DOCUMENT RESUME

ED 381 940 EC 303 886

TITLE Integrated Occupational Program: Information Manual

for Administrators, Counsellors, and Teachers.

Curriculum Standards.

INSTITUTION Alberta Dept. of Education, Edmonton. Curriculum

Standards Branch.

REPORT NO ISBN-0-7732-1165-9

PUB DATE 94

NOTE 96p.; For the 1989 edition, see ED 306 417.

PUB TYPE Reports - Descriptive (141) -- Guides - Non-Classroom

Use (055)

EDRS PRICE MF01/PC04 Plus Postage.

DESCRIPTORS Daily Living Skills; Educational Methods; Foreign

Countries; *Integrated Curriculum; Interdisciplinary

Approach; Lifelong Learning; Partnerships in

Education; Program Implementation; *School Business Relationship; *School Community Programs; Secondary

Education; Skill Development; *Special Needs

Students; *Vocational Education

IDENTIFIERS *Alberta

ABSTRACT

The purposes of the Integrated Occupational Program developed for special needs students in grades 8-12 in Alberta (Canada) are to have students become responsible members of society, develop entry-level vocational abilities, and become aware of the need and opportunities for lifelong learning. The focus is on the development of knowledge, skills, and attitudes necessary for everyday living at home, in the community, and on the job. While basic skill development in the core courses is directed to improving students' abilities in communication, computation, and social relationships, the practical arts/occupational courses provide opportunities for students to apply these abilities. The program features curriculum integration, social integration, student integration, and community integration. The program's occupational component encompasses agribusiness, business/office operations. construction and fabrication, creative arts, natural resources, personal and public services, tourism and hospitality, and transportation. The program is enriched through participation and support of community members and representatives of business, industry, and local agencies and organizations. This guide describes the target population, program benefits, implementation strategies, student selection process, junior high and senior high p-ogram design, teacher role, teaching strategies, assessment strategies, indicators of program effectiveness, and implementation of community partnerships. A list of 18 suggested professional readings is provided. (JDD)

\$\text{\$\



Reproductions supplied by EDRS are the best that can be made
 from the original document.



INTEGRATED OCCUPATIONAL PROGRAM

U.S. DEPARTMENT OF EDUCATION Office of Educational Research and Improvement EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

This document has been reproduced as received from the person or organization originating it.

Minor changes have been made to improve reproduction quality

INFORMATION MANUAL FOR ADMINISTRATORS, COUNSELLORS AND TEACHERS

1994

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

CURRICULUM STANDARDS





Points of view or opinions stated in this document do not necessarily represent official OERI position or policy

INTEGRATED OCCUPATIONAL PROGRAM

Information Manual

for

Administrators, Counsellors and Teachers



ALBERTA EDUCATION CATALOGUING IN PUBLICATION DATA

Alberta. Alberta Education.

Integrated Occupational Program: information manual for administrators, counsellors and teachers.

ISBN 0-7732-1165-9

- 1. Interdisciplinary approach in education—Alberta.
- 2. Education, Cooperative-Alberta. 3. Vocational education-Study and teaching-Alberta. I. Title.
- II. Title: Information manual for administrators, counsellors and teachers.

LC1047.C2.A333 1994

370,113

The primary intended audience for this document is:

Administrators	✓
Counsellors	✓
General Audience	
Parents	
Students	
Teachers	 1

Copyright @ 1994, the Crown in Right of Alberta, as represented by the Minister of Education. Alberta Education, 11160 Jasper Avenue, Edmonton, Alberta. T5K 0L2.

Permission is hereby given by the copyright owner for any person to reproduce with acknowledgement this document or any part thereof for educational purposes and on a non-profit basis, with the exception of such previously published material for which the department has secured copyright permission.

The materials contained in this manual have been derived from numerous sources and are designed to provide information for administrators, counsellors and teachers. Every effort has been made both to provide proper acknowledgement of the original source and to comply with copyright regulations. If cases are identified where this has not been done. it would be appreciated if Alberta Education could be notified to enable appropriate corrective action to be taken.



FOREWORD

This manual is designed to assist administrators, counsellors and teachers in implementing the Integrated Occupational Program in Grades 8–12. The information contained herein should be used in conjunction with the specific information provided in the program of studies/curriculum guides and teacher resource manuals for each subject area.

Careful planning and an understanding of the intent, structure, expectations, goals and objectives of the Integrated Occupational Program are essential for successful implementation of this program. The program is designed to be enriched through participation and support of community members and representatives of business, industry, local agencies and organizations.



ACKNOWLEDGEMENTS

Deputy Director:

Keith Wagner

Program Manager:

Michael Alpern

Editing:

Nancy Foulds

Desktop Publishing:

Lin Gray, Dianne Hohnstein, Esther Yong

For further information, please direct inquiries to:

Program Manager Integrated Occupational Program Alberta Education Devonian Building 11160 Jasper Avenue Edmonton, Alberta, T5K 0L2 Telephone: 422–4872, Fax: 422–5129



TABLE OF CONTENTS

PROGRAM OVERVIEW

Why Have an Integrated Occupational Program?	1
Philosophy	1
Mandate/Rationale	1
Purpose and Objectives	1
Goals of the IOP	2
Who is the Integrated Occupational Program Designed For?	3
Target Population	3
Relationship Between the IOP and Special Education	4
What is the Integrated Occupational Program?	4
Synopsis	4
Integration	4
Practical Arts/Occupational Component	6
Benefits of the IOP	7
Certificate of Achievement	8
How May the Integrated Occupational Program Be Implemented?	9
Implementation Strategies	9
Student Selection Process	12
Transfer Points from the IOP	12
Funding	13
Informational Videos	13
Implementation Assistance	13
implementation Assistance	10
WALLES AND A WITTON ATTEN COOLINATION AL PROCEDAN	
JUNIOR HIGH INTEGRATED OCCUPATIONAL PROGRAM	
Program Design	15
Course Codes: Junior High IOP Courses	17
Junior High Curricular Documents	17
Course Transfer Points: Junior High	17
	18
Achievement Testing	10
SENIOR HIGH INTEGRATED OCCUPATIONAL PROGRAM	
Program Design	19
Core Courses	20
Complementary Courses	20
Complementary Courses	



Achievement	Overview: IOP Occupational Component	21
Achievement Profile	Registered Apprenticeship Program	23
Transfer Between the Certificate of Achievement and the High School Diploma 25 Course Transfer Points: Senior High IOP Courses 26 Transfer Between IOP Occupational and CTS Course Streams 27 Course Codes: Senior High IOP Courses 28 Senior High Resources 29 Timetabling Alternatives 30 IMPLEMENTING AND MAINTAINING A SUCCESSFUL INTEGRATED OCCUPATIONAL PROGRAM 31 Information for Administrators and IOP Coordinators 33 Student Self-esteem 33 Characteristics of the Successful IOP Teacher 34 Preparing the IOP Teacher 35 Role of the IOP Coordinator 35 Role of the IOP Coordinator 35 Role of the IOP Courticulum Integration 36 Community Partnerships 36 Information for IOP Teacher 39 Information for IOP Teacher 39 The Program of Studies 39 The Program of Studies 39 The Program of Studies/Curriculum Guide 39 The Student Workbook 30 Text, Media and Software Resources 40 The IOP Problem-solving Model 41 Related Research 41 Related Research 42 Related Resources 42 Guiding Principles 42 Thinking-related Behaviours 46 Strategies for Teaching: "Getting the Mos! from IOP Students 46 Sessing Students' Work 46 Assessing Students' Work 46	Achievement	25
Course Transfer Points: Senior High IOP Courses 26 Transfer Between IOP Occupational and CTS Course Streams 27 Course Codes: Senior High IOP Courses 28 Senior High Resources 29 Timetabling Alternatives 30 IMPLEMENTING AND MAINTAINING A SUCCESSFUL INTEGRATED OCCUPATIONAL PROGRAM 31 Information for Administrators and IOP Coordinators 33 Sudent Self-esteem 33 Selecting the IOP Teacher 33 Characteristics of the Successful IOP Teacher 34 Preparing the IOP Teacher 35 Role of the IOP Coordinator 35 Planning Time for Curriculum Integration 36 Community Partnerships 36 Indicators of an Effective Integrated Occupational Program 36 Information for IOP Teachers 39 The Program of Studies 39 The Program of Studies 39 The Program of Studies 39 The Teacher Resource Manual 39 The Student Workbook 40 Text, Media and Software Resources 40 The IOP Problem-solving Model 41 Understanding the IOP Student's Level of Cognitive Development 41 Related Resources 42 Guiding Principles 42 Guiding Principles 42 Guiding Principles 42 Thinking-related Behaviours 46 Assessing Students' Work 46 Assessing Students' Work 46 Assessing Students' Work 46	Achievement Profile	25
Transfer Between IOP Occupational and CTS Course Streams 27 Course Codes: Senior High IOP Courses 28 Senior High Resources 29 Timetabling Alternatives 30 IMPLEMENTING AND MAINTAINING A SUCCESSFUL INTEGRATED OCCUPATIONAL PROGRAM Information for Administrators and IOP Coordinators 33 Student Self-esteem 33 Selecting the IOP Teacher 33 Selecting the IOP Teacher 34 Preparing the IOP Teacher 34 Role of the IOP Coordinator 35 Role of the IOP Coordinator 35 Planning Time for Curriculum Integration 36 Community Partnerships 36 Indicators of an Effective Integrated Occupational Program 36 Information for IOP Teachers 39 The Program of Studies/Ourriculum Guide 39 The Program of Studies/Ourriculum Guide 39 The Student Workbook 40 Text, Media and Software Resources 40 The IOP Problem-solving Model 41 Understanding the IOP Student's Level of Cognitive Development 41 Related	Transfer Between the Certificate of Achievement and the High School Diploma	25
Course Codes: Senior High IOP Courses 28 Senior High Resources 29 Timetabling Alternatives 30 IMPLEMENTING AND MAINTAINING A SUCCESSFUL INTEGRATED OCCUPATIONAL PROGRAM Information for Administrators and IOP Coordinators 33 Student Self-esteem 33 Selecting the IOP Teacher 33 Characteristics of the Successful IOP Teacher 34 Preparing the IOP Teacher 35 Role of the IOP Coordinator 35 Planning Time for Curriculum Integration 36 Community Partnerships 36 Indicators of an Effective Integrated Occupational Program 36 Information for IOP Teachers 39 The Program of Studies 39 The Program of Studies Surviculum Guide 39 The Teacher Resource Manual 39 The Student Workbook 40 Text, Media and Software Resources 40 The Kindent Workbook 41 Related Resources 42 Guiding Principles 42 Thinking-related Behaviours 42 S	Course Transfer Points: Senior High IOP Courses	26
Senior High Resources	Transfer Between IOP Occupational and CTS Course Streams	27
IMPLEMENTING AND MAINTAINING A SUCCESSFUL INTEGRATED OCCUPATIONAL PROGRAM Information for Administrators and IOP Coordinators	Course Codes: Senior High IOP Courses	28
IMPLEMENTING AND MAINTAINING A SUCCESSFUL INTEGRATED OCCUPATIONAL PROGRAM Information for Administrators and IOP Coordinators	·	29
Information for Administrators and IOP Coordinators 33 Student Self-esteem 33 Selecting the IOP Teacher 33 Characteristics of the Successful IOP Teacher 34 Preparing the IOP Teacher 35 Role of the IOP Coordinator 35 Role of the IOP Coordinator 35 Planning Time for Curriculum Integration 36 Community Partnerships 36 Indicators of an Effective Integrated Occupational Program 36 Information for IOP Teachers 39 The Program of Studies 39 The Program of Studies/Curriculum Guide 39 The Teacher Resource Manual 39 The Student Workbook 40 Text, Media and Software Resources 40 The IOP Problem-solving Model 41 Understanding the IOP Student's Level of Cognitive Development 41 Related Resources 42 Guiding Principles 42 Thinking-related Behaviours 42 Strategies for Teaching: "Getting the Most from IOP Students 43 Encouragement Versus Praise 43 Providing Structure 44 Setting Expectations 466 Assessing Students' Work	Timetabling Alternatives	30
Student Self-esteem 33 Selecting the IOP Teacher 33 Characteristics of the Successful IOP Teacher 34 Preparing the IOP Teacher 35 Role of the IOP Coordinator 35 Planning Time for Curriculum Integration 36 Community Partnerships 36 Indicators of an Effective Integrated Occupational Program 36 Information for IOP Teachers 39 The Program of Studies 39 The Program of Studies/Curriculum Guide 39 The Teacher Resource Manual 39 The Student Workbook 40 Text, Media and Software Resources 40 The IOP Problem-solving Model 41 Understanding the IOP Student's Level of Cognitive Development 41 Related Research 41 Related Research 42 Guiding Principles 42 Thinking-related Behaviours 42 Strategies for Teaching: "Getting the Most from IOP Students 43 Encouragement Versus Praise 44 Setting Expectations 46 Assessing Students' Work		
The Program of Studies The Program of Studies/Curriculum Guide The Teacher Resource Manual The Student Workbook Text, Media and Software Resources The IOP Problem-solving Model Understanding the IOP Student's Level of Cognitive Development Helated Research Related Resources Guiding Principles Thinking-related Behaviours Strategies for Teaching: "Getting the Most from IOP Students Encouragement Versus Praise Providing Structure Setting Expectations Assessing Students' Work 43 46 46 47 48 48 48 48 48 48 48 48 48	Student Self-esteem Selecting the IOP Teacher Characteristics of the Successful IOP Teacher Preparing the IOP Teacher Role of the IOP Coordinator Planning Time for Curriculum Integration Community Partnerships	33 34 35 35 36 36
Encouragement Versus Praise	The Program of Studies The Program of Studies/Curriculum Guide The Teacher Resource Manual The Student Workbook Text, Media and Software Resources The IOP Problem-solving Model Understanding the IOP Student's Level of Cognitive Development Related Research Related Resources Guiding Principles	39 39 40 40 41 41 41 42 42
	Encouragement Versus Praise	. 43 . 44 . 46



Performance Assessment Scale Portfolio-based Assessment Instructional Mediation Oral Language in the Classroom Modelling	50 51 53 53 56
Techniques for Maximizing Classroom Effectiveness	57
Student Behaviour Indicators	59
Professional Reading List	61
Alberta Education Documents	63
COMMUNITY PARTNERSHIPS	
Definition	65
Rationale	65
Mandate	66
Objectives	66
Benefits Students Teachers Schools Jurisdictions Business and Industry Community	67 67 68 68 68 69
Types of Community Partnerships	69
Launching Successful Partnerships Initiating and Planning Partnerships Implementing Partnerships Managing and Monitoring Partnerships Evaluating Partnerships Validating Partnerships Recognizing Community Partners	74 78 80 82



PROGRAM OVERVIEW

WHY HAVE AN INTEGRATED OCCUPATIONAL PROGRAM?

PHILOSOPHY

The need to develop programs for students with exceptional needs rests on the Government of Alberta's fundamental belief that the unique nature and worth of each individual must be respected. (Secondary Education in Alberta Policy Statement, June 1985, page 7)

The Integrated Occupational Program (IOP) also rests on a number of further beliefs and assumptions about the way children learn, their overall potential and their learning needs in relation to societal demands. These beliefs and assumptions have a tremendous impact on program goals, design and implementation.

There is no fixed pattern, nor is there any predictability to students' learning, given an intervention such as an integrated curriculum. Each student's learning pattern, style and pace is unique, reflecting past experiences and incorporating experiences provided by the Integrated Occupational Program. Though seen as "exceptional" in their learning needs, students targeted properly for the program nonetheless fall within the "normal" range of learning potential. Every effort must therefore be made to offer IOP students learning experiences that provide equitable opportunities to participate in all aspects of school life.

Inherent in the Integrated Occupational Program is an overriding commitment to prepare students for meaningful participation in our society.

MANDATE/RATIONALE

Recognizing that the needs of both the individual and society may best be served through the provision of school experiences tailored to meet student needs and abilities, the Policy Statement directs that the Integrated Occupational Program: Grades 8–12 be developed for students who continue to experience difficulty in learning.

The Policy Statement (page 23) further directs that:

"A Certificate of Achievement will be awarded to those students who, because of their abilities and needs, have taken the Integrated Occupational Program. The certificate will recognize their achievement in that program."

PURPOSE AND OBJECTIVES

The purpose of the Integrated Occupational Program is to enable students to:

- become responsible members of society
- develop entry-level vocational abilities
- become aware of the need and opportunities for lifelong learning.



The Integrated Occupational Program is designed to meet the needs of students who have experienced difficulty with the higher-level elementary and secondary school programs.

In the junior high school component of the program, emphasis is placed on providing students with opportunities to:

acquire, consolidate and expand upon concepts, skills and attitudes necessary for successful crossover to regular programs

OR

progress in the IOP at the senior high school level.

In the senior high school component of the program, students are offered opportunities to:

acquire, consolidate and expand upon concepts, skills and attitudes necessary for responsible citizenship, lifelong learning and successful transition to the workplace

AND/OR

provide successful transition to higher-level senior high programs.

GOALS OF THE IOP

The goals of the IOP are in keeping with the learning expectations stated in Alberta Education's Meeting the Challenge: Three-Year Business Plan. These are listed below.1

Schools will be accountable for their students' achievement of provincial learning standards including employability skills consistent with workplace requirements.

Schools will provide a variety of learning experiences so that students:

- can read for information, unc' standing and enjoyment
- write and speak clearly, accurately and appropriately for the context
- use mathematics to solve problems in business, science and daily-life situations
- understand the physical world, ecology and the diversity of life
- understand the scientific method and societal context of science
- know the history and geography of Canada and have a general understanding of world history and geography
- understand Canada's political, social and economic systems in a global context
- can research an issue thoroughly
- know how to work independently and as part of a team
- respect the cultural diversity of Canada and appreciate literature and the arts
- know the basic requirements of an active, healthful lifestyle
- recognize the importance of accepting responsibility for their physical and emotional well-being and appreciate the role of the family and other relationships to that well-being
- manage time and other resources needed to complete a task
- use computer and communication technologies
- demonstrate initiative, leadership, flexibility and persistence
- evaluate their own endeavours and continually strive to improve
- have the desire and realize the need for life-long learning.

Because the above goals are highly interrelated, each complementing and reinforcing the others, priority ranking among them is not suggested. It is recognized that in sequencing learning activities for students, some learner expectations are emphasized earlier than others; however, in relation to the total years of schooling, they are of equal importance.

^{1.} Meeting the Challenge: Three-Year Business Plan, 1994/95-1996/97, Alberta Education, page 5.



Within these broad goals, the specific goals of the IOP are to help students to:

- develop essential concepts, skills and positive attitudes in preparation for their roles in the home, community and the workplace
- foster success and achievement in their learning experiences, thereby enhancing their self-esteem
- foster an attitude for lifelong learning and develop skills in recognizing and accessing lifelong learning opportunities.

WHO IS THE INTEGRATED OCCUPATIONAL PROGRAM DESIGNED FOR?

TARGET POPULATION

The Integrated Occupational Program is designed for students who require an integrated program that enhances their academic and occupational competencies and their abilities to enter into employment and/or continuing education and training.

The number of students who may be appropriately recommended to take the Integrated Occupational Program varies across different school jurisdictions in the province. Schools should adopt policies and procedures to identify candidates before the end of their seventh year in school. The following criteria, taken together, may help determine student eligibility for the Integrated Occupational Program.

- Age—Students must be $12\frac{1}{2}$ years old or older as of September 1 in the year of entry to the program.
- Achievement—Candidates for the Integrated Occupational Program have a range of abilities and interests. They demonstrate reading, writing, computational and other levels of achievement below those of their age peers, which tends to make it difficult for them to experience success in a diploma program. However, students should be encouraged to take courses outside the IOP when their achievement levels indicate that it is appropriate for them to do so.
- Related Factors—Related factors (e.g., behaviour, motivation, emotional make-up, psychomotor coordination, work habits, attendance, persistence) should be considered.
- Learning Styles—Concrete learning experiences related to occupations will benefit these students.

