed as a three-credit course at the grade 11 level with five major themes: 1. Self-Management, 2. Well-Being, 3. Relationships, 4. Careers and the World of Work, 5. Independent Living. The course is being developed so that it may be extended to four or five credits through the addition of optional one-credit modules in areas such as entrepreneurship, human sexuality, crisis management, and consumer choices and investments. The implications of this new course for programs such as personal living skills, occupations, and business education will be addressed before finalizing the CALM course.

SOCIAL STUDIES

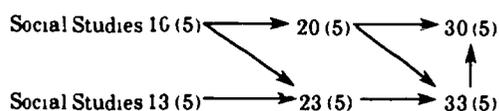
Social Studies 13-23-33 is being developed as an alternative course sequence to accommodate students whose learning needs are not adequately met by the present Social Studies 10-20-30 sequence. The 13-23-33 sequence will maintain the same emphasis on effective citizenship, critical thinking, and social responsibility. Social Studies 13-23-33 will be differentiated on the basis of instructional methodology, evaluation techniques, learning resources and complexity of content.

Both course sequences will be based on an understanding of history, geography, and other social sciences as they affect the Canadian community, and will be designed to accommodate transfer from one sequence to another.

The following diagram illustrates the proposed social studies sequences:

Figure 1

Social Studies Program Model



The role and purpose of the social science courses will have to be reconsidered in view of the revisions to the social studies program. It is recommended that the social sciences not be accepted as diploma substitutes for either the General High School Diploma or the Advanced High School Diploma

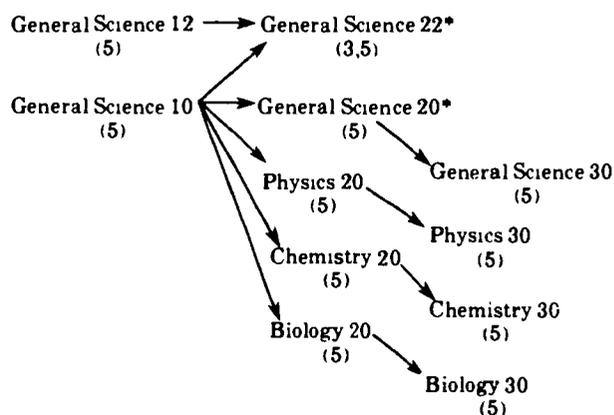
SCIENCES

The policy statement has introduced two significant diploma program changes in science at the senior high school level. The first is an additional science course required to achieve the General High School Diploma, raising the number of required science courses to two. The second change calls for the introduction of an academic general science program, as an alternative to the specialized study of physics, chemistry or biology. The general science route would extend from the elementary and junior high levels and meet the needs of students who may not prefer or need a specialized science for entrance into some post-secondary faculties.

The proposed science curriculum can be presented as follows:

Figure 2

Proposed Science Program Model



*The second science course requirement for the General High School Diploma may also be fulfilled by one of the following:

- Principles of Technology 10 (3,4,5)
- Agriculture 10 (3,4,5)
- Forestry 10 (3,4,5)
- Horticulture 10 (3,4,5)

A general science course for all grade 10 students provides pupils with additional time to consider program options in science and to gain a more comprehensive understanding of science. Students in grade 10 will take either of the two general science routes depending upon their academic abilities and interests. The General Science 10-20-30 sequence (as well as the specialized sciences) leads to the Advanced High School Diploma. The proposed General Science 12-22 sequence would be in keeping with the present Science 11 course.

MATHEMATICS

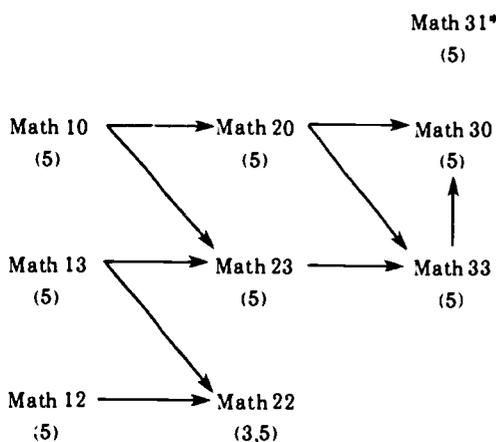
The policy statement has increased the number of mathematics courses required for a General High School Diploma to two, and has retained a three-course requirement (to the 30 level) for the Advanced High School Diploma. The current Mathematics 10-20-30 and 13-23-33 courses will be retained with increased emphasis on the development of problem-solving skills, the use of technology to enhance mathematical concepts and relationships, and practical applications. Present content objectives may be reordered, integrated with other topics, or eliminated altogether. The

Mathematics 31 course will be retained for students who require more advanced preparation for entrance into selected post-secondary faculties and programs. The Mathematics 12-22 sequence will concentrate on fundamental mathematics skills and their application in consumer, technical and service contexts.

