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ABSTRACT

In March 1990, Alberta's Education Minister established five teams to help implement Alberta's 3-year plan for education. Two of those teams, the Implementation Team on Business Involvement and Technology Integration (I-Team) and the Business Involvement Advisory Group (BIAG), worked to develop plans and recommendations regarding expanding business involvement in education through workplace learning opportunities for students and to increase the effective use of technology in the delivery of education. The I-Team and BIAG gathered information through the following activities: survey of approximately 9,500 stakeholders in education in Alberta (response rate, 8.4%); literature review; survey of all Alberta schools to identify existing/planned school-business partnerships; and invitational forum of 250 educators and lay Albertans. The I-Team and BIAG synthesized the information gathered into recommendations regarding the following: school-business communication/understanding; business/employer involvement in educational policymaking; employability skills; entrepreneurship education; valuing all career areas/educational programs equally; part-time jobs; career education/counseling; independent/interdependent lifelong learning; and equity. Contains a glossary and 33 references. Appended are the following: program brochure; 90th annual report on Alberta education; ethical guidelines for business-education partnerships; background information on the program and assessment advisory committee; employability skills profile; and descriptions of the Career Resource Centres and Careers...The Next Generation projects. (MN)

CREATING INDEPENDENT AND INTERDEPENDENT LEARNERS: BUSINESS AND EDUCATION WORKING TOGETHER

REPORT OF THE BUSINESS INVOLVEMENT ADVISORY GROUP AND THE MLA IMPLEMENTATION TEAM ON BUSINESS INVOLVEMENT AND TECHNOLOGY INTEGRATION

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Related documents:

- *Business Involvement in Education Literature Review*
- *Business Involvement in Education: Public Consultation Findings*
- *Framework for Enhancing Business Involvement in Education*
- *Partnerships Survey Report, 1995: School-Business Partnerships in Alberta*
- *Proceedings Report: Invitational Forum on Business Involvement in Education*
- *Technical Appendix Business Involvement in Education: Public Consultation Findings*

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Executive Summary

Creating Independent and Interdependent Learners: Business and Education Working Together reports on the work of the business involvement dimension of the MLA Implementation Team on Business Involvement and Technology Integration (the I-Team) and the Business Involvement Advisory Group (BIAG). The I-Team consists of Denis Herard, MLA Calgary Egmont (chair) and Hung Pham, MLA Calgary Montrose. The I-Team's responsibility, as assigned in 1994 by Halvar Jonson, Minister of Education, was to **consult with education interest groups and the general public to provide plans and recommendations for expanding business involvement in education through workplace learning opportunities for students.**

From Dependence to Independence and Interdependence

Early in its deliberations, the I-Team and BIAG agreed that:

- **“business” would be defined broadly to include private, for profit firms, not-for-profit organizations, and public sector employers—in other words, all employers including organizations that involve volunteer workers.**
- **society must develop business organizations that are also learning organizations, and citizens as workers must have the attitudes and skills that enable them to be independent and interdependent lifelong learners.**

This report includes the background to the establishment of the I-Team and BIAG, identifies and expands upon issues identified through an extensive input seeking process and provides a vision of a preferred future and current status for each issue. Detailed recommendations are provided on how each preferred future may be attained.

Background

Throughout the 1980s, Albertans became increasingly aware of the difficulty many students were having in making a smooth transition from the school to the workplace. Given the changing and complex nature of work, employers were indicating that secondary schools had to do more to help all students develop employability skills. A significant number of students enter the

Main Issues

workforce directly from senior high school. School programs, however, tend to focus on the needs of those students destined for university, yet many students who attain university degrees were returning to colleges and technical institutes to improve their employability.

Knowing this, Alberta Education began, in 1989, to update all of its practical arts courses (business education, industrial education and home economics). The new curriculum is known as Career and Technology Studies (CTS). In addition, the senior high school Registered Apprenticeship Program (RAP) was jointly developed by Alberta Education and Alberta Advanced Education and Career Development.

While viewed positively by most Albertans, these program developments raised the following two issues that were the starting point for the deliberations of the I-Team:

- The effective delivery of RAP and some CTS strands is accomplished most successfully through work site learning where students will have access to equipment and up-to-date expertise, and are exposed to “real-life” settings. This necessitates the support of employers and a close relationship between employers and schools.
- Students and their parents, as well as educators and employers, need to see programs such as CTS and RAP as valuable alternatives if enrollments in these programs are to increase.

Interrelated Issues

As the I-Team and BIAG considered these main issues, several other interrelated issues emerged.

- Our society must accord more value to the trades, services and technical careers. Parents and students need more information about these careers, about the changing labour market and the increasing importance of the “knowledge worker.” Schools and students need support from employers to offer more effective career counselling and career-oriented programs.

- Schools need to place increased emphasis on employability skills and entrepreneurial skills. With better links between employers and educators, part-time student jobs can become more effective learning experiences.
- To create better learning futures for students, business and education must work more closely together to support student learning. Business must be more involved in educational policy directions at the school, school system and provincial levels. The level of dialogue and understanding between employers and educators must be improved. Both provincial and community coordinating structures are needed to ensure equity of support to students and to facilitate idea sharing.

To address these issues, **one of the report's major recommendations is that business and labour organizations consider establishing a provincial level Career Education Foundation/Society.** This body could assume many roles, such as:

- assisting with a public relations program regarding the values of careers in the trades, services and technologies
- supporting career counselling
- facilitating teacher/business employment exchanges
- facilitating electronic linkages among schools in communities with limited industrial bases and businesses
- “networking” community-based Business–Education Councils
- facilitating an annual conference that could serve as a forum for discussion of joint issues and showcase effective business–education partnerships
- creating processes or mechanisms to develop better general understanding of business–education partnerships
- identifying schools that do not have partnerships and encouraging business/employers to be more proactive in establishing partnership.

“Demand Side” Issues

The I-Team realizes that all of the issues that were addressed are “supply side” issues. These “supply side” issues pertain to how educators and employers can work together to improve the general education of students and their preparation for the workforce. This alone will not solve all problems of unemployment. Governments must also address “demand side” issues such as job creation and work sharing. However important “demand side” issues are, the “demand side” issues were determined not to be the mandate of this I-Team effort.

Post-secondary Transitions

The basic mandate of the I-Team is to provide recommendations to the Minister of Education regarding programs for Kindergarten to Grade 12. However, the I-Team suggests that **the general principles and many of the specific recommendations in this report are equally applicable to the post-secondary educational system in Alberta.** Indeed, it is believed that students would be better served if there were more joint planning between Alberta Education and Alberta Advanced Education and Career Development (some suggest that perhaps amalgamation should even be considered). This could result in more “seamless transitions” as students move from one level to the next. However, business/employer involvement and work site learning opportunities should be available at all levels to ensure that programs are as relevant as possible.

Public Input

Extensive input, which helped to clarify the issues and led to the recommendations, was facilitated through the establishment of BIAG. In a series of ten, one-day meetings, BIAG reviewed a variety of related national and international information. BIAG also heard presentations from several interested individuals and groups, such as Junior Achievement, the Calgary Partnerships Foundation, partnership and work experience coordinators, and specialist councils of the Alberta Teachers’ Association (ATA). *A Business Partnership Survey 1995* and the results of a questionnaire developed under contract to Nichols Educational Consulting provided further input. Finally, at an Invitational Forum held January 18–19, 1996 approximately 130 Albertans commented on draft recommendations and proposed additional recommendations.

Recommendations

The full report focuses on nine interrelated topic/issues. A vision for a preferred future is put forward for each topic/issue. The vision is followed by a description of the current status and a set of related recommendations. The recommendations are summarized below and shown graphically on page xviii. More detail is provided on pages 14 to 44. Some of the recommendations relate to changes in the curriculum of schools. The I-Team realizes that the curriculum is already “crowded.” **Any curriculum additions should be considered over the entire K–12 span rather than just at the senior high school level.** Extending senior high school by adding Grade 13 was not considered to be an acceptable option.