The IOP target population should not include:

- students who require special needs programs, including students with educable mental handicaps and students with trainable mental handicaps
- students whose needs for remediation can be addressed through the elective components of regular courses or through remedial classes
- students whose sole criterion for entry is excessively disruptive behaviour.



RELATIONSHIP BETWEEN THE IOP AND SPECIAL EDUCATION

By law, schools MUST provide special education to students who require it. The Integrated Occupational Program, on the other hand, is a program of choice; i.e., local jurisdictions decide whether the IOP is the best way to meet the needs of selected students and, if so, may choose to offer it. The IOP is not designed to replace special education.

WHAT IS THE INTEGRATED OCCUPATIONAL PROGRAM?

SYNOPSIS

The IOP is a five-year program that begins in the eighth year of schooling and continues through the twelfth year of schooling. The program is for students who have experienced difficulty in learning. The focus of the IOP core courses is on the development of knowledge, skills and attitudes necessary for everyday living at home, in the community and on the job. While basic skill development in the core courses is directed to improving students' abilities in communication, computation and social relationships, the practical arts/occupational courses provide opportunities for students to apply these abilities.

The recommended teacher-student ratio for IOP classes is 1-20 in core courses and 1-15 in practical arts/occupational courses. These class sizes enable individualized student attention.

The IOP courses, and in particular the practical arts/occupational courses, all have a community partnership component (see Community Partnerships section, page 65). To provide enrichment to the curriculum, parents, private citizens, business, industry and community volunteers may come into the school. Alternatively, students may go out into the community and/or business world to develop and apply their learnings. As students see the relevance of their learning, they may become more interested in learning and in acquiring needed skills. Community partnership opportunities also provide a means of enhancing students' social skills and self-esteem while providing occupational preparation for entry into the world of work.

INTEGRATION

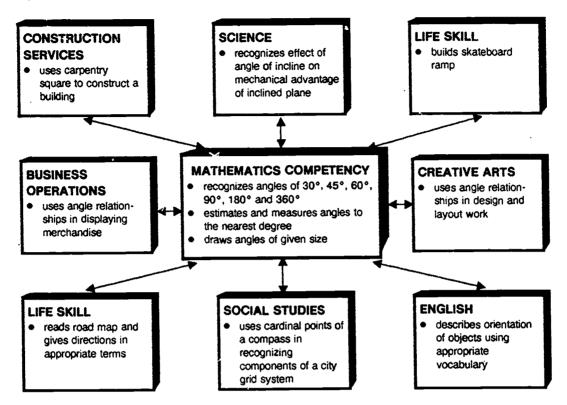
The name "Integrated Occupational Program" has been chosen with care. Within the IOP, integration occurs in a number of ways:

Curriculum integration. Knowledge, skills and attitudes addressed in core subjects may be taught
and reinforced through concrete applications in practical arts/occupational courses and other subject
areas.

Curriculum integration occurs as a direct result of planning for instruction across curricular subject areas. (See Planning Time for Curriculum Integration, page 36.)



For example,



- Social integration. Social skills are integrated into every IOP course. Research clearly indicates that typical IOP students have experienced frustration and failure in the regular school program and consequently may have low self-esteem and display poor social skills. The IOP curriculum addresses positive social skills development by breaking down units of instruction into manageable portions that assist students to experience success and thus feel good about themselves.
- Student integration. Integration of students into the school environment is encouraged at the local level. IOP students should be members of school teams, participants in sports functions, members of the student council, etc. Wherever possible, IOP students are encouraged to enroll in regular classes; e.g., physical education, CALM, art, music, drama.
- Community integration. The Integrated Occupational Program promotes integration between the school and the community. Community partnerships are an essential and required aspect of every practical arts/occupational course. As students get "on-the-job experience," learning becomes increasingly relevant and meaningful.

All IOP program of studies/curriculum guides are arranged in a four-column format. Column three provides specific suggestions for integration across subject areas. To ensure integration, teachers and administrators are encouraged to work together when organizing for instruction. Cooperative planning and organization time is vital at the local level to ensure that integration becomes a reality.



PRACTICAL ARTS/OCCUPATIONAL COMPONENT

The practical arts/occupational component of the Integrated Occupational Program provides opportunities for students to gain practical learning experiences within the school, home and community in the context of eight occupational clusters. The occupational courses focus first on the needs of students and seek to build on their strengths rather than on their limitations. These courses are designed to help students construct their own bridges as they make the transition from school to the workplace and/or post-secondary education and training.

Three key concepts about the practical arts/occupational courses emerge from the above:

- Students need to develop generic skills¹ that will enable them to make educated decisions
 concerning the roles they wish to play in the workplace and in the community.
- Students need to develop work skills that will enable them to gain at least entry-level employment
 in one or more occupational clusters.
- The development of both generic skills¹ and work skills can best be achieved through courses of study that integrate:
 - the learning of essential knowledge, skills and attitudes across the curriculum
 - the school and the community as partners in the educational process.

Each practical arts/occupational course in the Integrated Occupational Program is designed to enable students to develop essential knowledge, skills and attitudes in the context of one or more of eight occupational clusters.

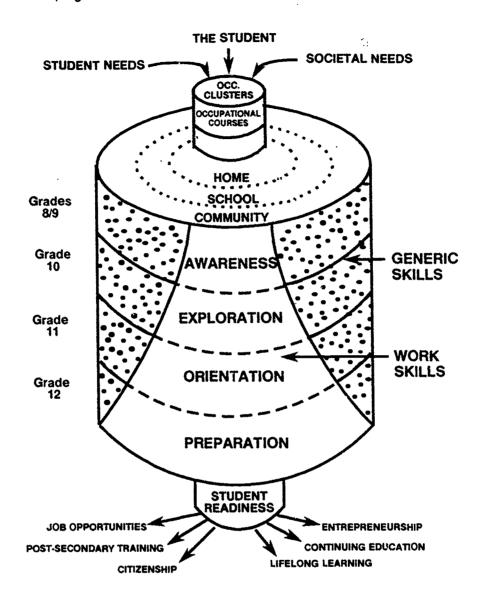
The Grades 8 and 9 practical arts course are designed to provide students with AWARENESS of the eight occupational clusters addressed in the senior high occupational component.

In Grade 10, students EXPLORE potential career opportunities within the eight occupational clusters. Grade 11 students narrow their career focus and may select an ORIENTATION in two or more related occupational courses. Grade 12 students narrow their career focus even further to develop skills in PREPARATION for their transition either to the world of work or to further education or training.

Generic Skills are closely related to the Basic Skills component of the CTS curriculum and the Employabilty Skills identified by the Conference Board of Canada (September 1992).



The model below shows the sequence of skill development and the anticipated outcomes for students who complete the IOP program and attain a Certificate of Achievement.



BENEFITS OF THE IOP

The structure of the IOP provides the following benefits:

- All learning in core subjects begins at the concrete developmental level. Instruction begins with reference to real life application(s). These learnings are deliberately reinforced and applied in the practical arts/occupational courses (e.g., "measurement" may be taught in mathematics and applied in the occupational courses). It is often this deliberate reinforcement in a practical area that enables students to understand the need for academic knowledge as it applies to success in the workplace.
- Both junior and senior high IOP core courses (language arts, mathematics, science, social studies) reflect the content of higher-level courses but within a functional, life skills and applied vocational context.



- The program is designed to allow flexibility for students to access occupational courses as well as other complementary courses. The amount of time for occupational courses increases at the senior high level.
- The program encourages student transfer into and inclusive instruction within higher-level courses where appropriate. Teachers are encouraged to use varied teaching strategies in keeping with the abilities, needs, interests and learning styles of individual students.
- Content emphasis in each course is on knowledge, skills and attitudes required for becoming responsible members of society.
- The community partnership component ensures that the needs of IOP students are addressed in practical, real life learning situations. Community partnerships provide practical experience with role models, mentors, community endeavours and the business world. Such experiences increase students' motivation and achievement, enhance their self-image, and provide opportunities to:
 - acquire both employability and career-specific skills while attending school
 - increase career awareness
 - explore occupational choices
 - develop understanding of the employer/employee relationship
 - assist in the transition from school to the workplace.
- The resources suggested are at a level of reading and interest suitable for IOP students.
- The program offers multiple entry, transfer and exit points to accommodate the needs of individual students. As soon as a student indicates a readiness for success in one or more higher-level course(s), exit is encouraged.
- There is emphasis on effective teaching strategies that accommodate a variety of learning styles.
- Students earn a Certificate of Achievement upon successful completion of 80 credits of instruction in specified and unspecified courses.
- By taking additional high school courses, students who obtain the appropriate credits may also earn high school diplomas.

CERTIFICATE OF ACHIEVEMENT

A provincially issued Certificate of Achievement will be awarded to students who complete a minimum of 80 credits in the specified and unspecified core and complementary courses* of the Integrated Occupational Program:

Core Courses

27 credits (minimum)

Occupational Courses 40 credits (minimum)

Unspecified Courses

13 credits

80 credits

[★] The details of specified courses are described in the senior high section of this manual, beginning on page 19.



HOW MAY THE INTEGRATED OCCUPATIONAL PROGRAM BE IMPLEMENTED?

IMPLEMENTATION STRATEGIES

There are many creative strategies used to implement effective Integrated Occupational Programs across the province. In fact, there is no one best way to implement the IOP and no one best way to organize for instruction.

Every school jurisdiction and school faces unique challenges when planning to implement the IOP. For example, the challenges facing a small rural school may be significantly different from those facing a large urban school. In each situation, however, detailed planning should precede implementation.

The **Program Development/Implementation Guide** on the following page outlines tasks that may be undertaken before, during and after implementation. Selection, prioritization and sequencing of these tasks may differ in different jurisdictions/schools.

Administrators, counsellors and teachers indicate that visits to other schools and discussions with school personnel offering the program have assisted them in their implementation plans. Key areas for local consideration include:

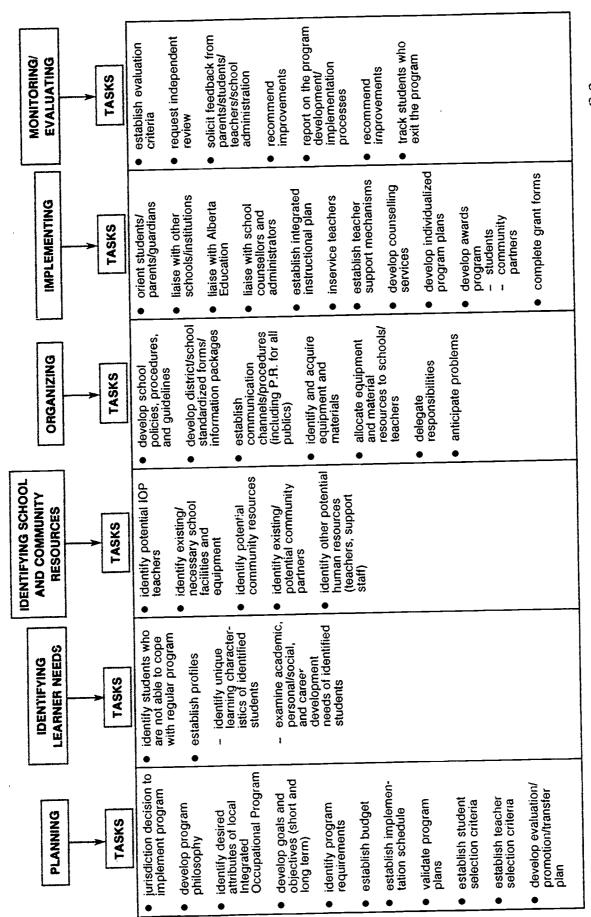
- how to organize for instruction when the number of IOP students is relatively small/large
- how to establish linkages/partnerships with other school jurisdictions and institutions in order to implement/further develop a program
- who should teach IOP students/courses
- how many teachers should IOP students receive instruction from each day/week
- how to timetable IOP students to maximize community partnership learning opportunities
- how to establish, monitor, nurture community partnerships
- who should coordinate community partnership activities
- how may parents/guardians be involved in maximizing learning opportunities/experiences
- how may students' successes and achievements be communicated to different publics.

The IOP: Organizing for Instruction Year Planner shown on page 11 may assist administrators, counsellors and teachers when planning the school's Integrated Occupational Program, Grades 8 through 12.

Additional information on implementing and maintaining a program is provided in Implementing and Maintaining a Successful Integrated Occupational Program, pages 33-64.



10P PROGRAM DEVELOPMENT/IMPLEMENTATION GUIDE









22

IOP: ORGANIZING FOR INSTRUCTION YEAR PLANNER

						INSTR	INSTRUCTIONAL ORGANIZATION	JAL OR	BANIZA	NOIF				- [
COURSES		Integra Cl	Integrated/Inclusive Classroom	usive n			స్టర	Segregated Classroom	ם פ			Q &	Concurrent Registrations	nt ins	
	8	6	10	11	12	8	6	10	11	12	8	6	10	11	12
Core/ Academic															
· f															
Practical Arts/ Occupational	,			_											
Other Courses															
				:						222					

STUDENT SELECTION PROCESS

The following guidelines may assist in the identification and selection of students who will benefit by being placed in the Integrated Occupational Program.

- IOP candidates are initially recommended by local school administrators, teachers, parents or students themselves.
- Profiles are completed based on the Target Population criteria (see page 3).
- A local committee (e.g., administrator, guidance counsellor, teacher) reviews each candidate's profile and supporting documentation and recommends a candidate's admittance to the IOP when there is a documented fit between the profile and the selection criteria, and when it is in the student's best interests to do so.
- Each candidate's profile and documentation, together with the selection committee's recommendation, are communicated to the parent(s)/guardian(s) and student. The communication will be of sufficient depth and breadth to enable the parent(s)/guardian(s) to provide informed written consent for the candidate's initial enrollment in the IOP. The parent(s)/guardian(s) (or student, if 16 years or older) will be the final arbitrator of whether the candidate will be initially enrolled in the IOP or maintain enrollment in the IOP.
- The student profile should be maintained and reviewed on an ongoing basis. Upon completion of the junior high IOP component, students and their parent(s)/guardian(s) will be presented with sufficient information to determine whether it is in each student's best interests to cross over to other programs or to remain in the IOP at the senior high school level. Information shared should include:
 - results of recently administered standardized tests (particularly in the areas of language arts and mathematics)
 - the student's accumulated record to date (including teacher-generated affective-domain evaluations)
 - examples of the student's work.

To permit continuity in IOP delivery, feeder schools should make available to receiving schools a copy of each student's ongoing IOP record. Principals of feeder junior high schools should recommend to receiving high schools the program placement most appropriate for each student.

TRANSFER POINTS FROM THE IOP

After one, two or more years in the program, some students in IOP courses may develop the attitudes and sufficient knowledge and skills to enable them to transfer to higher-level courses in the regular program.

Program transfer points are discussed in the junior and senior high sections of this manual.



FUNDING

Alberta Education supports the IOP through the provision of funds in addition to the School Foundation Program Fund. Regulations with regard to funding may be revised annually.

To qualify for funding, jurisdictions must offer or make available a five-year Integrated Occupational Program. Agreements between jurisdictions are possible at the local level (i.e., the junior high portion of the program may be offered within one jurisdiction, the senior high in another).

In order to qualify for IOP grants, the following conditions must be met by each student in:

- Junior High-minimum of two IOP core courses and two IOP practical arts courses
- Senior High—minimum of 40 specified credits in IOP occupational or Registered Apprenticeship Program (RAP) courses including a minimum of 10 credits in a 36-level occupational course. (See page 23 for information on the RAP.)

Specific funding information is provided in the School Grants Manual.

INFORMATIONAL VIDEOS

Two videos are available from the ACCESS Network Media Resource Centre (in Edmonton, call 440-7777; outside of Edmonton, call 1-800-352-8293 toll-free).

- "Opening New Doors"—a 30-minute video and accompanying brochure "IOP Questions and Answers" is directed to parents/guardians of potential Integrated Occupational Program students, and is designed to provide a basic understanding of the IOP and enable them to make an informed program placement decision.
- "On Cue Inservice for Teachers: The Integrated Occupational Program" —a 60-minute inservice video that informs teachers about IOP curricular materials and their use.

IMPLEMENTATION ASSISTANCE

Implementation of a new IOP requires knowledge about the intended operation of that program. Alberta Education may assist with the implementation of an IOP in a number of ways:

- IOP presentations, by request, at
 - major conventions and conferences across the province
 - zone meetings of school jurisdictions
- informational documents circulated to interested jurisdictions
 - the Integrated Occupational Program Information Manual for Administrators, Counsellors and Teachers
 - Integrated Occupational Program Promotional Package (both documents are available from the Learning Resources Distributing Centre)
- the ACCESS videos mentioned above
- the Curriculum Standards Branch may be contacted for further information at 422-4872.



JUNIOR HIGH INTEGRATED OCCUPATIONAL PROGRAM

PROGRAM DESIGN

Selected students should be encouraged to enroll in the Integrated Occupational Program in the eighth year of schooling in order to avail themselves fully of the program's potential benefits.

The junior high school core requirements consist of language arts, mathematics, science and social studies. These courses reflect the content of regular junior high school courses, but within a functional, life skills and applied vocational context.

In addition, students at the junior high level are expected to take a minimum of 225 hours of instruction in the practical arts including a minimum of 150 hours of instruction in IOP practical arts courses. Three areas of instruction have been developed in IOP practical arts: business education, personal and public services, and technical occupational. Taking each of these courses in Grades 8 and 9 will enable students to acquire the base of awareness they will need to make more definitive choices at the senior high level of the occupational courses that best match their interests and aptitudes.

In addition, students are encouraged to enroll in regular complementary courses that match their interests and needs; e.g., computer studies, agriculture, art, drama, music and religious studies.

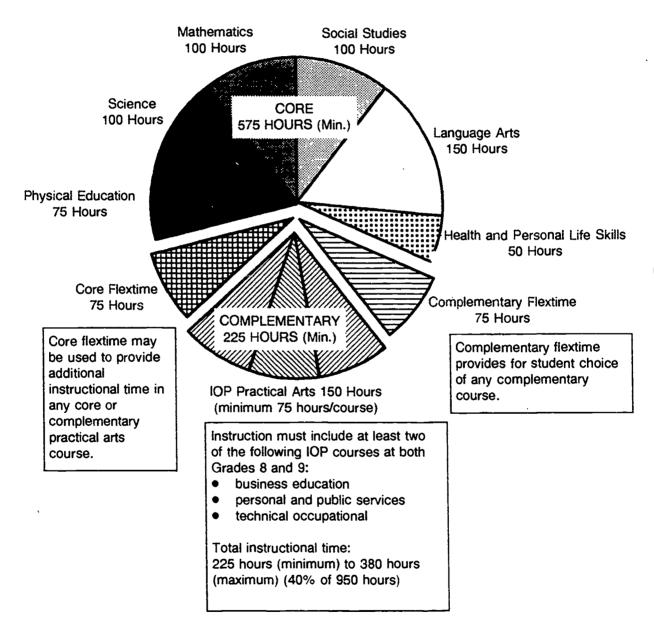
CORE	COMPLEMENTARY
IOP Core Courses in: language arts mathematics science social studies Regular Courses in: health and personal life skills physical education	Regular Complementary (student choices): Practical Arts* agriculture computer literacy home economics** industrial education** typewriting** Fine and Performing Arts art
PRACTICAL ARTS IOP Practical Arts Courses (maximum 40% time allocation): business education personal and public services technical occupational	drama music (general) music (choral) music (instrumental) Second Languages French German Ukrainian Religious or Ethical Studies religious studies ethics Other locally developed and approved senior high school courses

- ★ Career and Technology Studies strands and modules will replace regular practical arts courses effective September 1997.
- ** Since students will be enrolled in IOP practical arts courses, they would not likely choose home economics, industrial arts or typewriting as options because of similar course content.
- *** Based on provincial course specifications.