The senior high school mathematics program alternatives can be represented as follows:

Figure 3

Proposed Mathematics Program Model



*Mathematics 30 will continue to form the prerequisite for Mathematics 31. However, schools may register students concurrently in Mathematics 30 and 31.

ENGLISH LANGUAGE ARTS

Proposed revisions to the present English 10-20-30 and 13-23-33 programs will include greater use of technological processes such as word processing and data management.

It is recommended that Literature 21A and B and Communications 21A and B not be accepted as diploma substitutes for English 20 or 23

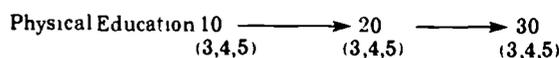
PHYSICAL EDUCATION

The secondary physical education program is based on developing skills in accordance with individual ability. The program for grades 7 through 10 has been validated during the 1986-87 school year and is expected to be available for optional implementation

in September 1987. The grade 10 course will increase from two to three credits. Physical Education 20 and 30, which are complementary courses, are being revised to reflect and extend the skills approach developed in the core program for grades 7 through 10.

Figure 4

Proposed Physical Education Credit Specifications



INTEGRATED OCCUPATIONAL PROGRAM

The Certificate of Achievement will be awarded to students who complete a minimum of 80 credits in the core and complementary courses of the Integrated Occupational Program as specified in Table 4 on page 10. Two routes to the Certificate of Achievement are available. Students selecting the modified route must achieve a minimum of 30 credits in regular and modified core courses, and 50 credits in complementary courses. Students selecting the alternative route must achieve a minimum of 24 credits in regular and alternative core courses, and 56 credits in complementary courses. In both routes, students must spend a minimum 50% time allocation in Occupational Patterns

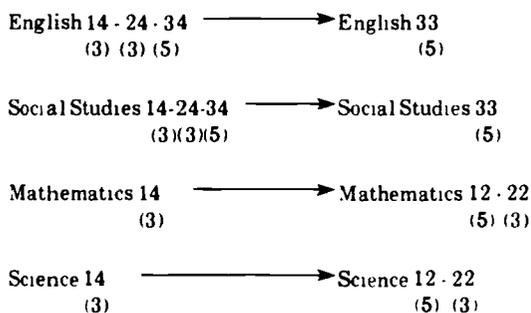
The core requirements of English, social studies, mathematics, and science may be met through the IOP "14" series of modified courses or the IOP "16" series of alternative courses. The 14-24-34 series will reflect the content of regular "13" level courses in English and social studies and "12" level courses in mathematics and science, but within a functional, life skills, and applied vocational context. The "14" series route will be applicable to IOP students with moderate learning disabilities and to school situations where integration with regular program students is necessary or preferred. The "16" series will be a further modification for those students whose learning disability or program deficiency warrants a specialized classroom program. Core courses should be scheduled throughout the three high school years, rather than being concentrated in any given year

The complementary component of the IOP will consist of compulsory Occupational Pattern courses taken in each high school year (minimum 50% time allocation), and the option of taking regular complementary courses (for example, art, drama, music, religious studies) according to a student's interests and needs. The seven program families within the Occupational Pattern (agribusiness, business and office procedures, creative arts, construction and fabrication, personal and public services, tourism and hospitality, transportation) will consist of course sequences that reinforce and maintain basic skills and knowledge covered in the core courses. At the same time, the Occupational Pattern courses will provide job-related training in various trade and service areas. A number of locally developed courses presently approved for use in Academic-Occupational schools will be considered for provincial use, and new courses will be developed according to need

Students who have obtained a Certificate of Achievement through the modified series of "14" courses may transfer to a regular program in order to complete the requirements of a General High School Diploma. Normally this would occur following a three year Integrated Occupational Program. Students who transfer at this point must have completed English 34 and Social Studies 34 for five credits each, as indicated in the figure below.

Figure 5

Proposed Transfer Between Certificate of Achievement and General High School Diploma

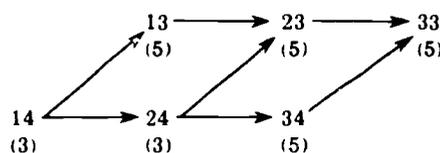


School principals may exercise flexibility in meeting the individual needs of students by substituting regular "13" series courses in place of modified "14" series courses. Figure 6 illustrates the recommended transfer points between the "12" and

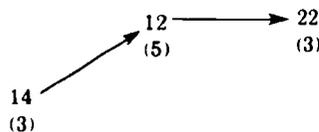
"14" series courses for mathematics and science, and the "13" and "14" series courses for social studies and English. Also, students who initially select the alternative route may subsequently transfer to the modified route. Achievement equivalencies between "14" and "16" series courses will be determined by the school principal, based on a student's progress. Alternative "16" series courses can be applied directly as prerequisites only to "14" series courses. Notwithstanding any transfer, the minimum credit requirements in each subject area specified for the Certificate of Achievement must be met in order to attain this credential

Figure 6

Proposed Transfer Points from the Integrated Occupational Program to the General High School Diploma Program



English and Social Studies



Mathematics and Science