Topic/Issue 1

Communication and Understanding Between Business/Employers and Education

- That each school system be required to adopt and implement a policy respecting the involvement of local businesses in education. The policy should address ethical issues by affirming the Conference Board of Canada’s *Ethical Guidelines for Business–Education Partnerships*.
- That community-based business–education councils be formed to develop better understanding and communication at local levels.
- That the Alberta Teachers’ Association encourage its members to become members of community groups likely to represent a cross section of employers, and that business/employer organizations be encouraged to solicit educators as members.
- That businesses, employers, and their organizations, encourage their employees and members to become more involved in education.
- That Alberta Education review the core curriculum at all grade levels and make whatever changes may be required to ensure that all students acquire a general understanding of how businesses operate and of their role in society.

Topic/Issue 2

Business/Employer Involvement in Educational Policy-making

- That business/employers be involved in educational policy development by:
 - helping educational institutions understand the labour needs of business and communicating those needs to the schools
 - being active participants in School Councils
 - helping educational institutions understand the nature of the desired employability skills
 - participating in an Annual Conference to review progress to date and establish new directions.
- That structures whereby business/employers can have input to educational policy-making at all levels be developed and/or identified and clearly communicated.
- That Alberta Education continue to survey employers and other stakeholders regarding their satisfaction with involvement in educational decision-making.

Topic/Issue 3

Employability Skills

- That Alberta Education periodically review the provincial learning expectations and curriculum at all grade levels, inviting a cross section of employers, employer groups, students and other Albertans to comment on their appropriateness.
- That Alberta Education complete the development of assessment standards and instruments for all courses that represent the minimum graduation requirement.
- That school systems develop skills portfolios to document student learning in employability skill areas and encourage all students to maintain such portfolios, beginning at the latest in junior high school.
- That school systems encourage all senior high school students to engage in at least one work site learning experience, and

that Alberta Education pilot a requirement of a 3-credit work experience course.

- That employer organizations, in cooperation with Alberta Education,
 - maintain an ongoing effort to inform employers about the standards required for graduation
 - encourage employers to take into account a student's school learning achievements in the part-time employment of all nongraduates under age 18
 - request student transcripts and portfolios from all first time job applicants
 - acknowledge successful high school work experience as one criterion for selection of first time job applicants.
- That scholarship providers recognize and value a wider range of skills, including employability skills, as criteria for scholarships.
- That post-secondary institutions consider employability skills and assessment of prior learning as one criterion for program admission.

Topic/Issue 4

Entrepreneurship Education

- That a public/private sector committee be established and supported by Alberta Education to review the status of entrepreneurship concepts in the curriculum.
- That a distinct, coordinated, organizational presence to support the advancement of entrepreneurship awareness and training in Alberta be established.
- That teacher training institutions include an understanding of entrepreneurial skills in their set of expected teacher competencies.
- That post-secondary institutions consider entrepreneurship skills as one criterion for program admission.

Valuing All Career Areas and All Educational Programs Equally

That a partnership of labour and business organizations, Alberta Education, and Alberta Advanced Education and Career Development, initiate programs, including a public relations campaign to improve the image of trade, service and technical careers, and the image of school programs that prepare young people for these careers.

- That school systems implement a more effective career counselling program, beginning in elementary school.
- That Alberta Education, with input from business/employers and others, review present diploma requirements with a view to making selected employability skills compulsory requirements for graduation.
- That Alberta Education set explicit learning expectations and standards for general work experience courses.
- That the Government of Alberta, in cooperation with business and employer organizations, explore:
 - how the sharing of technological equipment among schools, and between schools and businesses, can be maximized
 - the possibility of creating a business sponsored and administered fund to facilitate the development of “knowledge workers”
 - incentives for businesses to provide work site learning opportunities.
- That schools implement alternative flexible forms of student scheduling that facilitate work site learning and different learning styles.
- That *School Act* legislation be changed so that the authority to approve workplace learning sites, and direct students to them, is delegated to school principals.
- That the Students Finance Board be directed to develop appropriate scholarships for students with high levels of performance in complementary programs, such as CTS and

RAP, and that business also be encouraged to provide such scholarships.

- That Alberta Education and Alberta Advanced Education and Career Development consider establishing another youth apprenticeship program in addition to RAP, which would provide a “seamless transition” from high school to post-secondary programs.
- That Alberta Education, Alberta Advanced Education and Career Development, and the Apprenticeship Board and Committees review and align the academic requirements of high school programs and apprenticeship trade entry requirements.
- That the Apprenticeship Board examine the reasons for limited availability of entry-level apprenticeship positions, and address these reasons where possible.

Topic/Issue 6

Part-time Jobs

- That business organizations encourage employers to provide part-time student workers with as much breadth of experience as possible.
- That employers, educators and parents work together to encourage an appropriate balance among time students spend on school work, part-time work and recreational activities.
- That Alberta Education develop a framework within which school principals and employers can work together to develop programs allowing part-time student workers, including students who engage in volunteer community service work, to obtain credits for this work.

Topic/Issue 7

Career Education and Counselling

- That Alberta Education coordinate a review of its existing curriculum at all grade levels to ensure that career awareness is adequately addressed.

- That Alberta Education develop assessment standards and model assessment tools to assess student understanding of career planning and opportunities in Grade 9 Health and Personal Life Skills and for Career and Life Management 20 (CALM 20).
- That Alberta Education modify its policy on career counselling so that the policy sets out principles and beliefs relating to career development and student tracking.
- That Alberta Education and Alberta Advanced Education and Career Development engage in a joint project to provide students/schools with current labour market information, using information highway technology.
- That universities be directed to include methods courses that instruct teachers how to enable students to make career-related connections in all courses.

Topic/Issue 8

Independent and Interdependent Lifelong Learning

The prior seven issues and their recommendations can be considered independently from one another. However, each in its own way contributes to an overriding and interconnecting theme, that of independent and interdependent lifelong learning.

- That Faculties of Education and the ATA take leadership in encouraging teachers to expand and enhance methodologies that develop independent and interdependent learners who take ownership of their learning.
- That business/employers be encouraged to spend more on employee training programs.
- That government, business/employers and other stakeholders cooperate to help build a learning culture and support the concept of lifelong learning, and to convey the human resources component of the Alberta Advantage.
- That Alberta Education and Alberta Advanced Education and Career Development coordinate their efforts in promoting lifelong learning.

Topic/Issue 9

Equity: Coordinating Business/Employer Involvement

- That Alberta Education and provincial business organizations encourage the establishment of community-based business education councils.
- That government and business organizations establish a provincial Career Education Foundation (also see page ix).
- That school systems develop policies that address the coordination of business involvement in a manner appropriate to the communities served.



Figure 1: Student Workers to Citizen Learners

IMPLEMENTATION RESPONSIBILITY

The recommendations outlined below have been organized to reflect which organization has primary responsibility for implementation.