The Guide to Education: Junior High School Handbook specifies a minimum of 950 hours of instruction be available at each grade of junior high school. The time allotment for IOP core courses parallels that of other junior high core courses, with the extra provision that the core flextime may be used to provide additional instructional time in either IOP core or IOP practical arts courses (see diagram, below).

INTEGRATED OCCUPATIONAL PROGRAM JUNIOR HIGH SCHOOL PROGRAM FRAMEWORK



The IOP practical arts curricula provide for the inclusion of a variety of occupational topics to increase students' awareness of the eight occupational clusters and 20 occupational courses addressed at the senior high school level.



COURSE CODES: JUNIOR HIGH IOP COURSES

Grad	<u>e 8</u>	Grad	<u>le 9</u>
Course Code	Course Name	Course Code	Course Name
8104	Language Arts	9104	Language Arts
8111	Mathematics	9111	Mathematics
8141	Science	9141	Science
8151	Social Studies	9151	Social Studies
8611	Business Education	9611	Business Education
8621	Personal and Public Services	9621	Personal and Public Services
8601	Technical/Occupational	9601	Technical/Occupational

JUNIOR HIGH CURRICULAR DOCUMENTS

The following junior high IOP programs of studies are contained in the *Program of Studies: Junior High Schools*:

- IOP English Language Arts Grades 8 and 9
- IOP Practical Arts Grades 8 and 9
- IOP Social Studies Grades 8 and 9.

(IOP Mathematics Grades 8 and 9 and IOP Science Grades 8 and 9 will continue to be interim documents until a review of all mathematics and science curriculum is completed.)

The following Alberta Education teacher support documents are available from the Learning Resources Distribution Centre, 12360–142 Street, Edmonton, Alberta, T5L 4X9.

Language Arts:	
8/9	Program of Studies/Curriculum Guide
8/9	Teacher Resource Manual
Mathematics:	
8/9	Program of Studies/Curriculum Guide
8/9	Teacher Resource Manual
Science:	
8/9	Program of Studies/Curriculum Guide
8/9	Teacher Resource Manual
Social Studies:	
8/9	Program of Studies/Curriculum Guide
8/9	Teacher Resource Manual
Practical Arts:★	
8/9	Program of Studies/Curriculum Guide
8/9	Teacher Resource Manual

COURSE TRANSFER POINTS: JUNIOR HIGH

After completion of one or two years of IOP at the junior high level, it may be appropriate for some students to transfer to senior high courses (13- or 14-level) leading to a high school diploma.

★ The IOP practical arts curricular documents include three course components: business education, personal and public services, and technical/occupational.



ACHIEVEMENT TESTING

Grade 9 IOP students will not be required to write provincial achievement tests as:

- 1. the knowledge content of IOP academic courses is distinct
- 2. students entering the IOP must have demonstrated reading, writing, computational and other levels of achievement below those of their age peers.



SENIOR HIGH INTEGRATED OCCUPATIONAL PROGRAM

PROGRAM DESIGN

Successful completion of the Grades 10, 11 and 12 IOP program (80 credits) will result in a Certificate of Achievement. The courses required for a Certificate of Achievement are outlined in the following chart:

Eligible Courses and Credits for the Certificate of Achievement

A. IOP CORE	Courses and Credits [⊙]	Alternative Courses and Credits®
English	English 16 (3), 26 (3), 36 (3)	A minimum of 10 [®] credits in English, including 5 in English 23
Social Studies	Social Studies 16 (3), 26 (3)	Social Studies 13 (5)
Mathematics	Mathematics 16 (3)	Mathematics 14 (5) or Mathematics 13 (5)
Science	Science 16 (3)	Science 14 (5)
TOTAL 21 cred	dits	TOTAL 25 credits

B. Physical Education[®] 10 (3)

Career and Life Management 20 (3)

C. IOP Occupational Courses

A minimum of 40 credits from the occupational clusters 9 9

agribusiness

Grade 10 (16-level) - 10 credits recommended

business and office operations

Grade 11 (26-level) - 20 credits recommended

construction and fabrication

Grade 12 (36-level) -- 10 credits required

- creative arts
- natural resources
- · personal and public services
- tourism and hospitality
- transportation

D. Unspecified Credits

To meet the minimum credit requirement for the Certificate of Achievement, students must take additional unspecified courses. The number of unspecified credits available will depend upon the student's selection of IOP courses or alternative courses listed in Part A.

O Credits are indicated in parentheses.

Students who successfully complete the sequence English 16–23 for a total of 8 credits will have met the English credit requirement for the Certificate of Achievement.

© Components of the Physical Education 10 requirements may be waived on the recommendation of the principal, for good and sufficient medical or religious reasons. When a Grade 10 student is unable to meet the requirement for Physical Education 10 for medical reasons, every effort should be made to meet this requirement in Grade 11 or 12. See Guide to Education: Senior High School Handbook for individual or class exemption criteria.

One 36-level course from any occupational cluster will be accepted for transferring from the Integrated Occupational Program to the Diploma Program.

Students must complete a minimum of 40 credits in IOP occupational courses including one 36-level (10 credits) IOP occupational course to attain the Certificate of Achievement.



CORE COURSES

The senior high school IOP core requirements of English, social studies, mathematics and science may be met through the IOP 16–26–36 series of courses. These courses are for students who require an integrated and concrete approach to learning. Student integration is possible in all courses including career and life management and physical education. Core courses may be scheduled throughout the three high school years rather than being concentrated in any given year (e.g., CALM 20 is taken by most high school students during Grade 11; however, because it provides reinforcement of many of the concepts addressed in IOP courses, IOP students are advised to take it in Grade 12). All learning in core subjects begins at the concrete developmental level with reference to real life applications, and is deliberately reinforced and applied in occupational courses. It is often this deliberate reinforcement that enables students to understand the need and relevance of basic computational, communication and social skills as applied to success in the workplace.

COMPLEMENTARY COURSES

The complementary component of the senior high IOP consists of occupational courses that may be taken in each high school year, with the option of taking regular complementary courses according to a student's abilities and interests (personal development, fine arts, home economics, industrial education, business education, etc.). In order to attain the Certificate of Achievement, students must complete a minimum of 40 credits (including one 36-level occupational course) of the required 80 credits in IOP occupational courses selected from the following eight occupational clusters:

- agribusiness
- business and office operations
- construction and fabrication
- creative arts
- natural resources
- personal and public services
- tourism and hospitality
- transportation.

In Grades 8 and 9, IOP students are provided with an **awareness** of the eight occupational clusters addressed in the occupational component of the program, through their participation in an assortment of practical arts learning experiences. In Grade 10, students will **explore** potential career opportunities. Grade 11 students will narrow their career focus and will select courses that provide an **orientation**. Grade 12 students concentrate on the **preparation** of skills to assist them to make the transition to the world of work, to another educational/training institution or to industrial/business on-the-job training. This approach provides an excellent opportunity for students to find out first-hand about occupational clusters in Grade 10, and acquire hands-on experience in specific occupational areas in Grades 11 and 12.



OVERVIEW: IOP OCCUPATIONAL COMPONENT

	16-Level	26-Level	36-Level
Developmental Concept	Exploration	Orientation	Preparation
Primary Experiential Objective	To explore, reason, experiment, and discover skills related to families of occupations.	To explore, experiment and practise skills related to one or more occupational areas.	To practise and develop entry- level skills in one or more occupational areas.
Suggested Instructional Orientation (a) School (b) Community Partnership*	80% 20%	70% 30%	60% 40%
Credits per course	(3 or 5 credits) 75-125 hours	(10 credits) 250 hours	(10 credits) 250 hours
Recommended/Required Courses	Recommended: 4 × 3-credit courses. or 2 × 5-credit courses	Recommended: 2×10-credit courses in 16–26 sequence	Required: 1 × 10-credit course
Evaluation	Attitude, Achievement, Basic Competency	Attitude, Achievement, Increased Competency	Attitude, Achievement, Entry-level Competency
AGRIBUSINESS 1. Agricultural Production	Exploration of terms, tools and techniques related to land and soil products.	Orientation to further land usage and animal production.	Preparation for entry-level jobs. Further development of land/soil products, an increased emphasis on animal production.
2. Agricultural Mechanics	Exploration of terms, tools and techniques of basic carpentry, metal work and welding.	Orientation to arc welding, blueprint reading, small engine maintenance, painting. Orientation to arc welding, blueprint reading, small engine maintenance, painting.	Preparation for employment and skill development in basic concrete work, electricity, forge work and soldering:
3. Horticultural Services	Exploration of terms, tools and techniques of lawn and garden care.	Orientation to skill development in horticulture and basic floriculture.	Preparation for employment in greenhouse care, gardening and floriculture.
BUSINESS AND OFFICE OPERATIONS 1. Business Services 2. Office Services	Exploration of terms, tools and techniques related to jobs in sales, service and courier work. Exploration of terms, tools and techniques related to office work and consumer	Orientation to retailing cashier duties, keyboarding and telephone techniques. Orientation to common office operations including keyboarding, filing.	Preparation for employment, development of entry-level job skills in business services and sales. Preparation for entry-level employment and further development of consumer
	awareness.	duplicating, mail handling and telephone techniques.	awareness.
CONSTRUCTION AND FABRICATION 1. Building Services	Exploration of terms, tools and techniques related to subtrade work including tool use and care, woodwork and fasteners.	Orientation to framing, roofing, scaffold use and flooring.	Preparation for helper roles or apprenticeship articulation. Additional skill options include painting, concrete work, bricklaying and glasswork.
2. Construction Services	Exploration of terms, tools and techniques related to general piping, blueprint reading and tool use and care.	Orientation to option areas including heating, gas fitting, electrical, welding and insulation services.	2. Preparation for helper roles
CREATIVE ARTS 1 Crafts and Arts	Exploration of terms, tools, materials and techniques of craft and art work.	Orientation to skill development in specific crafts and arts.	Preparation for entry-level employment and/or entrepreneurial activity in creative arts/cottage crafts industry.

[★] The percentage figures given for the community partnership component are recommended minimal guidelines. Schools that do not have extensive on-site facilities will undoubtedly use community work sites to a much higher degree.



	16-Level	26-Level	36-Level
Developmental Concept	Exploration	Orientation	Preparation
CREATIVE ARTS (continued) 2. Technical Arts	Exploration of terms, tools, materials and techniques of graphic arts, media arts, photography and related arts.	Orientation to skill development in one or more technical or related arts areas.	Preparation for entry-level employment and/or entrepreneurial activity in one of the technical or related arts.
NATURAL RESOURCES 1. Natural Resource Services	1. Exploration of terms, tools and techniques used by workers in three natural resource industries: (a) Oil and Gas (b) Forestry (c) Mining.	Orientation to specific knowledge and skills related to one or more of three natural resource industries. (a) Oil and Gas (b) Forestry (c) Mining.	Preparation for employment in one or more of the natural resource industries: (a) Oil and Gas (b) Forestry (c) Mining.
PERSONAL AND PUBLIC SERVICES 1. Hair Care	Exploration of terms, tools and treatments related to natural hair and wig care.	Orientation to basic setting and styling, cutting, hair analyses and hair goods.	Preparation for entry-level employment as beautician's assistant, wig dresser, or apprenticeship articulation.
Esthetology Grant Care Child and Health Care	Exploration of terms, tools and grooming services used on face, feet and head. Exploration of services	Orientation to facial shapes and care, eyebrow arching, false lash application, manicure and pedicure. Orientation to principles of	Preparation for employment increased skill development and sales training. Preparation for employment
Services 4. Fashion and Fabric Services	provided to children, the aged and the infirm. 4. Exploration of garment care and cleaning, and the fashion merchandising fields.	child care, baby-sitting, child safety, care of adults, home duties and basic nutrition. 4. Orientation to fashion and fabrics. Basic skill development in repair and cleaning of clothes.	n day-care, residential aide or nursing assistant. 4. Preparation for employmen in fashion sales or laundry/cleaning operations
TOURISM AND HOSPITALITY 1. Food Services	Exploration of terms, tools and techniques of serving food and beverages.	Orientation to skill development, inside work, guest relations, sales and	Preparation for entry-level employment as waiter— waitress, bus person, in
Commercial Food Preparation	Exploration of terms, tools and techniques of commercial food production.	service. 2. Orientation to basic methods of food preparation, breakfast cookery and correct	food service establishment: 2. Preparation for entry-level employment in luncheon and dinner cookery.
Maintenance and Hospitality Services	Exploration of terms, tools and techniques of building maintenance and hotel/ motel support services.	operations behaviour. 3. Orientation to carpet and upholstery care and floor care and special area maintenance.	3 Preparation for entry level employment as maintenance worker, security guard, houseman/chambermaid, belihop or desk clerk.
TRANSPORTATION 1. Automotive Services	Exploration of terms, tools and techniques of automotive care and maintenance.	Orientation to engines and engine systems, tool and equipment care, replacement and	Preparation for entry-level employment as automotive helper, or apprenticeship articulation.
2. Service Station Services	Exploration of terms, tools and techniques used in service station operations.	mechanical services. 2. Orientation to sales and service, hoisting, lifting, wheels and tires, basic safety inspection.	Preparation for entry-level employment as service station attendant and/or automotive helper.



3. Warehouse Services

safety inspection.

Orientation to lifting, carrying, packing, boxing, wrapping, record keeping and receiving.

automotive helper.

assistant shipper or receiver.

Preparation for entry-level

employment as warehouse worker, stock-keeper,

Exploration of terms, tools and techniques or

warehousing, stock-keeping and inventory management.

The IOP occupational courses place a heavy emphasis on generic skills in addition to work skills.

Generic Skills¹ are the behaviours that are actively used in work performance, are transferable from one job or occupation to another, and are needed for promotion, continuing education or lifelong learning. (Employment and Immigration Canada, 1979.) Examples include:

- Interpersonal and Job Search Skills
- Organizational and Reasoning Skills
- Communication and Literacy Skills.

Work Skills are the components of each course that enable students to develop psychomotor skills related to two or more occupational clusters. Acquisition of the work skills specific to an occupation provide a meaningful context through which students begin to recognize the need for and the value of possessing the generic skills.

By emphasizing generic rather than job-specific skills, students will be prepared for a variety of potential entry-level jobs within the occupational clusters listed on the following page. In addition to these job opportunities, some students may consider entrepreneurial endeavours, such as lawn and garden maintenance, cleaning service, baby-sitting and house-sitting, or may decide to pursue an apprenticeship.

REGISTERED APPRENTICESHIP PROGRAM

The Registered Apprenticeship Program (RAP) provides an alternative sequence of occupation-related courses through which students can develop generic skills and work skills in a designated trade. A student enrolled in the RAP is registered by Alberta Education as working toward attaining a Certificate of Achievement or a high school diploma, and by Advanced Education and Career Development as a registered apprentice.

Students must meet the entry requirements for a designated trade before being accepted as an apprentice.

For further information on the RAP, contact:

Curriculum Branch Alberta Education 11160 Jasper Avenue Edmonton, Alberta T5K 0L2

Telephone: 422-4872, FAX: 422-5129

Generic Skills are closely related to the Basic Skills components of the CTS curriculum and the Employability Skills identified by the Conference Board of Canada (September 1992).



BEST COPY AVAILABLE

Potential Job Opportunities¹ (Entry Level)

Agribusiness—beekeeper, dairy plant employee, farm equipment repair/sales representative, feed mill employee, forage producer, fruit/vegetable processor, fur farmer, grain elevator operator, grain farmer, hog producer, livestock producer, market gardener, meat cutter, poultry/meat packing worker, poultry producer, rabbit breeder, sheep farmer.

Business and Office Operations—employee in local utilities, banks or insurance companies, file clerk, library assistant, messengers/courier, salesperson, receptionist, secretarial employee, switchboard operator, telephone operator, typist, wholesale/retail salesperson.

Construction/Fabrication—bricklayer, cabinetmaker, carpenter, concrete worker, factory worker, floor coverings salesperson, iron worker, plant employee, roofer.

Creative Arts—arts and craftsperson, employee in art shop, clothing salesperson, culinary artist, florist, glassworker, house and interior decorator, model, printer, seamstress/tailor, sign writer, woodworker.

Natural Resources - forestry worker, gas pipeline operator, oil sands worker, coal mining worker, pulpwood worker.

Personal and Public Services—appliance serviceman, auctioneer, barber, building superintendent, child care worker (elementary schools, nursery schools, development centres for the handicapped, day-care, after-school child care), clothing salesperson, domestic service personnel, dry cleaner, esthetician/cosmetologist, firefighter, funeral attendant, grocery store worker, groundskeeper, hardware salesperson, health care assistant, home health aid, homemaker, janitor and cleaner, landscape gardener, letter carrier, meter reader, museum aide, oil/gas services worker, postal clerk, railway worker, police constable, sales representative, security guard, waiter/waitress.

Tourism and **Hospitality**—baker, bellhop, building maintenance worker, campground attendant, chambermaid/houseman, cook, executive housekeeper, guide, travel business employee, waiter/waitress.

Transportation—instrument mechanic, parts salesperson, recreational vehicle mechanic, service station attendant, taxi driver, transit operator, truck driver.

Apprenticeships—entry to any one of 52 designated trades is available to suitably qualified students through the Registered Apprenticeship Program.



^{1.} Job Futures: An Occupational Outlook to 1995. Minister of Supply and Services Canada, 1988.

ACHIEVEMENT

Completion of the Integrated Occupational Program culminates in a Certificate of Achievement.

The Certificate of Achievement will be awarded to students who complete a minimum of 80 credits in the specified core and complementary courses of the IOP:

Core Courses

27 credits (minimum)

Occupational Courses

40 credits (minimum)

Unspecified Courses

13 credits

80 credits

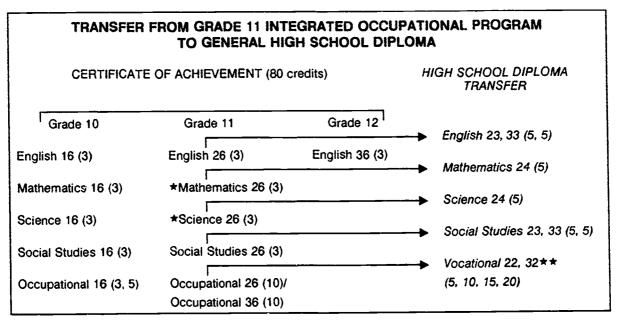
ACHIEVEMENT PROFILE

Students who attain the Certificate of Achievement may also receive an achievement profile from the school. This document will reflect the occupation-related abilities developed by the student through the completion of one series of 16, 26 and 36 occupational courses.

Software (IBM or Mac platforms) usable to both track and record student competency achievements in IOP occupational courses may be obtained by contacting Dr. Michael Alpern, Curriculum Standards Branch at 422–4872.

TRANSFER BETWEEN THE CERTIFICATE OF ACHIEVEMENT AND THE HIGH SCHOOL DIPLOMA

Some IOP students may be able to complete the requirements for a high school diploma. Although it is possible for individual course transfer to occur at various stages, an appropriate point for total program transfer is after completion of the Grade 11 IOP courses, as indicated below (refer to Timetabling Alternative No. 3, page 30).



[★] Mathematics 26 and Science 26—These courses are designed to prepare students for possible transfer to the high school diploma route. While not required as part of the Certificate of Achievement, IOP students may choose to enroll in these courses and may apply the credits as part of their unspecified course requirements (13 credits).

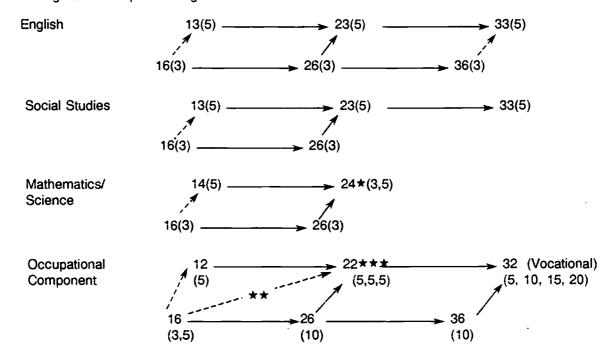
* As noted earlier, provincial implementation of Career and Technology Studies strands is planned for 1997-98.



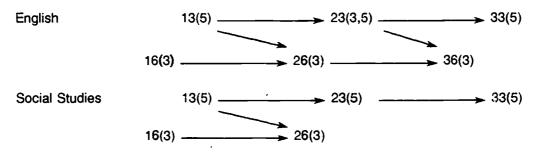
COURSE TRANSFER POINTS: SENIOR HIGH IOP COURSES

Each student's progress should be assessed on an ongoing basis to determine if it is in the student's best interest to transfer to one or more Diploma courses or to remain in IOP courses at the senior high level.

1. Recommended transfer points from Integrated Occupational Program courses to diploma program courses are shown below and in the current issue of the *Guide to Education: Senior High School Handbook*. Alternate transfer points from the Integrated Occupational Program to the High School Diploma Program are shown below as dotted lines.



2. Recommended transfer routes from a High School Diploma Program to the Integrated Occupational Program****



^{*} Students must successfully complete Mathematics 24 and Science 24 or higher-level mathematics and science courses in order to meet the requirements of the General High School Diploma.

^{***}In the situation of a transfer from the General Diploma Program to the IOP, in order to be eligible for a Certificate of Achievement, students must have completed a minimum of 40 credits in occupational courses, including a minimum of one 36-level (10 credits) occupational course.



^{**} Where there is course equivalency and according to principal's discretion, a transfer route from a 16-level occupational course directly to a 22-level vocational course or appropriate CTS course(s) may be possible.

^{***} Refer to Guide to Education: Senior High School Handbook for specific courses.

TRANSFER BETWEEN IOP OCCUPATIONAL AND CTS COURSE STREAMS

Students may transfer from a 16, 26 or 36 level occupational course stream to a related CTS course; that is, a related series of CTS modules grouped together to form a 3, 4, 5 or 6 credit CTS course. One credit is attained for each CTS module successfully completed.

Examples of possible transfers are indicated below.

	Transfer to CTS			
Course Completed:	Strand	Module Level(s)	Credits	
Automotive Services 16 Automotive Services 26 Automotive Services 36	Mechanics	Intro. or Inter.	3, 4, 5 or 6	
	Mechanics	Inter. or Adv.	3, 4, 5 or 6	
	Mechanics	Inter. or Adv.	3, 4, 5 or 6	
Hair Care 16	Cosmetology	Intro. or Inter.	3, 4, 5 or 6	
Hair Care 26	Cosmetology	Inter. or Adv.	3, 4, 5 or 6	
Hair Care 36	Cosmetology	Inter. or Adv.	3, 4, 5 or 6	
Building Services 16	Construction Technology	Intro. or Adv.	3, 4, 5 or 6	
Construction Services 26	Construction Technology	Intro. Inter. or Adv.	3, 4, 5 or 6	
Commercial Food Prep 16	Foods	Intro. or Inter.	3, 4, 5 or 6	
Commercial Food Prep 26	Foods	Intro. or Inter.	3, 4, 5 or 6	
Food Services 16	Foods	Intro.	3, 4, 5 or 6	

In cases where students complete an IOP occupational course that has little or no relationship with a CTS strand (e.g., food services, crafts and arts), teachers are encouraged to consult with the student, assess his or her competencies, and recommend transfer to a CTS strand/course that corresponds most closely to the student's interests and abilities.



COURSE CODES: SENIOR HIGH IOP COURSES

Grade 10		Grade 11			Grade 12	
Core Component:						
1119 English 16 1159 Social Studies 16 1226 Mathematics 16 1291 Science 16		2119 English 26 2159 Social Studies 26 2226 Mathematics 26 2291 Science 26		3119 English 36		
Occupational Component *:						
1801 1802 1915	Agricultural Production 16 Agricultural Mechanics 16 Horticultural Services 16	2801 2802 2915	Agricultural Production 26 Agricultural Mechanics 26 Horticultural Services 26	3801 3802 3915	Agricultural Production 36 Agricultural Mechanics 36 Horticultural Services 36	
1546 1547	Business Services 16 Office Services 16	2546 2547	Business Services 26 Office Services 26	3546 3547	Business Services 36 Office Services 36	
1847 1851	Building Services 16 Construction Services 16	2847 2851	Building Services 26 Construction Services 26	3847 3851	Building Services 36 Construction Services 36	
1407 1408	Crafts and Arts 16 Technical Arts 16	2407 2408	Crafts and Arts 26 Technical Arts 26	3407 3408	Crafts and Arts 36 Technical Arts 36	
1941	Natural Resource Services 16	2941	Natural Resource Services 26	3941	Natural Resource Services 36	
1602 1603 1877 1831		2602 2603 2877 2831	Esthetology 26	3602 3603 3877 3831		
1632	Commercial Food Preparation 16	2632	Commercial Food Preparation 26	3632	Commercial Food Preparation 36	
	Food Services 16 Maintenance and Hospitality Services 16	2633 2634	Food Services 26 Maintenance and Hospitality Services 26	3633 3634		
1747 1748 1749	Automotive Services 16 Service Station Services 16 Warehouse Services 16	2747 2748 2749	Automotive Services 26 Service Station Services 26 Warehouse Services 26	3747 3748 3749		

Grade 10 (16-level)

3 or 5 credits each course 10 credits each course

Grade 11 (26-level) Grade 12 (36-level)

10 credits each course



[★] Credit values of occupational component:

SENIOR HIGH RESOURCES†

Course	Program of Studies	Program of Studies/ Curriculum Guide	Teacher Resource Manual	Student Workbook
English	Х	X	Х	
Social Studies★	x	x	x	
Mathematics ★	X**	X * *	X**	
Science*	X**	X★★	X**	
Occupational Component:	X	X***	X***	
Agricultural Production Agricultural Mechanics Horticultural Services Business Services Office Services Building Services Construction Services Crafts and Arts Technical Arts Natural Resource Services Child and Health Care Esthetology Fashion and Fabric Services Hair Care Commercial Food Preparation Food Services Maintenance and Hospitality Services				× × × × × × × × × × × × × × × × × × ×
Automotive Services Service Station Services Warehouse Services				X X X

^{***} Generic to all occupational courses.



[†] For a description of the purpose and use of these resources, see pages 39 and 40.

[★] These courses are NOT offered at the Grade 12 36-level.

^{**} Resources for IOP Mathematics and IOP Science courses will retain interim status until a review of all mathematics and science programs is completed.

TIMETABLING ALTERNATIVES

The following sample timetables are provided to assist high schools in their planning.

Alternative 1. Core IOP courses are designed for 3 credits and may represent 62.5 to 75 hours of instruction. Since IOP students often benefit from additional time on task, schools may decide to offer 3-credit courses within a time structure in excess of 75 hours (e.g., 125 hours).

	GRADE	10	GRAD	E 11	GRAL	DE 12
1	English 16 (3)		English 26 (3)	→	English 36 (3)	
2	Social Studies 16 (3)		Social Studies 26 (3)		CALM** (3. 5)	
3	Mathematics 16 (3)		Unspec. (5)***	→	Unspec. (5)***	
4	Science 16 (3)					
5	Phys. Ed. (3. 5)		26-level Occ. Course* (10)†		36-level Occ. Course★† (10)	
6	Unspec. (3)				or 35-level RAP Courses	
7	16-level Occ. Courses*	(3. 5)	26-level Occ. Course			
8	or 15-level RAP Course (5)		or 25-level RAP Courses			
Total credits	30 (34)		31 (32)		21 (23) 3-Year Total	82 (89)



^{★ 16-, 26-, 36-}level occupational courses are listed in the senior high section of this manual. The 16-level occupational courses may be offered for 3 or 5 credits.

^{**} CALM has been placed at the Grade 12 level in all sample timetables as the themes in CALM reinforce many topics addressed in Social Studies 16 and 26.

^{***} Unspecified credits may be applied to any regular course (according to interest, ability) including work experience.

[†] To attain the Certificate of Achievement, students must complete a minimum of one 36-level (10 credits) occupational course.

Alternative 2. The timetable below is based on programming instructional time of 25 hours per credit. This timetable allows free time for students to take additional core or complementary courses to prepare them for the world of work or leisure activities.

	GRA	DE 10	GRAL)E 11	GRAD	DE 12
1	English 16 (3)	Social Studies 16 (3)	English 26 (3)		English 36 (3)	
2	Mathematics 16 (3)	Science 16 (3)	Social Studies 26 (3)		CALM** (3, 5)	
3	Phys.	Ed. (3, 5)	← Unspec.	(3, 5)	← Unspec.	(3, 5)
4						
5	16-level Occ. Courses * (3, 5)		26-level Occ. Courses★↑ (10)		36-level Occ. Course★↑ (10)	
6			or 15- and 25-level RAP Courses (10)		35-level RAP Course	
7	16-level Occ. Cours	e* (3, 5)	26-level Occ. Course	e ★ (10)		
8			25-level RAP Course	or es (10)		
Total credits	28 (32)		31 (32)		21 (24) 3-Year Total	80 (88)

^{16-, 26-, 36-}level occupational courses are listed in the senior high section of this manual. The 16-level occupational courses may be offered for 3 or 5 credits.

^{**} CALM has been placed at the Grade 12 level in all sample timetables as the themes in CALM reinforce many topics addressed in Social Studies 16 and 26.

[†] To attain the Certificate of Achievement, students must complete a minimum of one 36-level (10 creaits) occupational course.

Alternative 3. The timetable below indicates how a student may transfer from IOP to the Diploma Program after Grade 11.

	GŘ	ADE 10	GRADE 11		GRADE 12		1 Extra Year	
1	English 16 (3)	Social Studies 16 (3)	English 26 (3)	Social Studies 26 (3)	English	23 (5)	English 33	(5)
2	Math 16 (3)	Science 16 (3)	Math 26 (3)	Science 26 (3)	Math 24* (3, 5)	Science 24★ (3, 5)		
3	Phys. Ed. (3)	1 → (5)			Social Studies	23 (5)	Social Studies	33 (5)
4	Unspec. (3) Comp. Lit. 10				CALM			
5	16-level Occ. Co Const. Serv. 16		26.¹-vel Occ. Course★ (10)		Bidg. Const. 22B	(5)	Bidg. Const. 3	2AT (5)
6			Const. serv 26		Bidg. Const. 22A	† ₍₅₎	Bidg. Const. 3	28† (5)
7	16-level Occ. Co Auto. Serv. 16	ourses ** (5)	26-level Occ. Course * (10)		36-level Occ. Course ★★ (10)★★★			
8			Auto, Serv. 26		Auto. Serv. 36			
Total credits	30	 	32		36		20 4-Year Tota	ıl 118

[†] A Career and Technology Studies (CTS) course may be used.



To qualify for a High School Diploma, students must successfully complete Mathematics 24 and Science 24.

^{★★} To qualify for a High School Diploma, students must meet the minimum high school graduation requirements as specified in the Guide to Education: Senior High School Handbook (latest edition).

^{***} One 36-level occupational course (10 credits) will be accepted as equivalent to two Grade 12 courses for the High School Diploma for students transferring from the Integrated Occupational Program.

IMPLEMENTING AND MAINTAINING A SUCCESSFUL INTEGRATED OCCUPATIONAL PROGRAM

INFORMATION FOR ADMINISTRATORS AND IOP COORDINATORS

The following information and suggestions are provided to assist administrators/coordinators with the implementation and maintenance of the Integrated Occupational Program.

STUDENT SELF-ESTEEM

Self-esteem affects everything we try (or choose not to try), every relationship we have, and all of our expectations for success and happiness. Some ideas that have been used by principals to increase student self-esteem include:

- DIAL-A-PRAISE—ask teachers to inform the principal when students do something special. Their parents are phoned with a message of praise.
- BIRTHDAY CALENDAR—display a birthday calendar (updated monthly) on the wall of the cafeteria.
- "Hi, how are you doing?" -- a classroom visit on a regular basis to say a simple "Hi . . ." is a positive approach.
- STUDENT OF THE WEEK-designate a special student each week, identified for such things as considerate deeds, kindness, etc.
- Know every student by name (if at all possible) and use it.

Most of these ideas provide recognition that means something special to students because it comes from the principal.

SELECTING THE IOP TEACHER*

Selection of the IOP teacher is one of the most crucial elements in the successful implementation and ongoing maintenance of the IOP curriculum.

The teacher of the Integrated Occupational Program student must be sensitive to the needs and varying abilities of students as well as responsive to the fact that, by the time they reach adolescence, many students have grown accustomed to failure. The educational cliche, "teaching students, not curriculum," is particularly relevant to this teacher. The intent is not to downplay curriculum but to meet the individual needs of the student.

^{*} Those schools choosing to hire an IOP teacher aide should look for a person with similar qualities.



CHARACTERISTICS OF THE SUCCESSFUL IOP TEACHER¹

- The teacher sets reasonable, challenging and purposeful goals for the students. These goals must be flexible enough to accommodate the unique needs of each student.
- The teacher sets classroom rules that are firm, fair and consistent. This structure is made clear to students at the beginning of the year and strictly followed.
- The teacher is flexible and innovative in the design and use of curriculum.
- The teacher initiates and encourages mutual respect and trust. If the students perceive they are respected and trusted they will respond favourably.
- The teacher sets an example of those behaviours he or she is attempting to foster in students. "They practise what they preach."
- The teacher who can appreciate humour and can laugh at himself or herself is appreciated. A
 sense of humour, as long as it is not sarcastic, is very important. It helps the teacher to maintain
 perspective and may prevent over-reaction to minor incidents.
- The teacher takes an encouraging, supportive interest in the affairs of each student. It is important to let the student know that the teacher sincerely cares about his or her outside interests.
- The teacher becomes familiar with student records and background.
- The teacher recognizes that review, revision and repetition may be a part of the instructional process.
- The teacher is organized and well prepared.
- The teacher is comfortable with the integrated approach. A generalist may be more likely to understand other courses to facilitate integration.
- The teacher has a high level of commitment and energy as well as a work ethic.
- Occupational teachers should have knowledge and/or experience in the occupational area, especially at the 26–36 level. Past experience in the work force as a supervisor would be helpful when monitoring workplace policies, behaviours and expectations.

^{1.} Adapted from County of Strathcona #20, Basic Core Program, and suggestions from principals who were involved in the IOP field validation.



The following points may be helpful in identifying such a teacher.

- Select a team—if the size of the school warrants more than one teacher, try to put together a
 group of teachers who would work well together. This team approach will encourage sharing of
 ideas and work, and may result in effective team teaching.
- Request volunteers—wherever possible, ask teachers to volunteer or post the position in the
 district. A program such as this requires enthusiasm, commitment and an understanding of what
 integration means in the IOP. People who feel comfortable with the IOP approach will be more
 willing and able to present an effective program to students.

PREPARING THE IOP TEACHER

The challenge in teacher preparation for the IOP is not so much helping teachers understand what needs to be taught, although this aspect is important, but in helping teachers become confident and comfortable with how the material should be presented.

Teachers will benefit from:

- reading thoroughly the program of studies, program of studies/curriculum guide and the teacher resource manual for each IOP course, especially the preamble that details the unique IOP philosophy
- communicating with others who are also teaching IOP courses
- learning about the program and instructional strategies through well-planned inservice activities that are appropriately scheduled over time
- identifying sources of support (IOP teachers in neighbouring jurisdictions, Alberta Education, professional reading).

ROLE OF THE IOP COORDINATOR

Effective program implementation and maintenance involves coordinating the many resources and sources of support that are available within the school system and the community with the needs of the teachers and students. Within each jurisdiction, it may be wise to identify and train "model" teachers who can then explain the program and assist new IOP teachers.

An important step in the implementation of IOP is to assign the IOP coordinator role to an individual or team at an early stage.

Responsibilities of the IOP coordinator may include:

- identifying and dealing with teacher and administrator concerns
- identifying sources of support within the community, including regional services provided by government departments that have related responsibilities (e.g., career development centres, community and occupational health, labour offices)
- coordinating local teacher training workshops
- encouraging in-school support networks involving teachers, librarians and school counsellors



- coordinating workshops, seminars and information dissemination to parents, other staff members and community partners
- facilitating the purchase and sharing of resources
- acting as liaison with Alberta Education.

PLANNING TIME FOR CURRICULUM INTEGRATION

Effective teaching always integrates concepts, skills and attitudes within and between subjects. However, integrated teaching in secondary school is generally incidental rather than structured. The IOP teacher, on the other hand, teaches a curriculum that deliberately incorporates and mandates such an integrated approach. Suggestions for curriculum integration are provided in column three "Related Applications Across the Curriculum" in each IOP curriculum guide. In order to facilitate curriculum integration and improved student learning of related concepts, skills and attitudes, cooperative lesson planning between teachers is imperative. By structuring time for such planning, curriculum integration is much more likely to occur.

COMMUNITY PARTNERSHIPS

Community partnerships are central to the success of the Integrated Occupational Program and a required component of each practical arts/occupational course. While the initial process of establishing community partnerships is time-consuming, it pays rich learning dividends. Many jurisdictions engage a full-time coordinator to enlist and monitor community partnership sites. While a full-time position has obvious advantages, it is often not economically feasible for smaller jurisdictions.

See the section on Community Partnerships (pages 65-83) for a full discussion.

INDICATORS OF AN EFFECTIVE INTEGRATED OCCUPATIONAL PROGRAM

An effective Integrated Occupational Program is identified by the following indicators:

Students are:

- provided with instruction at an appropriate level and in appropriate amounts to maximize their opportunities to experience success in each course
- encouraged to participate in small and large groups in order to increase their ability to communicate with others and to build skills in teamwork and interpersonal relationships
- encouraged to express their opinions, solve problems and make decisions
- encouraged to participate in classes by either expressing ideas or actively listening
- encouraged to relate and apply their learnings through involvement in community partnerships
- encouraged to assess and evaluate their progress.



Teachers:

- have a good rapport with students
- attempt to interact with each student during each class period
- have clearly defined short- and long-term plans that reflect the integration of curriculum themes both within a given subject area and across subject areas
- encourage student input into course delivery, content and evaluation
- promote projects in which students experience success
- promote positive liaison with parents, the community and other colleagues
- plan activities suited to the needs, interests and capabilities of students
- provide opportunities for independent study and the sharing of findings
- assist students in developing sound problem-solving and decision-making strategies
- use questioning techniques that encourage critical thinking
- provide material requiring recall as well as case studies, simulations and discussions requiring understanding or synthesis
- provide support and opportunity for appropriate risk taking
- use creative methods of instruction when appropriate including:
 - brainstorming
 - case studies/stories
 - collages, scrapbooks
 - debates
 - discussions (small/large groups/dyads/tryads)
 - field trips, tours
 - quest speakers/workshop presenters/resource people
 - incomplete sentences/stories
 - interviews (students, community members, adults, etc.)
 - mentorships
 - opinion/value voting-continuums
 - peer teaching/peer assistance
 - question/answer (student/teacher)
 - role playing/dramatizations/role reversals
 - simulations
 - student planning and organizing of events
- apply fair and appropriate strategies to evaluate student learning with an emphasis on quality of performance rather than quantity (refer to teacher resource manual for each subject area)
- encourage team teaching and cooperative lesson planning
- promote a supportive, open classroom climate



- organize lessons for effective learning:
 - define lesson objectives
 - include warm-up activity or introduction
 - set the scene (outline what is expected of students and how they are to be evaluated) for each activity
 - help students identify what they learned from the activity and to relate the activity/lesson to their own lives
 - debrief students to ensure that they have concluded their activity and understand the positive aspects and applications of the experience
- determine when it is appropriate to involve supportive personnel if students are having difficulty
- continue with professional development.