Schools and School Systems

- School system/local policies
- Ethical guidelines
- Community-based business–education councils
- Skills portfolios
- Enhanced work site learning/career transition courses
- Flexible scheduling to support work site learning
- Revise career counselling policy

Employers and Business Organizations

- Provincial Career Education Foundation
- Educators members of business organizations
- Business organizations encourage involvement with education
- Participating on advisory committees
- Identify business–education partnership contacts
- Identifying labour needs and employability skills
- Inform employers of educational standards
- Community cooperation to monitor student part-time work hours
- Prior learning as criterion for first-time job applicants
- Coordinated organizational support
- Breadth of experience for part-time student employees
- Enhanced employee training programs

Government of Alberta

(Alberta Education, Alberta Advanced Education and Career Development, Other Departments)

- PR campaign for a “learning culture”
- Coordination of efforts to promote lifelong learning
- Shared technology and technology fund

Alberta Education

- Decentralized approval of work site learning
- Provincial policy
- Ethical guidelines
- Business participation on advisory committees
- Revise career counselling policy
- Survey employers regarding satisfaction with involvement in decision-making
- Review diploma requirements
- Expanded and alternative youth apprenticeship
- Curriculum promotes business understanding
- Review provincial curriculum for career learning expectations
- Committee to review curriculum and assessment requirements
- Explicit learning expectations and standards for work experience
- Pilot a requirement of a 3-credit work experience course
- Credits for part-time work
- Review provincial curriculum for career learning expectations
- Assessment standards and instruments for graduation requirements
- Develop assessment standards, Grade 9 Health and Personal Life Skills and CALM 20
- PR program for trade, service and technical careers

(continued)

Figure 2: Implementation Responsibility

(continued)

<p>Alberta Advanced Education and Career Development (AECD)</p> <ul style="list-style-type: none">• Alignment of academic and apprenticeship requirements• Determine reasons why there is a lack of entry-level apprenticeship positions• Expanded and alternative youth apprenticeship• Provide current labour market information• Coordination of efforts to promote lifelong learning• Employability and entrepreneurship skills criterion for post-secondary program admission
<p>Alberta Teachers' Association (ATA)</p> <ul style="list-style-type: none">• Educators members of business organizations• Independent and interdependent learning methodology
<p>Post-secondary Institutions</p> <ul style="list-style-type: none">• Employability skills criterion for post-secondary program admission• Entrepreneurship skills as criterion for post-secondary program admission• Conduct research regarding school-to-work transition• Teachers trained in entrepreneurial skills• Instruct teachers in career counselling• Independent and interdependent learning methodology
<p>Scholarship Providers/Student Finance Boards</p> <ul style="list-style-type: none">• Employability skills criterion for scholarships• Scholarships for trade, service and technical programs

Background

Establishment of Implementation Teams (I-Teams)

On March 30, 1994 Education Minister Halvar Jonson announced the establishment of five MLA teams to assist in the implementation of the key directions in Alberta Education's *Meeting the Challenge II: Three-year Business Plan for Education, 1995/96–1997/98*, which was published in February 1994.

The five teams were given the responsibility of consulting with education interest groups and the general public to provide recommendations to the Minister of Education on:

- regionalization and amalgamation of school boards
- redefining roles and responsibilities within the education system
- developing an accountability framework
- creating a new funding system for school boards
- developing plans and recommendations for expanding business involvement in education through workplace learning opportunities for students and to increase the effective use of technology in the delivery of education.

The issues being addressed by the first of the four teams outlined above were urgent; their work is now essentially complete and their reports have been presented.

The Business Involvement and Technology Integration I-Team

The MLA I-Team on Business Involvement and Technology Integration is chaired by Denis Herard, MLA Calgary Egmont and includes Hung Pham, MLA Calgary Montrose. The work of this I-Team has had two distinct dimensions, the business involvement dimension and the technology integration dimension.

“The MLA Implementation Team on Business Involvement and Technology Integration was established to allow students, schools, business, employers and the community at large to benefit from closer working relationships in preparing Alberta students to meet the challenges of the future.”

90th Annual Report 1994–1995,
Alberta Education.

Both dimensions required extensive work to define the issues clearly. Work proceeded on issues clarification while other I-Teams were involved in public consultation. This has worked well as it has enabled public consultation to be spread over time and thereby has reduced the “overload” on the consultation process.

The consultation process related to the technology integration dimension has now been completed and is outlined in a separate discussion paper, *Technology Integration in Education*, July 1995.

The report that follows pertains to the business involvement dimension. It outlines the issues, explains the process used to obtain input, and presents discussion and recommendations related to the issues.

Mandate and Issues

The Starting Point

“For educators at all levels, it is a time when the varieties of excellence we aspire to achieve in our universal education system must match to a sufficient degree the sheer diversity of our students.”

The Neglected Majority,
Dale Parnell, 1985.

Throughout the 1980s, Albertans, like citizens of other Canadian provinces and American states, became increasingly aware of the needs of the “neglected majority” of secondary school students. These are the “kids in the middle” who do not require special education but who also will not complete four year university degrees and may not pursue any formal education in post-secondary institutions. Historically, this group of students has successfully entered the workforce after completing high school. Given the changing and increasingly complex nature of work, employers were indicating that students needed help in developing employability skills. Both educators and employers were also realizing **the need for a smoother school-to-work transition.**

Knowing this, Alberta Education began to revise and update all of its practical arts courses (business education, industrial education and home economics) in 1989. The new curriculum, known as Career and Technology Studies (CTS), was designed to provide life skills and a more rounded education for all students and to enable some students to develop workplace entry skills. In addition, the senior high school Registered Apprenticeship Program (RAP) was developed jointly by Alberta Education and Alberta Advanced Education and Career Development.

These program developments, while viewed positively by most Albertans, raised two issues that were the starting point for the deliberations of the I-Team. First, the effective delivery of many of these programs is accomplished most successfully in the work site. Often schools do not have the equipment nor up-to-date expertise. Also, it is hard to recreate “real-life” settings in schools. Thus, the Alberta Education business plan encourages teachers to “take advantage of different delivery options such as . . . workplace learning.” This of course necessitates the support of employers and a close relationship between employers and schools. Second, while programs, such as CTS and RAP, may be excellent, students and their parents need to see them as valuable alternatives or enrollments will remain low. Employers can be

powerful allies with educators in communicating the value of these programs to parents and students.

Interrelated Issues

As the I-Team began to discuss with others how employers and educators could work more closely together to increase enrollments and work site learning experiences in programs, such as RAP and CTS, several other issues began to emerge. At the outset, the team recognized that business involvement in education had potential to **benefit all students at all levels**. All students must develop **employability skills, including entrepreneurship skills**. Students must begin exploring career options at the elementary school level, and successful school-business partnerships at the elementary level have demonstrated benefits to student learning.

The overarching issue identified at the outset was that whatever recommendations were put forward, they **must assist students to move from dependence to become both independent and interdependent learners**. Lifelong learning and learning and working collaboratively are highly important employability skills.

The I-Team also recognized early in their deliberations that **students' career planning must be dramatically improved**. Too many students aspire and/or are counselled to go to university. When they either change their mind or fail to meet entry requirements, they **"default" into the workplace**, having made no other career plans. For this group, the **school-to-work transition process is often difficult**. Educators and employers need to cooperate in helping students make this transition.

In determining how broadly the term "business" should be defined, the team found that many existing workplace learning sites and school partnerships were with public sector and not-for-profit employers, such as hospitals and the St. John Ambulance Society. Thus it was agreed that in the context of business involvement in education, **"business" would be defined broadly to include private, for profit firms, not-for-profit organizations and public sector employers**, in other words, all employers, including agencies or organizations that provide opportunities for experience working in a volunteer capacity.

"As we become independent—proactive, centered in correct principles, value driven and able to organize and execute around the priorities in our life with integrity—we then can choose to become interdependent—capable of building rich, enduring, highly productive relationships with other people . . . Interdependence opens up worlds of possibilities for deep, rich, meaningful associations, for geometrically increased productivity, for serving, for contributing, for learning, for growing."

The 7 Habits of Highly Effective People,
Stephen R. Covey, 1989.

“While thousands of educators, businesspeople, government officials, parents, union representatives and community members across Canada are active and enthusiastic partners, uncertainty about one another’s motives and actions is still common.”

Ethical Guidelines for Business–Education Partnerships,
The Conference Board of Canada,
1995.

Other related issues emerged. Public input was sought and received relative to these issues; detailed discussion and recommendations related to these issues are on pages 14–44 of this report. These related issues included the following.