Schools:

- believe in their students
- set high standards with firm and fair expectations
- have a pleasant and welcoming environment
- · create an atmosphere of support and caring.

Farents are:

- informed of the content of the IOP curriculum through parent information meetings, newsletters, videos, etc.
- involved in IOP placement decisions
- confident their values and decisions are respected
- encouraged to be involved in the IOP curriculum (as guest speakers or resource people, to participate in discussions and homework assignments).

Communities are:

- accessed where feasible (see suggestions about community partnerships in each subject area curriculum guide)
- informed about IOP courses (through newsletters, community newspapers, radio, TV stations)
- involved in open-house activities (e.g., career days, fund-raising activities, debates, demonstrations, presentations, tours)
- recognized for participation in the IOP (awards nights, newsletters, certificates, media).



INFORMATION FOR IOP TEACHERS

Alberta Education resources available for senior high schools are identified on page 29. The purpose and use of these resources is described below.

THE PROGRAM OF STUDIES

The program of studies for each Integrated Occupational Program subject is the legal document that outlines the philosophy, rationale and general and specific learner expectations for each course. A program of studies is available for each IOP course as a combined Grades 8 and 9 document and as a combined Grades 10, 11 and 12 document. Resources for all IOP mathematics and IOP science courses will retain interim status until a review of all mathematics and science programs is completed.

THE PROGRAM OF STUDIES/CURRICULUM GUIDE

Each Integrated Occupational Program subject at each grade level available in the program has a corresponding program of studies/curriculum guide combined in one document. All guides are arranged in a four column format:

- Column one, **Learning Objectives**, outlines the prescribed student outcomes of the course and corresponds to the program of studies.
- Column two, Related Life Skills, provides concrete examples, which teachers can use as an
 introduction to an objective, showing students why the learning objective is necessary in real life.
 Related Life Skills provide relevancy by answering the student's concern "Why do I need to
 know/do this?"

The Related Life Skills are appropriate to the developmental level of the students, thus enabling them to readily identify with the examples cited.

- Column three, Related Applications Across the Curriculum, indicates where planning cooperative units and lessons may facilitate improved student learning of related concepts, skills and attitudes between two or more courses; e.g., concepts introduced in core courses may have direct application in occupational courses. Suggestions for curricular integration are provided under subject headings in this column.
- Column four, Suggested Strategies/Activities, identifies teaching strategies and activities that may
 be used to enhance the teaching-learning process. To emphasize the importance of hands-on
 experiences, community partnership ideas are provided. Teachers are encouraged to assess the
 needs of their students and the availability of community resources and to use, adapt, complement
 and supplement the strategies and activities suggested to meet the needs of their students.

THE TEACHER RESOURCE MANUAL

Each Integrated Occupational Program subject at each grade level available in the program has a teacher resource manual. These manuals are designed to provide additional suggestions, strategies and other resources that teachers can use when organizing and planning for instruction.

The content of each manual is organized to support the teaching and learning of the learning objectives specified in each related program of study.



THE STUDENT WORKBOOK

A student workbook is available for each occupational course at each grade level (i.e., 16, 26 and 36). Each workbook is designated as a support student learning resource and may be used, in whole or in part, by teachers to facilitate a combination of teacher-directed and student-directed learning.

The content of each workbook is developmentally appropriate to the reading, interest and activity level of students appropriately placed in occupational courses.

The activities described in each workbook may be performed in school or in community partnership sites. In the latter situation, teachers should consider providing a copy of the relevant workbook to the community partner and explaining how the workbook may be used to meet the learning needs of students and the productivity needs of the community partner.

TEXT. MEDIA AND SOFTWARE RESOURCES

Each IOP course at each grade level has one or more resources approved as a basic student learning resource. Basic student learning resources are listed in Section D of each program of studies.

Support student learning resources, teaching resources and other resources are identified in the teacher resource manual for each grade level of each IOP subject.

Programs of studies, programs of studies/curriculum guides, teacher resource manuals, student workbooks, and basic and support student learning resources are available from:

Learning Resources Distributing Centre 12360 – 142 Street Edmonton, Alberta T5L 4X9 Telephone: 427–2767, FAX: 422–9750.

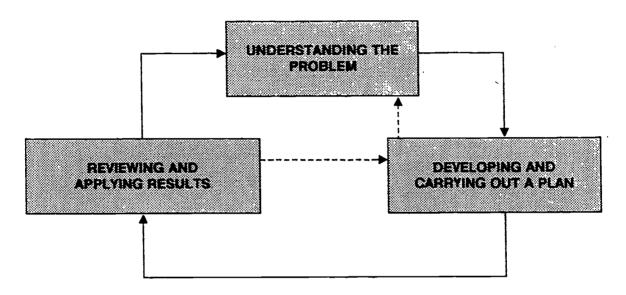
Please consult the latest edition of the LRDC Buyers Guide for a complete listing of available IOP resources.



THE IOP PROBLEM-SOLVING MODEL

To assist IOP students in coping with problems and in developing sound problem-solving strategies, a common model of the problem-solving process is used in each IOP subject area. This model encourages a transfer of concepts, skills and attitudes across the curriculum as well as to daily life at home, at work and at play.

Teachers are encouraged to post a copy of the problem-solving model in the classroom and have students refer to it as problems requiring a solution arise. As students are made aware of the model being used, it enables them to relate specific skills to an overall strategy to monitor and evaluate their own progress in being able to solve problems.



UNDERSTANDING THE IOP STUDENT'S LEVEL OF COGNITIVE DEVELOPMENT

How students think, feel and grow affects how they learn best. When teachers have a clear understanding of a student's cognitive, social and physical development, they are able to use these insights to choose activities and teaching methods. Informed choices can then be aimed at meeting, and indeed, extending student development through the appropriate stages. The information given below is not designed to be used to label students negatively or to lower expectations of pupils. It is reviewed for the purpose of further enabling teachers to facilitate and encourage students to achieve higher levels of cognitive, social and physical functioning.

RELATED RESEARCH

Research tells us that most IOP students operate, according to Piaget's framework, at the concrete operational level. A small percentage will exhibit formal operational thinking, particularly in subject areas where they are shown to be competent. Concrete operational thinking is characterized by its visibility, immediacy and practicality. At this level, students think logically about things and events, but usually in the context of their immediate experience, therefore having little access to abstracting principles from the past or future. They are able to coordinate two aspects of a problem at the same time, and can mentally reverse actions or operations as, for example, when they build classification systems and then break them down into subgroups. However, they may have difficulty in projecting a trend or hypothesizing, which are abilities that develop with formal operational reasoning.



Formal operational thinking, then, can be characterized as the development of hypothetical (i.e., if-then) thinking. Students are able to handle multiple sources of information, and, unlike concrete operational thinkers, have their underlying abilities rooted more in formal logic than in spatial perceptions.

Classroom application of the above means that IOP students respond well to concrete, physical objects or experiences that show what the concept "looks like." Questioning techniques that are sensitive to their cognitive level, yet challenge them to extend their thinking to the formal operational level, are appropriate. Introducing subjects by first finding out what the students already know is developmentally appropriate.

RELATED RESOURCES

When choosing academic tasks for students, the cognitive domain is important. A more complete statement is available in the Alberta Education documents, Students' Thinking, Developmental Framework, Cognitive Domain (1987); Students' Interactions, Developmental Framework: The Social Sphere (1988); Students' Physical Growth, Developmental Framework: Physical Dimension (1988); and Teaching Thinking: Enhancing Learning (1990).

All IOP program of studies/curriculum guides have been screened according to these developmental frameworks to ensure that the curricula meets and extends student development through the various stages. However, teachers are encouraged to generate other developmentally appropriate activities and teaching methodologies.

GUIDING PRINCIPLES

The following guiding principles are a starting point from which educators might explore ways to enhance their teaching of thinking. These principles are further discussed in *Teaching Thinking:* Enhancing Learning, Alberta Education (1990, page 2).

- 1. Students can improve their thinking skills.
- 2. Students should have opportunities to improve their thinking skills.
- 3. Educators should instruct students in thinking skills.
- 4. Educators should use a range of strategies in teaching thinking skills.
- 5. Educators should make use of life experiences and school subjects in teaching thinking skills.
- 6. Educators should have opportunities to learn about thinking as well as how to teach thinking.
- 7. Educators should use appropriate evaluation techniques to assess thinking skills.
- 8. Administrators can and should ensure positive attitudes toward thinking in schools.
- 9. Alberta Education should make explicit the teaching of thinking in curricular documents.

THINKING-RELATED BEHAVIOURS1

In order to encourage higher-level cognitive functioning of students, a teacher should be alert to behaviours that indicate weakness in thinking skills.

- 1. Very impulsive pupils:
 - a. make decisions quickly, without pausing to reflect
 - b. do not think in advance
 - c. do not plan
 - d. do not consider alternatives
 - e. say or do the first thing that comes into their heads.
- For permission to reprint copyrighted material, grateful acknowledgement is made to:
 1987, Phi Delta Kappa, Inc., "Teaching for Thinking: Louis E. Rath Revisited", by Selma Wasserman.

42



- 2. Overdependent pupils:
 - a. cannot complete a task without help; sometimes virtually at every step
 - b. continually get stuck and rely on the teacher for help before proceeding.
- 3. Pupils who cannot connect means with ends:
 - a. have strategies incompatible with their goals
 - b. may have clear goals, but cannot formulate plans or carry out procedures that enable them to realize their goals.
- 4. Pupils who miss the meaning:
 - a. have difficulty comprehending
 - b. have difficulty in following directions
 - c. are unable to conceptualize big ideas or large issues.
- 5. Pupils who are dogmatic and have closed minds:
 - a. are certain in situations about which thoughtful people entertain doubts
 - b. are unable to see alternatives.
- 6. Pupils who are rigid and inflexible:
 - a. operate within a narrow set of rules
 - b. prefer to behave in terms of clearly defined formulas
 - c. are frightened by change and innovation.
- 7. Pupils who lack confidence about their ideas:
 - a. are afraid of expressing their ideas for fear of being wrong
 - b. almost never answer questions that involve thought (i.e., "What do you think?").
- 8. Pupils who are anti-intellectual:
 - a. condemn the process of thinking as a waste of time and effort
 - b. detest independent work, projects, discussion and research
 - c. see themselves as "lesson-learners"; believe the teachers should do the thinking and pupils give the right answers, which are found in texts
 - d. require well-defined standards of accomplishment.

STRATEGIES FOR TEACHING: "GETTING THE MOST" FROM IOP STUDENTS

ENCOURAGEMENT VERSUS PRAISE

Encouragement from the teacher can be effective in that it can offer the possibility of success through effort, make the student feel appreciated and "in charge", and do much for the student's self-image.

When properly used, praise can also be an appropriate strategy for teaching. On the other hand, praise, especially when not earned, is sometimes used as a manipulative device to promote greater effort. Undeserved praise can have a negative effect, because it signals to the student that since praise is so easily earned, one doesn't really have to work hard to get it. The ineffective use of praise is particularly evident in the case of the student who becomes "praise dependent" and looks to the teacher to mete out rewards, even for indifferent efforts.



The differences between praise and encouragement may be summarized as follows:

Praise

- focuses attention on the student
- puts teacher "in control" of assessing and rewarding the student: promotes student dependency on extrinsic feedback
- manipulates
- does not correlate with student outcome
- may promote comparisons and competition among students
- may inadvertently instill fear of failure and rejection by the teacher
- may be contrived to make the slower learner feel better

Encouragement

- focuses attention on the effort and the task
- shifts control to the student to learn to monitor/appreciate own efforts: student learns to appreciate intrinsic worth of effort
- accepts student as he/she is
- promotes continued effort
- focuses on individual effort and self-improvement . . . builds on strong points and successes
- allows for self-acceptance and faith that one can learn from mistakes
- is authentic, sincere

Encouragement should instill in the student a belief in trust, confidence, acceptance and appreciation, and may at times be offered with a touch of humour.

Teachers may try these encouragement "openers", using a natural tone of voice:

- "You do a good job of . . ."
- "You have improved in . . ." (be specific, simple, direct)
- "I'm glad you enjoy . . ." (adding to student's own resources)
- "I appreciate your help. The room looks much better now that it's clean and tidy."
- "Let's try doing this together this time." (Help eliminate fear of failure.)
- "What would you do differently if you had another opportunity to work on this?"
- "Try again. You are giving it a good effort. Soon you'll have it down pat."

PROVIDING STRUCTURE

To facilitate instruction in IOP courses, IOP students may be placed in a variety of classroom structures. Terms commonly used to describe these structures include the following:

- Integrated or Inclusive. Both of these terms relate to the placing of IOP students with their peers for all or selected subject areas.
- Congregated or Segregated. These terms relate to the grouping of IOP students into a distinctive group and placing IOP students into separate classrooms for all or selected subject areas.

An IOP classroom, whether integrated (inclusive) or congregated (segregated), will tend to have students with a range of learning abilities and learning styles. Some students may have a trial-and-error, random or episodic approach to learning tasks and may depend heavily on directions and feedback from the teacher. The overall aim of the Integrated Occupational Program is to assist students to become independent learners; to be self-controlled and achieve satisfaction with the intrinsic reward of completing each task to the best of their abilities. The characteristics of student learning along a "much structure—little structure" continuum is shown in the following chart.



Much Structure	Some Structure	Little Structure
impulsive concrete easily frustrated passively accepting of failure; blames others confused by choice	 rule directed externally motivated "reward/praise-dependent" 	 self-directed inquiring enjoys intrinsic reward of own efforts responds to encouragement assertive likes choice

When students first enter the IOP, learning tasks should be structured to ensure success. As students' behaviours and performances improve, the amount of structure may be decreased. The following techniques have proven useful in some IOP classrooms.

- Develop a set of rules through teacher-pupil discussion. Let students know what is expected of them, and what consequences will result from failure to comply. The consequences should result logically from having to meet the expectations. Rules must be applied consistently if they are to be effective. Teachers involved with the same group of students should agree upon, monitor and promote the same expectations.
- Provide an opportunity for student input in goal setting (course goals, personal goals, long-term goals, short-term goals; frequently reviewing and adjusting as necessary) and goal evaluation.
- Develop appropriate and definite goals and deadlines. When assignments are given, be certain students understand the assignment, how it is to be done, how it will be marked, and when it is due. Work together in class to get the students well underway. Collect, mark and return assignments promptly.
- Divide large tasks into small segments and, when necessary, provide step-by-step guidelines and instructions. A wall chart of the steps and procedures may assist students.
- Use visual aids, simulations and real-life examples to reinforce intended learnings and outcomes.
- Enrich the learning environment by using a variety of techniques designed to address individual student's learning styles. A multi-sensory approach can ensure greater understanding.
- Provide sufficient variety in each class to enhance students' attention and learning.
- Use encouragement and praise effectively. Initially, provide immediate feedback on each step.
 Through time, assist students to accept responsibility and control by encouraging self-management
 and self-regulatory behaviours (see Encouragement versus Praise, page 43).
- Greet students sincerely as they arrive for your class. Be prepared for each class, and begin work immediately. Between lessons, be visible in the hallways. Promote smooth transition periods as students move from one activity or class to another.
- Provide opportunities for students to use a variety of decision-making and problem-solving strategies.
- Ensure students leave with the satisfaction of having learned new material, and having experienced success in what they have been studying. Tantalize them with a hint of something interesting to come next period.



SETTING EXPECTATIONS

I am not what I think I am and I am not what you think I am, but I am what I think you think I am.

The IOP promotes a flexible learning environment. Expectations should be established based on a diagnostic/developmental approach in keeping with individual student's abilities and needs. Important expectations include:

- emphasizing students' ability to learn. Students need to know that their teachers believe that they
 can learn. The learning tasks must be meaningful and rigorous, yet provide for success.
- encouraging students to become less teacher dependent and more in charge of themselves.
 Expect students to regulate, monitor and find intrinsic rewards in their personal best efforts.
 Teachers should avoid doing for IOP students anything they should reasonably be able to do for themselves.
- recognizing that all students have dignity and worth, and each has something important to contribute.

Teacher behaviours that may assist in setting appropriate expectations of students include:

- calling upon all students equitably to answer questions and make other contributions in class
- giving all students enough time to respond to the teacher's questions in class. Failing to wait for a student's answer communicates to the student that he or she is perceived to be less intelligent
- directing a variety of questions at all students to challenge them to think
- ensuring that all students are disciplined fairly, firmly and consistently
- taking a sincere interest in all students and showing understanding and concern for students' personal needs. Treating all students with respect and courtesy
- giving all students appropriate, immediate feedback to their responses in class. Affirming correct answers. When answers are unacceptable, telling and encouraging students to try again, or giving further information to assist them to arrive at the correct answer
- maintaining both verbal and visual contact with all students during class to demonstrate that all students are involved, which permits some individualized attention and may have the desirable side effect of minimizing discipline problems
- making time available for individual help either during class time or after school hours.

ASSESSING STUDENTS' WORK

The terms "authentic assessment" and "authentic teaching" are often used to describe teaching/learning activities that:

- are meaningful to both the teacher and students
- motivate students to higher levels of achievement
- assist students to develop the capacity for self-assessment.



A report published by the National Center for the Study of Vocational Education provides the following definition:

... assessment is considered authentic when students are asked to engage in activities that have intrinsic merit from either an academic or social perspective. . . . If they do not find an activity meaningful in some respect, they will not be motivated to engage in it effectively.¹

For assessment to be authentic, teaching must be authentic. That is, both teaching and assessment practices and the instructional content and context must be meaningful to students.

"Within the best models of authentic assessment, teaching and evaluation become virtually indistinguishable."2

Assessment should be viewed as an ongoing part of the teaching and learning process, providing feedback to students, teachers and parents/guardians. Assessment should provide:

- feedback to students relative to individual growth at each stage of the learning process. Feedback should be provided on a regular basis and encourage increasing amounts of self-monitoring and assessment
- information to teachers concerning the appropriateness of learning goals and objectives, and the effectiveness of learning strategies and materials that have been used. Such information enables the teacher to modify the program as required for individual students with respect to pacing, learning resources, teaching methods or objectives
- information to parents/guardians regarding the student's progress. Where possible, reports to parents/guardians should be interpreted through interviews so that assessment strategies are understood. The interview is also valuable in identifying student needs that may be met through targeted program planning and delivery.

Assessment should serve formative, diagnostic purposes in identifying student strengths and weaknesses, as well as summative needs in measuring overall growth.* Because assessment is an integral part of all aspects of the instructional process, information used in the assessment of a student should be gathered from a variety of souldessum a variety of methods.

[★] A variety of diagnostic instruments are available through Alberta Education, Learning Resources Distributing Centre (LRDC).



^{1.} Hill, C. and E. Larsen. Testing and Assessment in Secondary Education: A Critical Review of Emerging Practices. University of Berkeley, CA: National Center for Research in Vocational Education. December 1992, page 3.

^{2.} Ibid., page 87.