- Employers are concerned that many students do not acquire a disposition toward and the skills for lifelong learning. No matter how well-educated a student might be, most jobs today require ongoing learning. **Students must become both independent and interdependent lifelong learners.**
- The need for mechanisms to enhance understanding and trust between educators and employers.
- Educators are not always sure of what employability skills employers expect of students, and business isn’t always sure what support educators expect. As the workplace changes, entrepreneurship skills are becoming increasingly important.
- In addition to their involvement in implementing educational programs, employers would like more input into the development of educational policy and programs.
- Both educators and employers recognize the possibility of student exploitation. The potential for this is particularly evident in business sponsorships. Both groups recognize a need for a code of ethics in their relationships.
- While only a limited number of students have been involved in workplace learning experiences, the majority of students hold part-time jobs. Many others acquire excellent experience through volunteer community service work. There needs to be more links between these jobs or volunteer experience and the students’ schooling. There is great potential for enhancing the learning value of part-time jobs and volunteer service.
- Career counselling in schools needs to be reengineered. Students need to be better informed about careers that do not require university preparation.
- Because of the varying nature of Alberta communities, providing equity of support to schools and students through business involvement will be challenging.

The identification of all these related issues expanded the original mandate and workplan of the I-Team and somewhat more time than was first anticipated has been required to address the issues. The I-Team, however, felt that the time and effort was worthwhile and has resulted in the development of a holistic and comprehensive vision and set of recommendations.

“Demand Side” Issues

The I-Team realizes that all of the issues that were addressed are “supply side” issues. These issues pertain to how educators and employers can work together to improve the general education of students and their preparation for the workforce. This alone will not solve all the problems of unemployment. Governments must also address “demand side” issues such as job creation and work sharing. However important “demand side” issues are, the “demand side” issues were determined not to be the mandate of this I-Team effort.

Post-secondary Transitions

The basic mandate of the I-Team is to provide recommendations to the Minister of Education regarding programs for Kindergarten to Grade 12. However, the I-Team believes that **the general principles and many of the specific recommendations in this report are equally applicable to the post-secondary educational system in Alberta.** Indeed, it is felt that students would be better served if there were more cooperation between Alberta Education and Alberta Advanced Education and Career Development (perhaps amalgamation should even be considered). This could result in more “seamless transitions” as students move from one level to the next. While it is important that business/employers be involved with education at all levels, this is not to suggest that students should be encouraged to go into the workforce after completion of high school. All students should be encouraged to stay in school as long as possible. However, business/employer involvement and work site learning opportunities should be prevalent at all levels to ensure that programs are as relevant as possible.

The Process

The Business Involvement Advisory Group

The I-Team, consisting of Denis Herard, MLA Calgary Egmont—Chair, and Hung Pham, MLA Calgary Montrose—Member, was appointed by Halvar Jonson on March 30, 1994. From April 1, 1994 to November 1994 initial discussions were held with Alberta Education staff, a preliminary list of issues and a workplan were developed, and the decision was made to establish a Business Involvement Advisory Group (BIAG). Business organizations, particularly those representing employers likely to employ large numbers of secondary school educated employees, were contacted, as were several educator organizations. On November 7, 1994 Education Minister Halvar Jonson announced the appointment of the members of the Business Involvement Advisory Group (see page iii). The Alberta Federation of Labour (AFL) nominated a member, and a member was appointed by Mr. Jonson. However, the AFL member did not attend any meetings of BIAG.

The first meeting of BIAG was held on November 25, 1994. Ten more meetings were held from January 1995 to February 1996. The group received reports on several related Alberta Education initiatives, such as the high school diploma requirements, the Off-campus Education Policy, the CTS and RAP programs, and the provincial level partnerships initiative, Careers . . . The Next Generation. Reports were also received regarding several school system partnership and off-campus activities, and school system staff were asked to share observations regarding business involvement issues. Reports were also received from such groups as the Alberta Chamber of Commerce, Junior Achievement and the Calgary Partnerships Foundation. Several specialist councils of the Alberta Teachers' Association also reported and shared their policy on partnerships (Appendix A).

During this timeframe (January 1995–February 1996), the I-Team and BIAG continued to clarify and refine issues. Members of BIAG reviewed an extensive amount of information about related developments in other Canadian provinces and in other countries (see bibliography) as well as relevant press clippings from Alberta

“The engagement of private employers and worker organizations in the training of youth distinguishes the European approach . . .

Europeans accept teenagers as part of the mainstream workforce . . . both as workers and learners.”

School-to-Work Transition in the U.S.: The Case of the Missing Social Partners, 1994.

and other areas. A preliminary discussion paper/questionnaire was developed and reviewed by a network of Albertans. The input from the questionnaire was summarized and reviewed by the Advisory Group.

Public Input Questionnaire

The Nichols Educational Consulting Firm was contracted to assist with the task of developing and administering a public input questionnaire. Nichols considered the input from the reviewers and held focus group sessions involving approximately 80 individuals identified as having an interest in the work of the I-Team. On the basis of this input, Nichols strongly advised BIAG that the public questionnaire should not be in the discussion paper format as this made it so long that respondents would be discouraged from responding. They refined the questionnaire and shortened it substantially. As the Technology Integration Discussion Paper was also in progress, and as a lot of educators and business people are not available during the summer months, the questionnaire was not distributed until October 2, 1995. However, an "advance notice" letter was sent to all major stakeholder organizations in June 1995 so that they might begin to reflect on the issues.

The questionnaire, with a covering letter from the Minister of Education, a brief appendix that provided some background information about a number of the issues addressed in the questionnaire, and the results of a survey about school-business partnerships conducted by Alberta Education in the spring of 1995 was distributed at the beginning of October 1995. Approximately 9 500 stakeholders, including key business and education associations, all school boards and schools in the province, a sample of businesses known to have had some previous involvement in school-business partnerships, and a random sample of 3 000 employers in the province—including employers in the private and public sectors, as well as not-for-profit and volunteer organizations—received the questionnaire. Individuals and groups were also invited to prepare written submissions.

A total of 795 completed questionnaires were received by the extended deadline of November 24, which resulted in an 8.4%

response rate. A high proportion of the respondents added written comments in the spaces provided in the questionnaire. In addition, thirteen briefs were received.

Table 1 presents a summary of the survey responses. The respondents have been categorized in accordance with the way they identified themselves and completed the questionnaire.

**TABLE 1
SUMMARY OF SURVEY RESPONSES**

Respondent Category	Number	Percentage
Employers	333	42%
Educators	225	28%
Public	116	15%
High School Students	<u>121</u>	<u>15%</u>
TOTAL	795	100%

A detailed analysis of the findings is outlined in two reports, *Business Involvement In Education: Public Consultation Findings* and a related *Technical Appendix*.

Following is a summary of the main findings from the survey responses.

- 1) Students are not considered to be well prepared for entry into the workforce and the education system should place a higher priority on general employability skills. Employers and the general public are stronger in their views on this matter than are educators and students.
- 2) It is more important that priority be given to general employability skills, including communication skills, thinking skills, ability to assume responsibility and a positive attitude toward lifelong learning, than to job-specific skills.
- 3) There is a strong support for providing basic job-readiness training for all students, but a low level of support for requiring all students to have work experience.
- 4) Educators feel they have a better understanding of employer needs and expectations than employers feel educators have.

- 5) A majority of educators (76%) and some employers (45%) feel that there is a lack of common understanding among employers about their expectations of the education system.
- 6) Almost all employer respondents indicated that some groups or organizations should represent employers in the education community. The Chamber of Commerce was cited most frequently as the organization that should represent employers.
- 7) A majority of respondents (80% of employers, 68% of educators) feel that employers should be more extensively involved in education. The respondents also felt that the government should encourage employers to be more involved in education.
- 8) The majority of the respondents are of the opinion that employers would be prepared to help educators to establish students' school learning as a higher priority than part-time employment. The preferred strategy was for employers to recognize and reward school achievement.
- 9) The majority of respondents felt that Alberta Education should provide guidelines for schools who wish to enter formal partnerships to select suitable employer partners, and that school boards should establish selection criteria. However, the majority of respondents also felt that the actual selection of partners should be left to principals or teachers.
- 10) Concern was expressed that some of the messages students could receive through cooperative education programs may not be appropriate because of the lack of balance given to alternative beliefs, attitudes and values. Approximately two-thirds of the questionnaire respondents consider that it would be appropriate to have a policy to ensure students receive a balanced perspective and that parental permission be obtained before students participate in cooperative education programs.
- 11) There are mixed views about whether or not government should be concerned with partnerships that may have a promotional component: 48% of respondents feel that government should be concerned about such partnerships; 39% feel that government should not be concerned; and 13% do not know if government should be concerned.

There are also mixed views about whether sponsorship by employers should be controlled or limited in the school system. Overall, roughly one half of the respondents are of the opinion that employer sponsorship should be controlled or limited. Thirty-seven per cent of the respondents feel that sponsorship should not be controlled or limited and 12% do not know if it should be controlled or limited.

On many of the issues, different types of respondents held different views. More detailed findings are outlined in the two reports referred to above.

Literature Review

The Nichols Educational Consulting firm also prepared a literature review entitled *Business Involvement in Education Literature Review*. The review summarizes several books and journal articles about topics related to the I-Team mandate, such as school-to-work transition.

Business Partnerships Survey

From January–June 1995, BIAG members reviewed *Skill Development: Partnerships in Education*, a report on school business partnerships in Alberta prepared by Alberta Education, the Alberta Chamber of Resources and other partners in November 1992. BIAG recommended that Alberta Education update this status survey. This was done in April 1995. Key findings of this 1995 survey were that:

- 8 of 67 school jurisdictions reported had a policy on school-business partnerships
- 36 of 67 school jurisdictions had assigned an individual, at the system level, the responsibility for school-business partnerships
- 223 of the responding schools had a business partnership, and 86 additional schools were in the process of establishing a business partnership (there are approximately 1 800 schools in Alberta)

“There is significant interest, and activity, in school-business partnerships in Alberta . . . there is every indication that partnerships are thriving and growing.”

Partnerships Survey Report, 1995, Alberta Education.

- nearly all the schools that have partnerships judged them to be successful
- the main goals of the partnerships were:
 - promoting communication between schools and business
 - influencing students to continue their educational training
 - increasing knowledge of workplace expectations
 - expanding existing opportunities for career education
 - enhancing career information for young people.

The report concluded that school-business partnerships have demonstrated that they offer much to schools and businesses in Alberta.

Alberta Education 90th Annual Report

While not directly related to the work of the I-Team, Alberta Education also collected other data on issues identified by the I-Team from January–June 1995. These data were reported in the 90th Annual Report of Alberta Education. Data related to the recommendations in this report are outlined in Appendix B.

Invitational Forum

An equal balance of approximately 250 educators and lay Albertans, representing either business/employers or the general public, were invited to an Invitational Forum in Edmonton on January 18 and 19, 1996. Approximately 130 Albertans actually attended; the majority of those attending were educators.

Forum participants reviewed a draft report and 60 draft recommendations, and expressed their views through group and plenary sessions and a voting process. Most of the draft recommendations were strongly supported by the participants; in fact, 46 of the 60 draft recommendations were supported by 80% or more of the participants who voted. However, some recommendations received the support of only 60%–70% of participant voters, and four draft recommendations were dropped as a result of Forum input. Several other recommendations were

revised. Ten new recommendations were added or incorporated into existing draft recommendations. Forum proceedings were documented in the *Proceedings Report: Invitational Forum on Business Involvement in Education* and circulated to Forum participants.

Discussion and Recommendations

This section discusses the identified issue topics. A vision for what should be—a preferred future—is put forward. Then, a description of the perceived current status is outlined. Finally, recommendations to move the educational system and employers toward the preferred future are proposed. As several of the issues and topics are interrelated, some recommendations may be repeated in different sections. The recommendations are summarized in the Executive Summary (pages vii–xx).

Topic/Issue 1: Communication and Understanding Between Business/Employers and Education

“Ethical partnerships safeguard learners’ interests, build trust and mutual respect, regulate themselves, and make informed decisions that benefit everyone involved.”

Ethical Guidelines for Business–Education Partnerships,
Conference Board of Canada, 1995.

“All Albertans—students, parents, the community, teachers, principals, trustees, superintendents, business and government share the responsibility to provide all Alberta students with the best possible education.”

Meeting the Challenge II: Three-year Business Plan for Education,
1995/96–1997/98.

Preferred Future

Business/employers and educators engage in extensive dialogue, using language understood by all partners, at all levels. Through such dialogue, a productive level of understanding emerges. Ethical guidelines that guide relationships in the best interests of all parties, especially students, are in existence and are well understood by all involved. Business/employers, educators and students perceive the involvement of business in education to be meaningful and appropriate. Students develop an understanding of the role of business in society and how businesses operate, as well as positive attitudes toward the legitimate role of business in society. Perceptions of employers and educators regarding required educational emphases and skill attainments of students are very similar.

Current Status

While the level of dialogue between business/employers and educators has been increasing over the past few years, it is, in the view of many, still too limited. However, employers and educators have enough overlapping goals to enable successful partnerships.

Some educators are unsure of the motives or the educational agenda of business/employers; they feel that this agenda could unduly narrow the goals of education. They are also concerned that some forms of business sponsorships may exploit students to sell products or services. They are also concerned that some representatives of business/employers advocate instructional policies that would move the educational system backward rather than forward. In some emerging relationships between schools and businesses, it is difficult to distinguish between partnerships and sponsorships. Ethical issues are at times being addressed in an ad hoc fashion in the context of specific negotiations.

Business/employers, on the other hand, often feel that educators are ignoring their needs to have a workforce that will enable them to be competitive in the 21st century. Business also feels that some educators are not supportive of free enterprise, and do not understand a legitimate profit motive. Some employers also feel that students are not developing adequate understanding of the legitimate role and importance of business in society. They believe that students are developing negative attitudes toward business, and often regard business in an anonymous, depersonalized manner that can lead to future problems.

There are limited opportunities for employers and educators to dialogue at various levels—national, provincial, school system and school. Recent efforts of the Conference Board of Canada have resulted in extensive dialogue and the development of a model set of ethical guidelines for school–business partnerships. Business representatives have been involved in a fair amount of provincial educational decision-making; e.g., the development of science and CTS curricula, but express a desire for greater involvement. There is now provision for business representatives to be a part of school councils.

“The relationship between the basic institutions—school, workplace, and government—must be woven into a new pattern. Where there has been isolation, there must now be direct communication. Where there has been suspicion and distance, there must now be trust and close cooperation. And where there has been benign neglect, there must now be impartial analysis and swift action.”

Making the Grade,
Governor John R. McKernan, Jr.,
1994.

Recommended Actions

1. That each school system be required to adopt and implement a policy respecting the involvement of local businesses in education. This policy should address such topics as partnerships and sponsorships, and other ethical issues by affirming the Conference Board of Canada *Ethical Guidelines*

for Business–Education Partnerships or by modifying it based on local circumstances and viewpoints. School system policies could be adaptations of a provincial policy developed by Alberta Education, but such policies should meet minimum standards specified provincially.

2. That community-based business–education councils be formed to develop better understanding and communication at local levels (also see Topic/Issue 9, Recommendation 1, page 42).
3. That business and labour organizations, along with educational stakeholders, consider establishing a provincial Career Education Foundation (also see Topic/Issue 9, Recommendation 2, pages 43–44).
4. That the Alberta Teachers' Association encourage its members to become members of community groups likely to represent a cross section of employers (e.g., local Chambers of Commerce, Rotary Clubs, etc.), and that business/employer organizations be encouraged to solicit educators as members.
5. That businesses, employers, and their organizations, encourage their employees and members to become more involved in education. This could include having each organization identify a partnership contact person.
6. That Alberta Education review the core curriculum at all grade levels and make whatever changes may be required to ensure that all students acquire a general understanding of how businesses operate and of their role in society (also see Topic/Issue 5, Recommendation 3, page 28).

Topic/Issue 2: Business/Employer Involvement in Educational Policy-making

Preferred Future

Clearly identified structures exist whereby the business/employer community can have input to educational policy-making at the provincial, school board and school levels. Business organizations, both sectoral and cross-sectoral, exist at all levels and function effectively to coalesce the views of the business community and to represent those views to educators. Surveys of the business community indicate high levels of satisfaction with their degree of input to educational decision-making.