STRATEGIES FOR EFFECTIVE ASSESSMENT

Assessment is a fact of daily life and a necessary part of monitoring programs and student progress. Efforts must be made to use a variety of assessment strategies to help students identify their strengths and provide for their success. Some students will go to extreme measures to avoid being "tested" again. Common avoidance behaviours are absence from examinations, feigning an uncaring attitude, or not giving their best effort so that the anticipated failure can be dismissed with the excuse that they really did not try anyway.

The strategies provided here are intended to serve as guidelines to the teacher in developing a system of evaluation that will enhance student learning.

- Assess students on an ongoing basis, using a variety of methods, such as:
 - provide taped versions of quizzes and tests for weaker readers and allow them to explain the answer on tape or to a scribe
 - schedule opportunities for students to give demonstrations, which will provide the external structure and/or motivation to cope with the demands of print
 - encourage students to formulate their own questions for an exam, which will provide teachers with valuable insight into the information that students think is important. Students will also acquire practice in asking and answering skills
 - provide a variety of open-ended items to encourage critical and creative thinking
 - use open-book examinations to enhance note-taking, organizing, locating and skimming abilities.
- Emphasize the synthesis of a variety of knowledge and process objectives, rather than isolated skills. Provide students with a variety of informal situations where they can demonstrate their understanding and application of knowledge, skills and attitudes.
- Provide encouragement by asking questions and making statements that will prompt students to assess their work and learning. These techniques will encourage students to be less dependent on external rewards and more responsible for their own learning. Some examples might include:
 - "You did a good job of ___(be specific)_."
 - "What steps did you find most difficult?"
 - "How could you improve your work in this question?"
- Provide adequate time for students to complete their work. Students often do not do their best under time pressure.
- Consider the following when evaluating student performance:
 - use students' strengths to ensure success in the evaluation process
 - help students realize that ongoing self-assessment, as well as external assessment, is a positive developmental process
 - assist students to understand that making mistakes and developing the ability to identify and correct errors are part of the growth process and that mistakes need not be embarrassments.



Teachers are encouraged to assess student progress relative to prescribed curriculum throughout the year using a variety of strategies that may include the use of the following instruments and techniques. The list is not inclusive. It is a guide to the assessment process.

INSTRUMENTS AND TECHNIQUES	COMMENTS OR DESCRIPTIONS	
Anecdotal Records	A continuous log or diary of student progress in written form. As a detailed record of specific observations, anecdotal records can provide useful data for analysis and interpretation.	
Checklists	Checklists serve to record performance levels in a variety of activities/situations, such as the completion of tasks associated with specific criteria and participation in group/individual activities. Checklists may be useful for peer, teacher and self-assessment and to enhance student organizational skills.	
Interviews and Conferences	Student/teacher conferences may be used to move the student toward increased self-direction, to review an activity, unit or test and to acquire student perceptions about progress, etc.	
Media	Teachers may tape-record tests to assess students' listening skills and knowledge. Students may use tape-recordings to respond in a testing situation. Students' performances may be videotaped for assessment purposes.	
Öbservations	Observing student behaviour in order to record performance on a checklis or to record data for an anecdotal report is a useful evaluation technique. The focus is usually an individual student or a select number of students undertaking an activity over a given time frame. Observation can include student responses to questions, use of time and materials and participatio in discussions and group activities.	
Portfolios	Samples of student work are collected and maintained in a portfolio; qualitative differences in this work over time may be assessed. Written work, reports, maps, tests, completed projects or photographs of completed projects may be kept as part of a student's portfolio. (See pages 51–52 for additional information.)	
Self- and Peer Assessments	Peer assessment may be used when assessing other students' participation skills in group activities and their completed projects. Self-assessment should be followed by a conference with the teacher.	
Specific Assignments	Group activities, such as role playing, simulation games and panel discussions. Speaking activities, such as oral presentations, interviews and debates. Displaying/demonstrating activities, such as artwork, cnarts, graphs, tables and maps. Written assignments, such as paragraphs, reports and position papers.	



INSTRUMENTS AND TECHNIQUES	COMMENTS OR DESCRIPTIONS
Questionnaires, Inventories and Checklists	Questionnaires may include true/false, multiple choice, key-list, matching and/or sentence completion items. Inventories and checklists may be related to the student's interests and attitudes. Examples of useful inventory instruments include: The Likert Scale—a five-point key that may be used in connection with any attitude statement. Examples of the key are strongly approve, approve, undecided, disapprove and strongly disapprove. A summed score may be established by weighting the responses to each statement from five for strongly approve to one for strongly disapprove. The Semantic Differential—uses descriptive words to indicate possible responses to an attitudinal object. The response indicates the direction and intensity of the student's beliefs from plus three (very favourable) through zero (very unfavourable). Rank Order—a group of three or more items is presented, which the student arranges in order of preference. This type of item is a cross between matching and key-list questions.
Tests	Objective tests—matching, fill-in-the-blank, true/false, multiple choice, key-list questions. Free response tests—sentence answers, paragraphs, essays. Testing should be balanced with other evaluation instruments and techniques when determining marks for reporting purposes. Tests should be scheduled. Unscheduled tests may be used for diagnostic purposes rather than for grades or report card marks.

PERFORMANCE ASSESSMENT SCALE

The Performance Assessment Scale (PAS) shown on the following page may be used by the teacher when assessing student performance and level of competency. In addition, a copy of the PAS may be given to each student to assist in self- and peer assessment activities.

Teachers may modify this assessment scale or use alternative instruments to assess and report the level at which each student has met the course learning objectives specified in each IOP Program of Studies.

The use of a commonly understood assessment scale will:

- assist in ensuring increased consistency in assessment practices
- provide a concise method of recording and reporting the level of student competency
- assist in referencing the level of student competency on items placed in a student's portfolio.

The teacher resource manual related to each IOP course and the student workbooks related to each occupational course contain additional information that may be of assistance when assessing student performance.



PERFORMANCE ASSESSMENT SCALE

	OUTSTANDING
	COTOTARDING
6	CAN PERFORM THIS SKILL SATISFACTORILY AND CAN LEAD OTHERS IN PERFORMING IT.
	EXCELLENT
5	CAN PERFORM THIS SKILL SATISFACTORILY WITH INITIATIVE AND ADAPTABILITY TO SPECIAL PROBLEM SITUATIONS.
	ABOVE STANDARD
4	CAN PERFORM THIS SKILL SATISFACTORILY WITH MORE THAN ACCEPTABLE SPEED AND QUALITY.
	AT STANDARD
3	CAN PERFORM THIS SKILL SATISFACTORILY WITHOUT ASSISTANCE AND/OR SUPERVISION.
	NEAR STANDARD
2	CAN PERFORM THIS SKILL SATISFACTORILY BUT REQUIRES PERIODIC
	ASSISTANCE AND/OR SUPERVISION.
	BELOW STANDARD
	CAN DEDECRA COME DADTE OF THIS SKILL SATISSACTODILY DIT
1	CAN PERFORM SOME PARTS OF THIS SKILL SATISFACTORILY BUT REQUIRES ASSISTANCE AND/OR SUPERVISION TO PERFORM THE ENTIRE
	SKILL.

Additional readings in the area of assessment include:

Educational Leadership. Volume 49, Number 8, May 1992.

Making the Grade: Evaluating Student Progress. Scarborough, ON: Prentice-Hall Canada Inc., 1987.

Principles for Fair Student Assessment Practices in Canada. Edmonton, AB: Joint Advisory Committee, 1993.

This document may be obtained by contacting:

Joint Advisory Committee

Centre for Research in Applied Measurement and Evaluation

3-104 Education Building North

University of Alberta

Edmonton, Alberta

T6G 2G5.

Wolansky, W.D. Evaluating Student Performance in Vocational Education. lowa State University Press, 1985.

PORTFOLIO-BASED ASSESSMENT

Portfolios may be viewed as storytelling devices. They can show and tell the reader/viewer what a student has learned and can do, and answer the question, "how well?" The "how well?" question is answered by using an appropriate assessment strategy.



Portfolio-based assessment is an increasingly popular strategy being used to maintain, record and report a visual record of a student's progress, achievement and level of competency.

Encouraging students to develop and maintain their own portfolios takes a considerable amount of teacher time. The process, however, once in place, has been found to be effective in motivating students to achieve at higher levels of competency and to take pride in their achievements.

When properly implemented, portfolio-based assessment strategies:

- encourage students to take ownership, to have a vested interest in the creation of their own
 portfolio by having them select items for inclusion in the portfolio
- recognize a range of efforts and depict tangible achievements
- present a visually appealing history of student progress
- encourage students to reflect on their work by reviewing procedures used, revising and perfecting the product of their efforts.

Additional reading in the area of portfolio assessment include:

Arter, Judith A. Using Portfolios in Instruction and Assessment. Portland, OR: Northwest Regional Education Laboratory, November 1990.

This 36-page paper summarizes the use of portfolios especially in the area of writing and integrated language arts.

Arter, Judith A. "NCME Instructional Module: Using Portfolios of Student Work in Instruction and Assessment." Educational Measurement: Issues and Practices. Volume II, Number I, Spring 1992, pages 36–44.

This article attempts to clarify the meaning and use of the terms "portfolio" and "portfolio assessment." A training module is provided to clarify the terms and to help users design and use portfolio assessment strategies.

Educational Leadership. Volume 49, Number 8, May 1992.

This volume focuses on "Using Performance Assessment" and provides a variety of articles on performance assessment and authentic assessment.

Grady, Emily. The Portfolio Approach to Assessment. Bloomington, IN: Phi Delta Kappa Educational Foundation, 1992. (Fastback #341)

This PDK Fastback provides a concise overview of the portfolio approach to assessment. Strengths and limitations of the strategy and the role of both the teacher and the student in the approach are presented.

In addition, a search of ERIC files will assist teachers to identify a much broader range of articles and research reports on the use of portfolios and alternative performance assessment strategies. Key descriptors include:

- ability identification
- evaluation methods
- portfolio assessment
- portfolios
- self-evaluation
- student evaluation.



INSTRUCTIONAL MEDIATION

Instructional mediation refers to the teacher's interpretation of the physical and social context for the student. It can include interpretation of a student's responses to that student, and may be verbal or non-verbal. For example:

Verbal mediation—Suppose a student stumbles over a word in reading aloud. If the teacher supplies the word, no mediation has occurred. However, if the teacher instructs the student to sound out the word and/or if the teacher suggests that the student discern the word through context, the student has learned a strategy that has a general application.

Non-verbal mediation—Guiding a student's hand to show how to use a power tool is an example of non-verbal mediation. It is intentional and meaningful. The technique experienced has application beyond the immediate situation.

Mediation can be used to regulate students' behaviours in terms of their use of strategies and heuristics on tasks. In promoting a strategic view of tasks, the s

A further use of mediation is to develop students' feelings of competency. Students who feel competent, and who focus on effort as being effective in learning, are willing to try new tasks, even when these are difficult. Students who are rewarded only for having performed well, on the other hand, come to have a performance goal. These students become reluctant to engage in any task at which they cannot quickly become successful. Teachers can foster a learning goal by providing appropriate challenges for students and by supporting their efforts in solving these challenges. Teachers should focus their mediation on the role of effort and strategy selection to achieve success, rather than in praising performance.1

ORAL LANGUAGE IN THE CLASSROOM

A great deal of recent research has focused on teacher talk in the classroom. Specifically, interest has focused on the use of teacher questioning techniques, and on other patterns for teacher/student oral interaction.

Research findings suggest that listening is often a stronger learning modality for students who experience difficulty when reading. Teachers should, therefore, be cognizant of questioning techniques and students' overall abilities to deal with language by ear in addition to their abilities to deal with language by eye.

Students may differ in their abilities to process oral language. The following strategies may enhance student comprehension when giving oral instruction in the classroom.

Determine speaking rate. The average oral reading rate for newscasters is 175 wpm, which may be
too fast for some students. Teachers are encouraged to determine their speaking rate using a
variety of methods such as taping themselves in class, evaluating their speech habits and adjusting
their rate of speech accordingly.

^{1.} Pace, Sandra. Instructional Mediation in the Classroom: How Teacher Talk Influences Student Learning. Alberta Education, 1987.



- Examine and adjust the content of the message. Teachers must be aware of factors that may hinder student comprehension such as technical language and abstract concept density.
- Enrich the context of spoken instructions by providing examples, synonyms, antonyms; e.g., "julienne the carrots into 3" strips."
- Enrich the context of the classroom with demonstrations, posted reminders of rules and procedures, and labels on containers/tools.
- Paraphrase key points for students to remember; e.g., "In other words, what you must keep in mind is . . ." (may be done by the more able students).
- Provide advance organizers to help students develop a mental set for listening. In the first two to three minutes of class, briefly describe the day's lesson, highlighting the important things that will be discussed and accomplished.
- At the end of each lesson, summarize what has been covered, referring back to an advance organizer.
- Minimize the dependence on lecture format. Provide opportunities for students to ask questions, discuss, view and engage in meaningful writing activities.

Questioning Techniques

Significant gains can be made by students when classroom questions:

- probe and prompt students to develop strategies that will enhance their abilities to recall. organize
 and apply information in a variety of contexts
- assist students to develop strategies that enhance memory and retrieve information
- encourage students to expand their use of language. Appropriate questioning techniques prompt students to make predictions, consider alternatives, project into the lives of others and generate creativity
- provide opportunities for students to review information or activities, suggest ways to apply new information and predict future classroom activities
- assist students to develop and apply questioning strategies appropriate to circumstances or personal needs.



Teacher Self-evaluation of Questioning Techniques

Teachers may monitor their questioning techniques using a checklist of questions, by inviting a colleague to sit in on the class to observe and record various categories of questions posed, or by videotaping a class presentation. A simple grid might look like this:

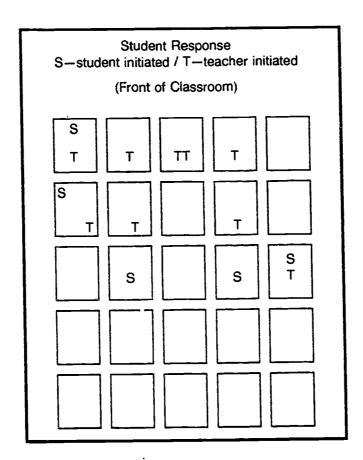
Examples

Tally

CLOSED-ENDED QUESTIONS	OPEN-ENDED QUESTIONS	PERFORMANCE-MONITORING STATEMENTS		
What date? Who?	Give an opinion Give an alternative Predict	Explain in your own words		
111	1111	11		

Response Opportunity

Teachers are encouraged to provide opportunities for all students to respond to questions. Teachers may invite a colleague into the class to monitor the distribution pattern of questions and responses.





Latency Period

Latency period is the length of time between a question and an answer. Pausing after posing a question provides opportunities for all students to formulate responses. Specific techniques may be used to monitor wait time, such as pacing five steps or making eye contact with five students before naming a student to respond. Probes, prompts and "scaffolding" aid in memory search and help students expand comprehension. Often, the answer will be found, and you will have taught a valuable strategy!

Teacher question:

"Why do you think the supervisor in the film gave Jody a low evaluation on

communication skills?"

(pause) Cory?

Student response:

"She didn't say much."

Probe/Prompt:

"When Jody answered the telephone, Cory, what did she say?"

Monitoring Comprehension:

"When she recorded the message what did she write?" "How would you

have answered the telephone?"

Teach the rest of the class to be patient and polite when dealing with moments of silence. If a question is not straight recall, most students will have a contribution to make, at some level, when they are called upon to answer.

MODELLING

Some students lack skills that enable them to perceive and attend to a variety of tasks and to memorize information. For these students, the behaviour of their teachers and other students in similar contexts and situations will tend to be copied.

The role of teacher-as-model may be even more important when students are in segregated classes within a school, or in segregated schools.

Teachers should model:

- thinking strategies—Talking aloud while developing and using a problem-solving or decision-making strategy may help to clarify the thinking processes for the student. Gaining meaning through the use of context clues, for example, lends itself well to modelling.
- organizational skills—Modelling organizational and planning skills and strategies may assist students
 to plan and organize themselves and their materials. Assist students to organize notebooks, to
 maintain a tidy work environment, and to come to class with necessary materials and be prepared
 to work.
- appropriate personal presentation—Clothing, deportment and attitudes can be modelled by teachers.
 For example, students may become more accepting of others if they observe tolerant and understanding behaviour modelled by the teacher.
- good communication skills and attitudes—Students can benefit from the teacher's examples of non-verbal communication. Eye contact, facial expression, voice tone, mood, posture and gestures, and the language of personal space and distance are often problematic to teenagers. A teacher who is willing to listen and assist students to resolve problems patiently, fairly and democratically is providing an important role model for students.



TECHNIQUES FOR MAXIMIZING CLASSROOM EFFECTIVENESS

The following techniques have been selected to maximize teaching effectiveness because they can be individualized to take into account the needs of students who learn best when involved in meaningful experiential learning situations.

Audio-visual Aids

Students who do not read well can use the senses of hearing and seeing to obtain information they otherwise may miss because of limited reading skills. Audio-visual aids can be more realistic and interesting than some other methods of learning. The tape recorder, for example, has proven to be particularly useful in teaching students, especially slow readers and students who lack academic motivation and confidence. It allows students to hear themselves and may assist in improving their speaking abilities.

Brainstorming

This technique encourages the use of imaginative or creative thinking about a particular topic. Brainstorming is often effective with students who are withdrawn and do not express themselves well in large group discussions. Since no idea presented is rejected, students who may be less verbal in other learning activities feel less threat in participating and expressing their ideas.

Demonstrations

A demonstration can put principles and theories into a meaningful and practical operation by allowing students to see and hear what is being performed. The multisensory appeal tends to attract and retain students' attention. Learning is based on observed outcomes that provide practical meaning. A demonstration allows for physical rather than abstract learning. The sequence of steps and key points involved become obvious to the success of the completed process. One of the most effective ways to motivate students is to make clear how a skill or process to be learned can be of practical use to them.

Field Trips and Other Off-campus Activities

Field trips and other off-campus activities offer first-hand learning experiences. These activities provide opportunities for students to relate theories and principles learned in the classroom to practical situations in the community and the world of work.

Games

The use of games in the classroom emphasizes that learning can be an enjoyable activity. Games may also provide social experiences that require cooperation and interaction. A well-chosen educational game can provide opportunities for the development of comprehension and skill in following instructions. Appropriate follow-up activities can be developed to maximize the learning experience.

Individualized Instruction

Individualized instruction may accommodate the learning styles and interests of students who:

- prefer to work at their own speed
- have difficulty with verbalization
- are not easily motivated
- have a high fear of failure.

This technique is most effective when it is custom tailored to the student's needs, interests and capabilities.



Peer Tutoring

In peer tutoring, one student, who has mastered a particular skill or some basic knowledge, shares this competency by working with another student to help him or her learn the skill or knowledge. Peer teaching can be used to:

- assist with the integration of the IOP student into regular classes, thus stimulating social intermingling.
- make learning more friendly and less formal
- improve knowledge of a subject and communication skills of both peer and tutor.

Project Method

The project method is a type of instruction in which the student can be given increasing levels of responsibility for selecting, planning, executing and evaluating a specific skill or work assignment with the guidance of the teacher and/or other knowledgeable and experienced individuals. This method is particularly useful when there is a wide range of individual differences in student abilities. Advantages of this method include:

- individualized instruction
- student responsibility
- active involvement
- practical application of newly acquired knowledge
- opportunity to succeed in an educational experience and take pride in this accomplishment.

Resource Centre

The resource-based classroom is the emerging trend in schools.

A classroom or other resource centre has the potential of providing motivation for students if it:

- includes a variety of subject-appropriate materials (books, magazines, journals, newspaper articles, brochures, community resources, etc.)
- is easily accessible
- is inviting to students
- includes examples of student projects and potential and completed community activities relating to courses being taken.