Current Status

At the provincial level, the input of business/employers occurs on an ad hoc basis. Groups such as the Alberta Chamber of Commerce and the Alberta Chamber of Resources have been represented on some advisory committees. These organizations have, from time to time, been represented on various subject area advisory groups; e.g., Minister's Committee on Secondary Science, but there has been no direct representation of such groups on general curriculum policy advisory committees. However, appropriate employer representatives were involved in focus groups that provided advice on the development of the Career and Technology Study strands.

At the school board level, there are no common requirements or practices regarding business/employer involvement in policy setting. Several school systems do consult with local entities, such as the education committees of local Chambers of Commerce regarding specific issues. At the school level, there are also no common requirements or practices regarding business involvement. Alberta Education's *School Councils Handbook* suggests that the community representation on a school council may be "a representative of a business that has a link with the school" or "an employer who has direct contact with students in that school." A recent survey indicated that 69% of employers were satisfied with involvement in decision-making at the school

"Advice on employment skills must be sought and incorporated into the educational curriculum . . . the use of 'Business Advisory Boards' could be expanded and applied to a broader segment of education. As well, the application of the Apprenticeship Training Program might well be extended to a larger segment of the educational system."

School-to-Work Transition,
Alberta Chamber of Commerce
Education Task Force, 1995.

level, and 52% of employers were satisfied with involvement in decision-making at the school board level. As well, there were fewer representatives of business/employers involved in Alberta Education decision-making than most other groups.

Recommended Actions

1. That business/employers be involved in educational policy development by:
 - a) helping educational institutions understand the short- and long-term labour needs of business and effectively communicating those needs into the schools
 - b) helping educational institutions understand the nature of the desired employability skills in the short and long term
 - c) being active participants in School Councils.
 - d) participating in an Annual Conference which would review progress to date and establish new directions
2. That structures whereby business/employers can have input to educational policy-making at all levels be developed and/or identified and clearly communicated. As a start, Alberta Education should expand the present Program and Assessment Advisory Committee (PAAC) to include representatives of business and broaden the input (see Appendix D regarding terms of reference of PAAC). Business representatives should be “front line” owners, managers or entrepreneurs.
3. That Alberta Education continue to survey employers, as well as other stakeholders, regarding their satisfaction with involvement in educational decision-making, and should target improvements in satisfaction levels.
4. See Topic/Issue 3, Recommendation 1, page 20.

Topic/Issue 3: Employability Skills

“We believe:

- All students must have strong reading, writing and math skills with which to analyze data and develop ideas and inferences.
- The education system must provide our society with creative and critical thinkers and problem-solvers, who are prepared for the world of work . . .
- The education system must provide opportunities for students to acquire the entrepreneurial and technical skills and work habits required for success in the rapidly changing, high-tech global economy.”

Meeting the Challenge II: Three-year Business Plan for Education, 1995/96–1997/98.

“Employability skills are the generic skills, attitudes and behaviours that employers look for in new recruits and that they develop through training programs for current employees. In the workplace, as in school, the skills are integrated and used in varying combinations, depending on the nature of the particular job activities.

All the [employability] skills . . . are already either explicit or implicit in general educational goal statements of the provinces and territories. Drawing attention to skills necessary for employability is compatible with and can enhance a school’s efforts to meet its other goals and objectives.”

Employability Skills Profile, Conference Board of Canada, 1993.

Preferred Future

Employers have clearly identified the general employability skills that students are expected to have attained at graduation. These skills are incorporated into provincial learner expectations and are clearly communicated to schools. Schools share these expectations with students. Provincial examinations assess skills that can be measured in paper and pencil formats, and students demonstrate the graduation standard. For skills that cannot be evaluated by written examinations, students maintain skills portfolios documenting related experiences. Several of these experiences are attained in the workplace, and both workplace supervisors and the school attest to the attainment of standards in the portfolio. Employers have widespread familiarity with the skill expectations and standards, and routinely request copies of student transcripts and portfolios when students apply for jobs.

Current Status

*Meeting the Challenge II: Three-year Business Plan for Education, 1995/96–1997/98, sets out the learning expectations for students. These expectations reflect the expectations of employers as expressed in the Conference Board of Canada *Employability Skills Profile* (Appendix E).*

Standards for the academic learning expectations are, for the most part, embodied in courses required for graduation. However, with the exception of skills in the language arts and social studies, the minimum standards for graduation are not assessed provincially. For example, the minimum graduation requirement in mathematics is successful completion of the course Mathematics 24, for which there are no provincial assessment standards or examination. Some skills that are now regarded as employability skills, such as the ability to use computer and communication technologies, are not required for graduation.

The attitudinal or “personal skills” dimension of the learning expectations, such as “knowing how to work independently and as

part of a team, ” while referenced in such Alberta Education publications as *Building a Comprehensive School Guidance and Counselling Program*, are not assessed or reported in any structured manner. For many students, these skills are taught only incidentally and only in the school setting. Some informal assessment of attitudes is occurring at the school level.

Employers have little understanding of the skill expectations and standards required in several senior high school courses. While they often ask students applying for jobs if they have a high school diploma, they seldom request a transcript. At times they ask for letters of reference from job applicants’ teacher(s), but there is no standardized way for schools to report students’ skills, attitudes and abilities in nonacademic employability skills areas, such as “managing time and other resources needed to complete a task. ”

Recommended Actions

1. That Alberta Education periodically review provincial learning expectations and curriculum at all grade levels, inviting a cross section of employers and employer groups; e.g., Chamber of Commerce, in addition to students and other Albertans, to comment on the degree to which curriculum addresses employability skills.
2. That Alberta Education complete the development of assessment standards and common provincial assessment instruments for all courses that represent the minimum graduation requirement. These assessment standards should be reviewed by representatives of employers, as well as other stakeholders. Assessments will not necessarily be administered at the provincial level.
3. That school systems, with assistance from Alberta Education, develop employability skills portfolios and encourage and assist all students to maintain such portfolios, beginning at the latest in junior high school.
4. That school systems encourage all senior high school students to engage in at least one work site learning experience, and that Alberta Education pilot a requirement of a minimum 3-credit work experience course with at least one willing

school jurisdiction. (Also see Topic/Issue 7, Recommendation 1(f), page 36).

5. That employer organizations, in cooperation with Alberta Education, will:
 - a) maintain an ongoing effort to inform employers about the standards required for graduation
 - b) encourage employers to take into account a student's school learning progress in the part-time employment of all nongraduates under age 18
 - c) encourage employers to request student transcripts and portfolios from all first time job applicants
 - d) encourage employers to acknowledge successful high school work experience as one criterion for selection of first time job applicants.
6. That scholarship providers recognize and value a wider range of skills, including employability skills, as criteria for scholarships.
7. That post-secondary institutions consider employability skills and assessment of prior learning as one criterion for program admission.

Topic/Issue 4: Entrepreneurship Education

Preferred Future

The preparation of young people for a changing work environment includes a firm base in change-oriented, entrepreneurial, and business awareness and skill development.

Such preparation includes the following.

- The skill sets students develop through entrepreneurship education are clearly identified, assessed and recognized.
- Schools at all grade levels have at least 5% of instructional time devoted to increasing entrepreneurship and/or business awareness and skill development.
- These learning situations are integrated into current (K–12) curricula but are also distinctive enough to be seen as a separate learning strategy.
- Students appreciate the business environment; and develop skills, knowledge and attitudes associated with enterprise development; gain self-confidence and understanding of a rapidly changing world, and are aware that self-employment could be a career option.
- All instruction is supported by appropriate teacher expertise and interest. Resources are up-to-date and accessible to all schools and encourage an experiential learning environment.

Current Status

The world of work is changing. Many big businesses will become shrinking employers. From July 1994 to July 1995 in Alberta, firms with more than 300 employees lost 17 205 jobs, while firms with less than 50 employees gained 24 419 jobs. For many reasons, including developing economic trends, the future world of employment will see an expanding majority of Canadians working in micro-business enterprises. These micro-businesses will exist both as independent businesses and as profit centres within large

businesses. Therefore, one of the employability skill areas that is developed is the set of skills required for self-employment.