Role Playing

Role playing, used in the protective setting of the classroom, can further focus and advance the process of learning. For example, a mock job interview that simulates "the real thing" can do much to develop desirable behaviours. In a trusting atmosphere, students can better accept coaching tips on asking and answering questions, haircuts/styles, makup, dress, and so on. The interview can be taped and then reviewed. Invite the school work-experience coordinator to act as the interviewer, or, better yet, invite the personnel manager/operator of a neighbourhood business to become involved as a community partnership venture.

Role playing can be used to help students:

- express themselves verbally
- show creativity
- learn in the affective domain (i.e., develop appropriate and positive attitudes)
- gain an understanding of the feelings of others
- become actively involved in the learning situation.

A role-playing situation should take between 5-15 minutes. Ample time for proper expression of attitude and clarification of misunderstandings should follow each role-playing activity.



Study Skills

Many students, particularly students in the Integrated Occupational Program, would benefit from guidance in the area of study skills. The IOP teacher is encouraged to take the time to help students improve their study skills.

You don't have to be brilliant to do well at school or to pass exams.

You do have to be WELL ORGANIZED, and to have GOOD STUDY HABITS . . . 1

Study Power, 1985

Topics that may be addressed include:

- examination preparation and test-taking strategies
- listening skills
- note-taking skills
- organizational skills
 - time management techniques
 - where, when and how to study
- paraphrasing strategies
- project and assignment hints
- reading skills
- remembering skills and techniques
- stress management techniques.

STUDENT BEHAVIOUR INDICATORS²

As the effective teaching strategies outlined on the previous pages are implemented, teachers will likely note the following positive changes in student behaviour.

• Problem-solving characteristics:

- spontaneous effort to define problem
- spontaneous correction of errors
- decrease in the number of erasures
- increase in need for precision by oneself and others
- decrease in impulsivity and aggressive interpersonal behaviour
- increase in the relevance and completeness of responses
- increase in willingness to defend one's own statements on the basis of objective or logical evidence, and to require the same from others
- more systematic work
- increase in planning behaviour.

Acquisition of vocabulary, concepts, operations, etc., necessary for problem solving:

- spontaneous use of acquired vocabulary and concepts
- spontaneous use of operations, strategies and principles
- spontaneous use of sources of information and reference materials: dictionary, maps, etc.

^{2.} For permission to reprint copyrighted material grateful acknowledgement is made to: SPELT International for the material from *Instructional Materials to Accompany Feurestein's Instrumental Enrichment Training*, by Jane Towery Woolsey, Sandra Falconer Pace, John Read, and Robert Mulcahy. Reprinted by permission of the Canadian publishers, SPELT International, 1988.



^{1.} Study Power Australia. Study Power: A Guide to Improved Study Skills. Claremont, Western Australia: 1985.

• Production of intrinsic motivation through the formation of habits, of internal needs systems:

- spontaneous reading of instructions before starting to work
- settling down to work more rapidly upon entering class
- spontaneous checking of own work
- increased responsibility for own supplies and equipment
- increased responsibility for making up work after absences.

Increase in task intrinsic motivation:

- increased curiosity about objects, events and concepts previously unnoticed
- increase in attention span and time on task
- increase in readiness to cope with more difficult tasks and less anxiety and fears of failure
- increased cooperation and readiness to volunteer.
- decrease in absenteeism
- increased readiness to cope with difficult and challenging material.

• Evidence of more reflective thinking and development of insight:

- increase in divergent responses
- increase in reflection before responding
- increased sensitivity in interpersonal relations
- increase in readiness to listen to peers, and greater tolerance for the opinions of others
- spontaneous examples of generalization
- increase in exploration of alternatives before reaching a decision.

• Overcoming cognitive passivity:

- decrease in number of requests for additional explanation and assistance before starting to work
- increased willingness to participate in oral discussions
- increase in willingness to render and accept help
- increase in self-confidence
- improved self-image and pride in performance
- decrease in reliance on authority
- increase in readiness to question.



PROFESSIONAL READING LIST

Subject specific resources are listed in subject area IOP teacher resource manuals.

The learning resources listed below have been identified as potentially useful for IOP teachers. These titles have not been evaluated by Alberta Education and their listing is not to be construed as explicit or implicit departmental approval for use. These titles are provided as a service only, to assist local jurisdictions in identifying potentially useful learning resources. The responsibility for evaluation of these resources prior to selection rests with the local jurisdiction.

Canada Safety Council. Instructional Safety Objectives for Vocational/Technical Training Courses.

This resource will help the occupational teacher provide safety awareness training in a variety of occupational areas.

Canada Safety Council 1765 St. Laurent Blvd. Ottawa, Ontario

Carson, David (ed.). Education for Work, 1991. The Open University.

This book explores the ground that lies between education and work in contemporary educational thought and practice. Contributions are included from Canada, England, New Zealand, Scotland, Australia and the United States.

Coloroso, Barbara. Discipline: Winning at Teaching, 1983.

This book presents a positive approach to discipline through such topics as: discipline versus punishment; troubled students; trust, respect and success.

Kids Are Worth It, Inc. 2222 Juniper Court Boulder, Colorado, U.S.A. 80302

Csapo, Marg. Teaching Social Skills, 1987.

This book provides systematic methods and strategies for teaching children basic social skills. Some of the topics addressed are social withdrawal/social isolation/social aggression.

Available on loan from: Edmonton Public Library, University of Alberta Library, Calgary Board of Education Library.

Available for purchase from: Centre for Human Development and Research, 2889 Highbury Street, Vancouver, BC, V6R 3T7.

Dunn, Rita Stanfford. Educator's Self-Teaching Guide to Individualizing Instructional Programs. New York: West Nyacle: 1975. Pages 74–111.

This book provides techniques for determining individual student's learning style.



Florida Department of Education, Division of Vocational Education. Teaching Academically Disadvantaged Students in Vocational Education Courses, 1982.

Available from: State of Florida, Department of Education, Division of Vocation Education, Commissioner of Education, Tallahassee, Florida.

The purpose of this book is to provide the vocational education teacher with:

- a description of some demographic and personal characteristics of academically challenged students
- a description of some desirable characteristics in teachers of academically challenged students
- a discussion of ways to modify classroom management and curricula
- a presentation of teaching strategies that the vocational education teacher may find useful with academically disadvantaged students
- a bibliography and a resource list.

Making the Grade: Evaluating Student Progress, 1987.

This book provides examples of student evaluation strategies and a variety of evaluation instruments that may be used in IOP core, practical arts and occupational courses.

Available for purchase from: Learning Resources Distributing Centre, 12360–142 Street, Edmonton, Alberta, T5L 4X9. (Check current Buyers' Guide for price.)

Mulcahy, Marfo, Peat and Andrews. A Strategies Program for Effective Learning and Thinking. SPELT. A Teachers' Manual, 1987.

This manual presents an approach to learning and instruction based on cognitive theory.

Northwest Regional Educational Laboratory. Experience-Based Learning: How to Make the Community Your Classroom, 1978.

This book is intended to show how off-campus learning opportunities can be opened up for students. Experience-based learning techniques are described and the following questions are addressed:

- How is experience-based learning different?
- How do you structure experience-based learning?
- How can you link community resources with student projects?
- How do you locate resource people and involve them in experience-based learning?
- How do you manage the process?

Northwest Regional Educational Laboratory 710 S.W. Second Avenue Portland, Oregon 97204

Simon, Dippo and Schenke. Learning Work: A Critical Pedagogy of Work Education, 1991. OISE Press.

This book addresses the challenges in implementing career-related education programs. A variety of authors describe teaching methods and actual lesson suggestions.



Weber, Ken. The Teacher is the Key. 1982. Agincourt, Ontario: Methuen Publishers.

This book is a practical guide for teaching adolescents with learning difficulties. It contains chapters on organization and development, lesson planning, individualization, behaviour management, and a major section on teaching efficient thinking strategies.

Weber, Ken. Yes, They Can! A Practical Guide for Teaching the Adolescent Slow Learner. 1974. Agincourt, Ontario: Methuen Publishers.

This book is a developmental, carefully structured approach to teaching adolescent slow learners, based on the premise that these students are capable of more than they and most of society believe. It includes realistic methods of motivating as well as nurturing the self-confidence of these students.

ALBERTA EDUCATION DOCUMENTS

In addition to Alberta Education documents developed for specific IOP subjects (program of studies, program of studies/curriculum guides, teacher resource manuals and student workbooks) the following Alberta Education documents may be useful to teachers:

Essential Concepts, Skills and Attitudes for Grade 12, 1987.

Students' Interactions. Development Framework: The Social Sphere, 1988.

Students' Physical Growth. Development Framework: Physical Dimension, 1988.

Students' Thinking. Development Framework: Cognitive Domain, 1987.

Teaching Thinking: Enhancing Learning, 1990.

Off-campus Education Guide, 1994.

Alberta Education documents are available through the Learning Resources Distributing Centre.



COMMUNITY PARTNERSHIPS

DEFINITION

Broadly defined, a community partnership is an off-campus activity involving an agreement between a school and a business, industry or community agency to provide students with enhanced and meaningful learning opportunities. Community partnerships are based on the belief that educators can enhance students' learning experiences by bringing the community into the school and by exposing students to learning opportunities in the community.

Community partnerships are vital components of every IOP course, particularly the occupational courses. Partnerships should be designed to provide students with a variety of exposures and experiences in the real life world of work.

Potential community partners include business, industry, community-based service organizations, parents and citizen groups. For example, a student may become involved in a community partnership with a charitable organization or participate in a community venture such as landscaping and maintaining the school yard. An example of an in-school community partnership might be a parent, university student, senior citizen or business representative acting as a guest speaker to a class, or assuming the role of mentor or tutor to an individual student. By using the expertise, talent and unique human resources of community organizations, private citizens and businesses, community partnerships enrich the experiences of students.

As students become involved in community partnership activities early in their schooling, they begin to appreciate, through first-hand experience, the need for basic computational, communication and social skills in order to achieve on-the-job success. As students see the need and relevance of acquiring these skills, they become motivated to achieve.

To paraphrase the message of an old Chinese proverb . . .

Tell students, and they will likely forget Show students, and they may remember; BUT, Involve students, and they will understand.

RATIONALE

There is an increasing effort among educators and their communities to provide students with learning opportunities in off-campus situations. The education of youth is no longer seen as a responsibility delegated by the community to the local school alone, but is increasingly perceived by the community at large as a jointly held obligation.

Community partnerships provide opportunities to coordinate efforts among community members to work toward enhancing students' educational opportunities. Community members can make known their employment needs and, further, may participate in the direct schooling of students by acting as guest speakers, giving demonstrations, hosting tours, etc. Professional educators, in turn, can recognize community needs and seek ways and means of making formal and reflective much of what heretofore has been informal education. Community partnerships, therefore, require planned articulation between community-based and school-based educational experiences.



MANDATE

The provincial government's policy statement Secondary Education in Alberta (June 1985) Policy Statement supports the concept of community partnership.

- Policies and guidelines will be developed to facilitate the effective use of educational services available outside the school.
- The secondary school system will explore ways of using accomplished members of the community, such as scientists, performing artists and community leaders, more extensively in schools, in both instructional and non-instructional ways, and in support of and in association with permanent teaching staffs. For example, useful approaches might include school-community exchanges, creative use of staff-leave provisions, and other partnership ventures.
- Expanded practical experience programs planned, administered and evaluated in consultation with the academic, cultural, recreational, social services, business, industrial and labour-related communities will be required to provide some students with the knowledge and the practical experiences they need for occupational awareness and preparation.
- The secondary school system should develop direct and effective linkages with public and private agencies in the community, particularly those that provide services to Alberta youth, to ensure coordinated and complementary assistance to students.
- The responsibility for students' secondary school programs will evolve toward a partnership among students, parents, the school and the community. Students, parents and teachers will be responsible for planning each student's program.

This policy was reaffirmed in *Meeting the Challenge: Three-Year Business Plan 1994*/95–1996/97. Educators should consult the *Program Policy Manual* for the general guidelines and procedures for Off-campus Education Programs. In particular, attention is directed at policy and procedures related to work site selections and insurance coverage. The information contained in the *Off-campus Education Guide*, 1994, should be used to guide all off-campus learning activities.

OBJECTIVES

To ensure that the needs of Integrated Occupational Program students are addressed in real-life learning situations, partnerships with the community are essential. These partnerships help prepare students for their future roles in society and represent investments in the development of a more-literate society, better-prepared employees, and a country that is proud of its schools.

Community partnerships are designed to:

- provide students with hands-on experiences to help them to relate their schooling to the workplace and the community
- develop students' awareness of essential employee/employer attributes, and to prepare students for the attainment of these attributes
- provide occupational preparation for entry into the world of work



- provide students with opportunities to develop life skills in the areas of goal setting, decision making and problem solving
- promote the development of self-esteem, self-awareness and self-assertion through social interaction at the place of employment or in the community
- encourage students to continue their educations, and to seek post-secondary education or training appropriate to their career, educational and personal/social aspirations.

BENEFITS

The notion of reciprocity is fundamental to the success of community partnerships. There are numerous benefits to students, teachers, business and industry and other stakeholders.

STUDENT BENEFITS

- Enhances educational experience through practical real-life involvement with:
 - role models
 - mentors
 - community endeavours
 - the business and industrial world.
- Provides individual opportunities to:
 - increase motivation
 - improve achievement
 - enhance self-image.
- Prepares for a smooth transition from school to the first full-time job by:
 - acquiring employability skills while attending school
 - increasing career awareness
 - exploring occupational choices
 - developing an understanding of employer/employee processes
 - obtaining employment experience, contacts and references.

TEACHER BENEFITS

- Enriches the curriculum by helping teachers involve students in the learning enterprise in a more practical meaningful way.
- Enhances teachers' knowledge about current trends in local business and industry.
- Creates a more positive classroom environment, with improved attendance.
- Provides the possibility of:
 - assistance in special areas
 - opportunities for professional development in the context of business/industry
 - enhanced recognition as an innovative and progressive educator.



SCHOOL BENEFITS

- Enriches total curriculum through community partnerships.
- Increases community awareness and appreciation of the effective use of community resources.
- Provides information regarding changes or additions in curriculum required to meet the changing needs of society.
- Improves the level of community satisfaction with the schools.
- Permits increased awareness of job/career opportunities in local areas.
- Encourages student retention until graduation.
- Maximizes the educational program in periods of financial restraint.

JURISDICTION BENEFITS

- Shows leadership in innovative educational programs.
- Provides information relative to the program structure of schools (e.g., elements of curriculum, career objectives and counselling).
- Provides an increased pool of expertise that creative school personnel can tap. Community people thus multiply the resources of the school and help improve programs.
- Encourages more intensive interaction between business, community and education.
- Encourages a sense of caring through collaborative activities.

BUSINESS AND INDUSTRY BENEFITS

- Permits local business and industry to apprise schools of their present and future labour needs, and to influence career awareness and school programs that are specifically geared to meeting those needs.
- Provides a pool of potential labour:
 - with desirable knowledge and skills
 - with lower training costs since students will have developed many generic and work skills as part of their school program
 - prospective employees who have been observed under actual working conditions
 - with a reduced turnover rate owing to career awareness and preparation
 - that is more productive because of occupational preparation.

Such an improved labour force has the potential of increasing profit.

- Provides rewarding and satisfying experiences for participating employees and employers because of the:
 - teamwork and mutual achievement
 - involvement with young people
 - personal satisfaction of making a positive contribution to education and the community.



- Provides an opportunity to enhance:
 - management skills
 - communication skills
 - resource utilization.
- Develops a better appreciation of:
 - the issues, challenges and decisions facing today's youth
 - the corriplexities and challenges addressed by educators.
- Improves public relations owing to visibility, thus providing recognition for a valued community service, social responsibility and good corporate citizenship.

COMMUNITY BENEFITS

- Increases civic cooperation.
- Provides a well-prepared work force.
- Enables young people to become contributors to the local economy as employees, employers, entrepreneurs.
- Enables community members to impart their wisdom to students and students to reciprocate in meaningful ways.
- Strengthens the system of public education.
- Maximizes effective use of community resources.

TYPES OF COMMUNITY PARTNERSHIPS

There are numerous avenues along which community partnerships may develop. In junior high school, students may be initially introduced to the concept of community partnerships through such activities as:

- Inviting members of the community into the classroom as guest speakers, tutors, discussion or seminar leaders, or demonstrators (e.g., cake decorating, carpet care, grooming, landscaping, school photographer, special equipment use).
- Involving community members in special events (career days, mock job interviews).
- Touring local business and industry.
- Conducting taped interviews with employees in job areas of interest to the student.
- Sharing of such resources as films, videos, booklets, pamphlets, equipment and specialized laboratory facilities.
- Mentorship—A student is paired with an employee of a local company who volunteers to spend a
 few hours a month to be a "friend in industry" to the student. Mentors typically invite students to
 their workplaces to tour company facilities and may include them in trade and technical fairs.



- Job Shadowing—After selecting a job area of interest, the student spends time with an employee
 working in that area, thus gaining exposure to the realities of the job and providing the student with
 realistic expectations to enable appropriate educational planning. In recent years, job shadowing
 has become a particularly popular method of informing students about potential careers in
 non-traditional fields.
- Group Community Partnership Project—One effective way of introducing students to individual community placements is first to involve them in a group community partnership project. Such projects are a versatile approach to experiential, community-based learning that can be designed around nearly any length of time, fit almost any situation and involve any number of students. Projects can incorporate academic, socio-personal and occupational objectives and may be set up as homeroom projects, school projects or even as entrepreneurial endeavours. Many classes may become involved in such projects as:
 - school yard beautification—the science class may determine the most appropriate fertilizer, grass and paint to use; the mathematics class may undertake a cost comparison of various supplies; and each occupational class may assume an appropriate activity—planting, painting, etc.
 - school store—various classes may have the school store merchandise products from woodworking, sewing and craft projects. The business class may handle the bookkeeping and retailing; the English class may promote and advertise the store.
 - school lunch program—various classes may share responsibility for a lunch program. The business class may handle incorporation and maintenance of a non-profit society. It may also maintain accounting records, do purchasing and collect money from students buying lunch. The home economics class may do menu planning and participate in food preparation and lunch service. The social studies class may do public relations among students and within the community. It may conduct market research, provide linkage with wholesalers and the milk foundation board. The board of directors for the lunch program may include one student elected from each participating class.

As students gain maturity and confidence, their community partnership activities should encourage them to assume greater responsibility. Students will be expected to:

- work within the school in a supervised, structured environment; e.g.,
 - working as an assistant in the school (library, cafeteria, caretaking, canteen services, etc.)
 - working directly with the public while receiving course instruction (provide hair care services to community clients, run a school day-care program, catering services, service station, automotive shop, etc.).
- work in the community in an individual capacity; e.g.,
 - businesses and industry (typing, cataloguing, delivering, warehousing, taking inventory, performing custodial services, farming, construction and automotives, etc.)
 - community service (hospitals, involvement with senior citizens and handicapped, playground program, SPCA)
 - community agencies and fund raising (Uncles at Large, Big Sisters, Elks, Kiwanis, Lions, Canadian Cancer Society, Salvation Army, Red Cross, Heart and Lung Association, Easter Seals, Friendship Centres).



Placements are limited only by community availability, the creativity of the teacher involved, and the interests and education level of each student. Examples of possible placement and job opportunities in the eight occupational clusters are provided on page 24. Further placement and job possibilities may be tained from:

Alberta Agriculture District 4-H Offices Alberta career centres clergy clubs community associations media (television, radio, newspaper) RCMP senior citizen organizations yellow pages in telephone book.