Some futurists and economists predict Canada's future economic growth will come almost exclusively from the development of innovative, and change-oriented micro-businesses or enclaves of restructured organizations.

Currently, entrepreneurship and business awareness and skill development are found in Grades 7–12. The most significant courses, Enterprise and Innovation and Management and Marketing, are strands of Career and Technology Studies. In fact, a basic competency common to all CTS strands involves being innovative and enterprising. Career and Life Management 20 also has some potential to offer instruction in these areas.

No strategy or plan exists in K–6 to develop entrepreneurship and business awareness and skills directly. Various related activities are taught in such subjects as health, social studies and mathematics. For example, a life career section in health may examine various careers but, having been developed over ten years ago, it may not emphasize self-employment as a career option.

Additionally, a number of nonprofit organizations provide some activities in entrepreneurship and business awareness and development. Such organizations include Junior Achievement, Canadian Foundation for Economic Education, I Want to Be a Millionaire Program, Future Entrepreneurs of Canada, Skills Canada Alberta, and the Alberta Foundation of Economic Development.

Some of these projects and programs operate in conjunction with the schools and some school–business partnerships provide supportive activities on a local basis.

Recommended Actions

1. That Alberta Education establish and support a public/private sector committee to complete the following tasks:
 - a) review the current status of entrepreneurship and business awareness and skill development throughout Alberta's K-12 curricula, particularly reviewing social studies and CALM 20 activities
 - b) compare Alberta's current status with programs and resources in other jurisdictions
 - c) if deemed appropriate by the committee, test Alberta students at different grade levels as to their attitudes, awareness and skills associated with entrepreneurship and business
 - d) propose initiatives that will increase the effectiveness of entrepreneurship and business awareness and skills development throughout Alberta's K-12 curricula.
2. That a distinct, coordinated, organizational presence to support the advancement of entrepreneurship awareness and training in Alberta be established. This initiative would be linked with the proposed Career Education Foundation as well as other entrepreneurial development activities and organizations. Such an initiative would provide support to educators involved with entrepreneurship and business awareness and training, and work to advance the activities of other nonprofit organizations involved in various aspects of entrepreneurship and business education. The development of a comprehensive information bank of exemplary entrepreneurship initiatives, programs and models would comprise part of this support (also see Topic/Issue 9, Recommendation 2, pages 42-43).
3. That teacher training institutions include an understanding of entrepreneurial skills in their set of expected teacher competencies.
4. That post-secondary institutions consider entrepreneurship skills as one criterion for program admission.
5. Support for Topic/Issue 5, Recommendation 3, page 28.

Topic/Issue 5: Valuing All Career Areas and All Educational Programs Equally

Preferred Future

Society accords dignity to all types of productive work. People in the professions are valued, as are people who work in the trades, services and technical careers.

Students are provided effective career counselling programs having equal emphasis on supplying accurate information about trades, services, technical careers and professions.

Students understand the changing nature of the workplace. They know that as we move into the information age, all types of work are increasingly demanding the application of knowledge; **the “knowledge worker” will be in high demand.** They understand that as workplace hierarchies are flattened, the traditional distinctions between “managers” and “the managed” are blurring; all workers, regardless of their chosen career, require high level employability skills. Students will be both independent and interdependent learners and workers.

Students have the support of parents, educators, government and business/employers in assuring them an opportunity to be the very best in any career they choose, whether it be in the services, trades, technical careers or professions.

All school programs are both academic and relevant, theoretical and practical. Students who have chosen to pursue careers in the trades and services are expected to meet high academic standards, and students who have chosen to prepare themselves for professions are expected to develop a high level of employability skills. Students learn academic skills in practical, community and career-oriented contexts.

The educational program is so structured that students meet high standards in core courses while gaining meaningful work experience. Work site learning is considered as “normal” as school site learning. Clearly defined levels of achievement and standards exist for both school site and work site learning, and

“Schools and teachers are encouraged to take advantage of different delivery options such as distance education and workplace learning. Senior high students will be able to learn employability skills in the workplace . . . The province will provide high school credit for workplace learning that is certified by the school and by the employer. This will ensure that students have the skills demanded by business and gain recognized work experience to assist in making the transition from school to work.”

Meeting the Challenge II: Three-year Business Plan for Education, 1995/96–1997/98.

“Because of educators’ push to send more students to college, I worry that U.S. students’ poor international test scores will simply lead to an increase in spending on the top third of our students, and once again, the rest of our children will be neglected. It is these neglected children whom we must equip to understand and run today’s electronic technology.”

Making the Grade,
Governor John R. McKernan, Jr.,
1994.

“With the move to a greater emphasis on a value added economy in Canada, the need for highly skilled technicians and specialized trade workers will increase significantly . . . there is a significant lack of student awareness of opportunities and advantages for workers in the field of technology.”

School-to-Work Transition,
Alberta Chamber of Commerce
Education Task Force, 1995.

“There is at present an artificial distinction between school and work; that barrier must be broken down. Although there may be significant societal pressure to obtain a post-secondary education, an individual should be aware that such a course of action is not the only option available.”

*Mayor of Calgary’s Steering
Committee on the Future of
Education,* 1991.

strong linkages between the two exist. Schools are entrusted to make decisions about work site learning placements for students.

Those students electing not to pursue institutionally-based, post-secondary studies have the opportunity within the basic educational system to prepare for satisfying careers through close linkages between the schools and employers. There is a wide range of career paths that may be pursued through these linkages; these paths include such areas as banking, retail trade and logistics as well as the traditional apprenticeship trades. The image of these careers, and the programs leading to them, are such that motivated students are attracted to them.

Current Status

Society accords high value to the professions, for which the normal entry requirement is a university degree. However, people who work in the trades and services are often not as highly valued. The reality is that society does not need and cannot accommodate everyone with a university degree. At the same time, work in the trades and services is being influenced by technology. Business/employers are becoming increasingly concerned about “skills shortages” in these career areas.

Education leading to careers in the trade, service and technical areas has had a poor image and tends to attract lower academic achieving students. Most teachers are more familiar with the professions than with trade, service and technical careers. Career information provided to students regarding trade, service and technical careers may not receive the same emphasis as career information about the professions.

One of the consequences of the conditions outlined above is that many students take high school programs related to university entry. When they do not attain the standards required, or simply tire of going to school, they enter the job market with little focused preparation for any specific job. **In effect, they “default” into the workplace.** This situation is worsened by the fact that even technical post-secondary institutions often use 30-level courses as “screening devices” and do not appear to recognize the practical value of 33-level courses and CTS courses.

Post-secondary institutions, especially universities, are graduating more students than can be absorbed by the labour market in some program areas.

For the majority of these students, there is no structure that enables them to obtain a solid academic education and concurrently meaningful work experience leading to a career. The standards of the workplace are frequently not defined or monitored, and high school diploma requirements are perceived by many to be too low. High school work experience courses are of widely varying quality; recently there have been attempts to set some common standards, but there is a perception that such courses are “time fillers.”

Currently, the interest level in CTS and RAP is on the increase, but student enrollment in these programs, especially in RAP, is quite low. RAP is tied to the larger system of apprenticeship, which is limited to approximately 50 trades—compared to approximately 400 in most European contexts. Also, there is little linkage between school-based learning and work site learning in RAP.

In CTS, many schools are ill-equipped to offer hands on training; they lack resources to provide modern equipment in many fields. Also, it is impossible to provide the real-life atmosphere of a workplace at the school site. Traditional school schedules and timetables do not facilitate work study in CTS. While some opportunities for work study and work site learning experiences in vocational education courses are available, and some new CTS modules are being delivered through work study and work site learning experiences, the overall amount is limited.

On the other hand, industry is generally not conditioned to a training program for students. Many workplace supervisors have had little training in acting as student mentors.

Efforts to structure a plan that integrates high school education and work-based training have not gone far enough.