Time allocations—The amount of time devoted to community partnership activities should increase with each year spent in the Integrated Occupational Program, as shown by the following chart:

GRADES	DEVELOPMENTAL CONCEPT	INSTRUCTIONAL ORIENTATION	
		School	Community Partnership
8/9	Awareness	90%	10%
10	Exploration	80%	20%
11	Orientation	70%	30%
12	Preparation	60%	40%

The percentage figures given for the community partnership component are recommended minimal guidelines. Schools that do not have extensive on-site facilities may use community work sites to a much higher degree.

Schools with extensive in-school laboratory facilities should still ensure that all senior high students are given job placements within the community as part of their instruction in the occupational courses. The incidental learnings gained via actual job placement in terms of expected attitude, productivity standards, social relationships, and so on, are not easily duplicated in the classroom.

LAUNCHING SUCCESSFUL PARTNERSHIPS

There is no one right way to establish community partnerships, nor is there a single formula for success. There are many successful programs, all different and all flourishing.

It is the responsibility of the school, in cooperation with its community, to devise the specific program, judge its suitability, set local objectives, determine the methods of instruction, evaluate placement, and develop methods of recognition. Responsibilities could be grouped under the following headings:

- program initiation and planning
- program implementation
- program monitoring and management
- program evaluation
- program validation
- recognition of community partners.



INITIATING AND PLANNING PARTNERSHIPS

Information Forms

Student and community information forms prove useful in matching potential partners. For example:

STUDENT INFORMATION OUTLINE

Personal Information:

Name

Address (home)

Social Insurance Number

Birthdate

Home Phone

Emergency Contact

Parent or Guardian's Name

Parent or Guardian's Address

Parent or Guardian's Occupation

Could your parents (guardian) help with any type of community partnership; e.g., volunteer in school/out of school; work placement at the business or in organizations?

Do you have access to transportation?

Schooling:

Current School

Grade Level

Main Areas of Interest

Past Experience:

Include WHEN you worked, WHAT you did, and what you liked about each experience:

Volunteer work (e.g., babysitting, paper routes, etc.)

Hobbies

Interests

Special skills

Placement Preference List:

List in order of preference.

Restrictions:

List any restrictions (particularly geographical area, transportation, etc.).

COMMUNITY INFORMATION OUTLINE

Name of Organization/Individual/Business Address

Contact Person

Job Title

Responsible to: Title

Person

Summary of Responsibilities

Main Duties

Working Conditions

Personal Qualities

Skills/Attitudes that may be developed in this work situation

Other Comments



Guidelines

Educators should consult the *Program Policy Manual* for the general guidelines and procedures for "Off-campus Vocational Educational Programs, Work Experience Programs and Work Study Programs." The information contained in the *Off-campus Education Guide*, 1994, is also helpful.

The following responsibilities are outlined for the certificated teacher supervising an off-campus site:

- to ensure that the curriculum is followed and a plan of instruction is in place
- to ensure there are a variety of activities or experiences
- to ensure safety provisions are met
- to assess student performance
- to monitor student attendance
- to monitor student-instructor relations and student behaviour
- to monitor work site-community relations
- to ensure a positive learning environment
- to ensure appropriate records are kept for all of the above.

In developing and maintaining off-campus teaching/learning opportunities, the school board must ensure that each work site selection meets the following criteria:

- the work site will have adequate space provisions for the number of students enrolled
- the facilities and equipment at the work site will be adequate to achieve the objectives of the program
- the facilities meet the required standards of Occupational Health and Safety, and fire regulations
- the equipment used by the students meets Canadian Standards Association (CSA) standards
- all applicable federal, provincial and municipal legislation is followed.

School boards offering off-campus programs:

 will carry extended liability insurance for the protection of the board, its employees, students and third parties.



IMPLEMENTING PARTNERSHIPS

Assign a teacher to coordinate and be responsible for the community partnership program. A high degree of interpersonal skill is necessary to deal with the many different personalities found in the workplace. The teacher will:

- identify appropriate training stations
- identify community partners who tend to have some of the following characteristics:
 - interest in education
 - commitment to young people
 - energy and enthusiasm
 - responsible position in the company
 - creative and innovative thinking
 - communication skills
 - willingness to make the necessary time commitment
 - support for the goals of the program
 - consistency, commitment, cooperation
- clarify the responsibilities of the employer:
 - to provide a safe environment
 - to provide a valuable learning experience
 - to provide an employee to act as the supervisor of the student
 - to evaluate the progress of the student
 - to report any problems to the coordinator (i.e., performance, behaviour)
 - to report student absences to the school
- outline the basic expectations of each student. These may include the following:
 - to conform to company standards of dress and behaviour
 - to be punctual and attend regularly
 - to report absence as a result of illness as follows:
 - a. phone your employer before the start of the workday, say that you will not be at work, and explain why. Phone each day you are absent
 - b. phone the school, giving notification of your absence
 - c. inexcusable absences will be dealt with by the school principal. Missing an off-campus placement is the same as missing any other class
 - to become aware of the rights and responsibilities of employers and employees (teachers may wish to discuss this prior to work placements)
 - to work the full time specified by the agreement
 - to observe all company rules
 - to show a positive attitude
 - to learn as much as possible
 - to complete time sheets each week
 - to do his or her best
 - to be informed of evaluation components. For example:
 - a. classroom performance
 - b. tests, assignments
 - c. employer observations/feedback
- meet with each student and agree on a mutually acceptable placement and job application procedures. For example:
 - preparing a resume and covering letter
 - arranging and preparing for an interview



- organize an orientation for each student, to:
 - explain the purpose of the community partnership, outlining what he or she can expect to learn
 - introduce the student to his or her supervisor and to other employees
 - acquaint the student with the physical facility
 - provide a complete description of the job to be performed
 - explain school and business expectations regarding volume and amount of work to be accomplished, speed, consistency of keeping busy, initiative, neatness, accuracy, safety, efficiency, punctuality, attendance, honesty and loyalty (emphasize that the business community will not accept lax standards)
 - explain company rules (breaks, dress requirements, smoking policy)
 - provide the student with a list of tasks that could be performed when regular duties are finished
 - establish a routine for the student to follow
 - show the student the tools/equipment that are used in the organization and the ones he or she will be using
 - describe the safety practices to be followed
- provide a list of suggestions to aid the partner's effectiveness with the student:
 - start the student at a point where he or she can be reasonably assured of success
 - give one instruction at a time; determine the rate of progress, and then proceed in incremental steps to task completion and mastery
 - introduce a new task by:
 - a. demonstrating and explaining what the student is to do (written instructions may be a helpful reference for the student)
 - b. allowing the student to try the new task, then demonstrating again to show how to improve
 - c. allowing the student to practise
 - d. coaching the student to improve
 - have the student work as helper to a regular employee who will gradually give the student more and more responsibility
 - evaluate each student individually, recognizing that each one will have different skills and abilities
 - tell the student how he or she is doing—either well or poorly. With specific feedback, students are more able to adjust their performance
 - increase productivity through positive reinforcement:
 - a. convince student you want him or her to succeed
 - b. provide praise when appropriate; give constructive criticism in a sensitive, positive manner; assure the student that correction is part of the learning experience
- develop a school jurisdiction or school/handbook/brochure of information as a useful communication tool. Suggested topics to include are:
 - program goals
 - benefits
 - expectations of the student
 - expectations of the employer
 - student evaluation
 - general information



develop a plan to promote and maintain public relations with:

Business and industry

- inform companies of the purpose of the program, explaining their roles in the evaluation of students
- discuss the role of the teacher-coordinator and the school
- stress that the concept of community partnership is to provide an educational training experience
- state your school board's position regarding remuneration
- deal with questions and/or objections calmly but persuasively
- ask for a commitment after summarizing the benefits
- send a letter of confirmation to each partner
- establish a formal document of the partnership agreement, to be signed by the teacher/coordinator, the community partner and the student. For example:

Dear	
	,
	are writing to thank you for agreeing to participate in
	High School's community partnership program. It is our understanding
	accept (number) student(s) for (length
and type of	program).
The company:	following student(s) have/has expressed an interest in working with your
The for an interv	ese students have been asked to telephone you and make arrangements iew.
pام	ase refer any questions and/or concerns to me at the school
Ple: (telephone:	ase refer any questions and/or concerns to me at the school).
(telephone:). ank you again for your cooperation in expanding the learning opportunities



	PARTNERSH	IP AGREEMENT
Between:		
	a	and
		have entered into a partnership g experiences of students in:
		chool
We agree wi	th the objectives	of the program which are:
1.		
2.		
3.		
4.		
We agree th	at: (Specifics)	
1.		
2.		
3.	•	
School Re	presentative	Student Representative
Parent Re	presentative	Organization/Individual/

Home and school

- provide parents with an overview of the school board's philosophy and commitment to the program
- explain in detail the mechanics of the program
- explain the board's insurance policy, which covers students while at the training station
- answer any concerns that parents may have
- ask parents for their support of the program



	LETTER TO PARENT	
Dear		
The Integra describe program)	ted Occupational Program of	School is (briefly
is as valuable as po Agreement" and ret you will encourage	ensure your child's upcoming commossible, we request that you compleurn it to the school by (date) your child to discuss the experiencencems, please call me (telephone:	te the attached "Partnership During this time we hope
the community parts	iate your cooperation, which is vital nership program. Community partner nmunity members. In so doing, cor nities for the school's most important	erships require a coordinated mmunity partnerships expand
	Yours sincerely,	•

General public

 provide a press release and follow-up articles for the local media to increase public awareness about successful partnerships as well as to show appreciation of supportive people and businesses.

MANAGING AND MONITORING PARTNERSHIPS

Managing

Successful partnership programs require thoughtful coordination of the various management components. Some of these identifiable components are:

- taking into account individual student needs, desires and performance to ensure proper placements
- tying together the classroom and on-the-job training components in such a way that the stated objectives may be achieved
- regularly assessing the strength of the program by both partners
- cooperatively managing human resources to ensure effective communication and to maintain a working atmosphere that encourages continued involvement.

Although the Integrated Occupational Program is primarily an educational program, there is an emphasis on the community partnership placement as a real job. As students are confronted with actual job expectations, classroom theory becomes a reality, and students and parents need to be aware that students will be treated as regular employees. As in any job, students will have to prove to employers



that they can handle responsibility. Many employers have students complete jobs of lesser responsibility during the first few weeks to give them the chance to prove themselves. In this way, students are able to adjust to different work sites and grow with their jobs.

Monitoring

Partnerships need to be monitored to ensure that each one is working well. Monitoring strategies may include:

establishing a reporting system that provides opportunities for teacher-student-partner discussion.
 For example:

		<u>VISITATION REPORT</u>
Student's Name	e:	
Placement Loc	ation:	
Employer/Supe	rvison	·
Date:		Time:
Student's	a.	Attitude/Interest
	b.	Comments
Supervisor's	a.	Attitude/Interest
	b.	Comments
General Comn	nents:	

- using behaviour/competency checklists on a daily/weekly/monthly basis. These checklists may include the following information:
 - attendance
 - jobs done
 - equipment used
 - areas of strength
 - suggestions for improvement
 - dresses properly
 - follows instruction
 - finishes job
 - attitude
 - personal relations
 - responsibility
 - safety.



• dealing with problem situations effectively. The following procedure may be useful to share with the partner:

SUGGESTED PROCEDURE WHEN PARTNER IS EXPERIENCING A PROBLEM WITH A STUDENT

- Inform the teacher-coordinator.
- Outline your perception of the problem to the student.
- If possible, develop a plan to solve the problem. For example:
 - give the student a goal to work toward
 - develop a list of duties to be performed
 - outline specific output expectations (e.g., two oil changes per hour)
 - develop a list of duties the student could do when regular duties are finished
 - increase supervision and/or assign the student to work with another employee
- If the problem is serious, or if plans have not worked to solve the problem, the following is a suggested procedure:
 - inform the teacher-coordinator
 - hold a frank meeting with the student explaining the reasons the student's job is in jeopardy
 - consider allowing the student a chance to reverse his or her behaviour
 - notify the teacher-coordinator when all else has failed.

EVALUATING PARTNERSHIPS

Partnership evaluation should be conducted in two dimensions: evaluation of the partnership program, and evaluation of a student's behaviour and performance after participating in a partnership.

Evaluation of the total community partnership program should involve all concerned. The following sample of a Partnership Evaluation Form may be adapted to obtain input from students, employers, volunteers and parents.





PARTNERSHIP EVALUATION FORM 1. Do you feel that this experience: has been of benefit to you? Yes_ Why not? How has helped to prepare you for the world of work? No Why not? How has expanded your learning opportunities? Νo Yes Why not? How 2. What difficulties arose? 3. What strengths/abilities did you discover in yourself as a result of this experience? 4. Do you have any suggestions for improving this program? Date Placement Location Employer/Supervisor Signature Student/Parent

Evaluation of the partnerships should focus on:

- the adequacy of partnerships to serve the educational needs of students
- the strengths and weaknesses of specific partnerships/types of partnerships
- the achievement of objectives as outlined
- the benefits of partnerships to students, partners, teachers and others.

Student evaluation should include both the in-school component and the job-site component of the program. The evaluation criteria should be well defined and thoroughly explained to the student at the beginning of the program:

- The student's evaluation of the work placement and personal growth opportunities may include:
 - a self-evaluation of the work placement, outlining areas of strength, areas where improvement is needed, etc.
 - a self-evaluation of knowledge and skills developed and awareness gained.
- The teacher-coordinator's evaluation may include:
 - assessing the student's portfolio of in-class assignments and participation



- reviewing student log sheets and diary on a regular basis
- visiting and observing the student at work
- keeping anecdotal records after each visit
- reviewing the student's progress with the supervisor
- reviewing the student's progress with the student
- taking into account the student's self-evaluation of progress
- calculating a final mark for reporting purposes.
- The community partner's evaluation may include:
 - observing the student's performance on the job, and giving immediate feedback to the student
 - completing written progress reports or checklists
 - assessing activities related to projects and assignments from the in-school component
 - reviewing work and employability skills
 - completing a final evaluation.

VALIDATING PARTNERSHIPS

An ongoing role of the school is to ensure that the program itself is able to accomplish the stated goals. Validation is the "key piece" in the ongoing efforts to maintain a successful program. Validation occurs when the partners reach agreement and can show reasons and evidence that goals have been met. For example:

- For the students—the level and type of experience is different from, broader than and, at least in some aspects, deeper than what the students could have achieved in a classroom or school lab
- For the partner—the students have gained experiences that will be beneficial and will differentiate them from other young, untrained people who will approach a prospective employer seeking to enter the world of work
- For the school—the off-campus placement has served to enhance in-school efforts and assist students in their personal development, their career development, and eventually in their transition to the workplace
- Fcr the parents—the partnership experience has produced growth in maturity and skill development of their son or daughter.

RECOGNIZING COMMUNITY PARTNERS

The services and support provided by partners should be acknowledged with expressions of appreciation from students, teachers and parents. Some ideas for providing recognition include:

- hosting special recognition events for partners (e.g., brunch, lunch)
- · featuring partners in the school newsletter or newspaper
- welcoming partners into the staff room
- inviting partners to attend special events in the school
- designing greeting cards at special times of the year
- referencing the work of partners during open houses and on parents' night
- recognizing the commitment and dedication of partners through writing about them in the local community paper



- presenting all partners with a framed certificate of appreciation suitable for hanging in their front office
- sending letters of appreciation from students and teachers. Samples:

Name School/Grade

STUDENT THANK-YOU LETTER (on School Letterhead)
Date
Partner's Official Title Name of Business/Organization/Individual Address (including postal code)
Dear Mr./Mrs.
I would like to thank you for providing me with the opportunity to learn more about
(Second paragraph could mention specific skills learned and person(s) who were particularly helpful).
(The final paragraph should express personal appreciation of the value of the experience.)
Yours sincerely,

SCHOOL/TEACHER THANK-YOU LETTER Community/Business Partners
Dear
We wish to express our sincere appreciation for your involvement as a Partner in Education. We understand the time and commitment necessary in providing students with a real-life learning situation. This coordinated effort to prepare our students represents an investment both in their future and our future. Thank you for your part in this educational endeavour.
Yours sincerely,
Name Home Address Telephone No.



ADDENDUM

The following statement on achievement testing replaces the statements contained on page 18 of the <u>Integrated Occupational Program Information for Administrators, Counsellors and Teachers, 1994.</u>

A new administration policy for achievement testing became effective in the 1993–94 school year. The new policy states:

All students receiving instruction in grades 3, 6 and 9 subjects are expected to complete the provincial achievement tests scheduled for them (General Information Bulletin, page 2).

A copy of the Administration Policy is attached.

To obtain further information about the change in this administration policy, please contact Dennis Belyk at 427–0010 (telephone) or 422–4200 (fax).



Administration Policy

Background

As many students as possible are expected to write the achievement tests so as to provide a complete picture of how well all students are achieving, regardless of where or how they receive instruction.

The achievement tests, as well as the policies and procedures for administering the tests and reporting results, are designed to make the tests accessible to all students in grades 3, 6, and 9.

- a. Special materials and circumstances are available for students with learning disabilities or physical disabilities.
- b. There are French translations of the mathematics, science, and social studies achievement tests.
- c. Tests are designed so that students receiving instruction in public, separate, or private schools, or at home have a similar opportunity to demonstrate learnings. The achievement tests assess performance in relation to provincial standards and test learnings that can be achieved through a variety of instructional programs.
- d. Results are reported in such a way as to encourage improved learning, while minimizing possible harmful effects of testing for individuals or groups of students. We report the number of students who achieve acceptable and excellent standards, not specific test scores. We encourage comparisons of local results to provincial standards, not comparisons of individual scores in relation to provincial averages or in relation to other students.
- The results are not to be used to label or place students.
 Individual and group results are provided only for the purposes of giving students, parents, teachers, and school administrators feedback on strengths and weaknesses in each area of learning so that future opportunities for learning can be optimized.
- e. Every effort is made to ensure the tests show respect for culturally diverse groups and do not bias the performance of particular groups of students.
- f. In scheduling the tests, flexibility is provided to allow for special needs and varying circumstances.

Policy

All students receiving instruction in grades 3, 6, and 9 subjects are expected to complete the provincial achievement tests scheduled for them.



Guidelines

- a. A principal may recommend and a superintendent may approve exemption* of a student if it is not possible for that student to respond to the assessment instrument or if participation would be harmful to the student.
- b. Special provisions are available for students with learning disabilities and physical disabilities. These students should participate in the assessment, unless they are unable to make a reasonable attempt at answering any of the questions even with a special provision.
- c. Students who are absent during the writing of an achievement test are expected to write the test if they return to school before the deadline for returning the tests to Alberta Education.

Special Note

For the 1993-94 school year, students who are exempted and who are absent will be reported as in the past; i.e., separate exemption and absent categories. Beginning in the 1994-95 school year, however, we will estimate these students' performance as not meeting acceptable standards and report accordingly.

Tests in the French Language

For June 1994, a French translation of the Grade 3 Mathematics Achievement Test will be available. Those superintendents who wish to have their students in French language programs participate in this assessment should indicate their requests on the Enrolment Information Request—June 1994, Achievement Testing Program, forms.

Grade 6 French Immersion and Francophone students taking science in French are expected to write the French translation of the Grade 6 Science Achievement Test. A provincial sample of students in French language programs will write the English version of this test. This will provide us with useful information and help us in reporting results. This approach was recommended based on the findings of the Language of Testing Study conducted in 1989, 1990, and 1991, and on discussions, which followed in 1990, 1991, and 1992, with stakeholder groups.

Students in Grade 9 French Immersion and Francophone programs are expected to write the Grade 9 English Language Arts Achievement Test and the Français 9e Année Test de rendement. We recommend that these two tests be scheduled two days apart.



^{*}Immediately following the administration of an assessment, the principal must enter any exemptions on the *Principal's Report* and *List of Students* and attach the superintendent's written approval.