“After numerous reorganizations over more than half a century the truth is that ultimately high schools end up catering to the minority of students who go on to university, and these young women and men happen to be disproportionately from advantaged backgrounds. The dilemma is how to increase options and open up paths in a way that is inclusive, that doesn’t leave out those students who come to school with fewer advantages.”

For the Love of Learning,
Royal Commission, Ontario, 1994.

Recommended Actions

1. That a partnership of labour and business organizations, possibly working through the Careers Education Foundation referenced elsewhere in this report, Alberta Education and Alberta Advanced Education and Career Development, initiate programs, including public relations, to improve the image of trade, service and technical careers, and the image of school programs that prepare young people for these careers.
2. That school systems, with support from Alberta Education, implement a more effective career education program, beginning in elementary school.
3. That Alberta Education, with input from business/employers and others, review present diploma requirements, including CALM 20, with a view toward making selected knowledge, skills and attitudes currently found in the Enterprise and Innovation, Information Processing, and Career Transitions strands of CTS compulsory requirements for graduation. To avoid undue "crowding" of the senior high school program, thought should be given to incorporating some of these learnings in Grades 1-9, where possible.
4. That Alberta Education set explicit learning expectations and standards for general work experience courses.
5. That the Government of Alberta, in cooperation with business and employer organizations, explore:
 - a) how the sharing of technological equipment among schools, and between schools and businesses, can be maximized (also see Topic/Issue 9, Recommendation 2, pages 43-44)
 - b) the possibility of creating a business sponsored and administered technology investment fund that would support the purchase of technological equipment and provision of staff inservice needed by schools to deliver programs that will assist students in becoming "knowledge workers"
 - c) incentives for businesses to provide work site learning opportunities for students.

"In Denmark, as in Germany, all firms pay into a general fund administered by labor and employers. The money is divided among those companies that accept apprentices to offset the cost of training wages."

Making the Grade,
Governor John R. McKernan, Jr.,
1994

6. That schools implement alternative flexible forms of student scheduling that facilitate work site learning and differing learning styles.
7. That *School Act* legislation be changed so that the authority to approve workplace learning sites, and direct students to them, is delegated through school boards to school principals.
8. That the Students Finance Board be directed to develop appropriate scholarships for students with high levels of performance in complementary programs, such as CTS and RAP, and that business should also be encouraged to provide such scholarships.
9. That Alberta Education and Alberta Advanced Education and Career Development consider establishing another youth apprenticeship program in addition to RAP. The program would apply to occupations other than the present 51 apprenticeable trades. It would link and integrate school site and work site learning. It would provide a “seamless transition” from high school to one- and two-year college and technical programs. The model currently in place in Maine—see Appendix F—provides some good ideas.
10. That Alberta Education, Alberta Advanced Education and Career Development, and the Apprenticeship Board and Committees continue to review and align the academic requirements of high school courses and apprenticeship trade entry requirements.
11. That the Apprenticeship Board examine the reasons for limited availability of entry-level apprenticeship positions, and address these reasons where possible.

Topic/Issue 6: Part-time Jobs

Preferred Future

Schools and teachers take advantage of the part-time work experienced by students choosing to work outside of any formal school-generated “workplace learning.” This includes volunteer work. These students learn employability skills and are given high school credit for this workplace learning, which must be certified by the school and by the employer or volunteer work supervisor. This ensures that students have the skills demanded by business and gain recognized work experience to assist in making the transition from school to work. Schools and business communities (employers) work closely together to ensure that reasonable limits are placed on hours of work so that student learning is not adversely affected. Employers make every effort to ensure that students engaged in part-time work are exposed to all aspects of the business so that the work provides a broad, positive learning experience.

Current Status

Students who choose to work part-time are not normally provided with any high school credits, unless the work is related to their enrollment in the RAP program. Some students indicate that their part-time jobs are simple, repetitive activities that provide limited learning opportunity. Educators believe, and some research supports the view, that many students work an excessive number of hours (more than 15 per week), and that their progress in school learning is negatively affected.

Recommended Actions

1. That business organizations encourage employers to provide part-time student workers with as much breadth of experience as possible.
2. That employers, educators and parents work together closely to encourage an appropriate balance among time students spend on school work, part-time work and recreational

activities. This might be achieved as one activity of School/Business Coordinating Councils that could be established at the community level (also see Topic/Issue 9, page 41).

3. That Alberta Education develop a framework within which school principals and employers can work together to develop programs allowing part-time student workers, including students who engage in volunteer community service work, to obtain credits for this work. Schools, students and businesses would participate on a voluntary basis, and credit-bearing, part-time work would be preapproved by all parties. To ensure credits are meaningful, students could be required to report orally and/or in writing:
 - a) about this work experience. Topics could be about actual work performed—skills required, energy level, working with others, following and taking orders from managers or supervisors, personal hygiene and dress, reliability
 - b) evaluations of how well they did and compare this to employer's evaluation
 - c) an analysis of what they liked and did not like, and relate the analysis to their career goals
 - d) on what they learned about work and themselves that would help get them a different kind of job.

Also, to ensure credits are meaningful, schools should require students to present employer assessments of their job performance. Local business–education councils (also see Topic/Issue 9, Recommendation 1, page 42) could assist schools and employers in establishing appropriate assessment criteria and standards.

Topic/Issue 7: Career Education and Counselling

“... appropriate, active intervention in the process of transition from school to work has a positive impact upon the success of young people over time.”

Center for Education, Employment and Community Education Development Center, Newton, Mass.
Vivian Guilfey
Joyce Malyn-Smith
Cathleen Corbitt.

“Students especially need a coach or advocate, not just during the preliminary discussions of their obligation but throughout their time in school and during the transition to the workplace.”

Making the Grade,
Governor John R. McKernan, Jr.,
1994.

Preferred Future

All students have access to career education and counselling, as distinct from personal counselling or educational counselling, suited to their maturity, needs and interests. Such programs begin early and are so effective that most students have a sound sense of their general career direction and are able to choose high school courses in grades 11 and 12 that provide appropriate preparation for their post-high school life.

This effective career education and counselling is a combination of the integration of the principles of career development into all subject areas through day to day teaching/learning activities as well as specific career counselling. School-based career education programs are delivered via a variety of models, at least some of which are joint ventures between school system staff and staff provided by Alberta Advanced Education and Career Development. The counselling in some models is provided by independent career counselling agencies on a contract basis.

All models involve parents and students, and parents are well-informed and supportive of the career direction choices being made by their children. A process to evaluate the effectiveness of alternative models is in place.

Employers in all communities are heavily involved in assisting with every school's career programs. Employers provide staff to give career talks and concrete, hands on career demonstrations on an ongoing basis, as well as on “career days.” All students in junior high school have several job shadowing experiences in different career areas, and all students in senior high school acquire work experience in one or more career areas of their choice. Career mentors are available to all students from Grade 7 on. Most communities have school/business coordinating councils to assist in organizing these programs.

Every senior high school has a student follow-up program in place. All dropouts and graduates are tracked for a minimum of two years after leaving school. Surveys of graduates, employers

and post-secondary institutions are conducted by each high school. Business and industry have a system in place that rewards those high schools that exhibit high performance in preparing students who enter the workforce directly. These rewards are both financial and symbolic (public recognition). Senior high schools also have job placement officers, either located in the high school or assigned by Alberta Advanced Education and Career Development and/or Human Resources Development Canada to work with a high school. These officers assist with job placements for students who do not go on to post-secondary education, and with student follow-up and tracking.

Current Status

It is a widely held perception that career education and counselling is simply not working.

For a number of years, a career awareness component has been a part of the health curriculum in Grades 1–9. Until recently, this curriculum was compulsory at all Grades 1–9. A recent change allows junior high schools to concentrate the curriculum in one or two of the three grades. Career and Life Management 20 is a compulsory, minimum 3-credit, 66-hour high school course that can be taught in any senior high grade, but is generally taught in Grade 11. This course includes a segment on career planning. As well, most senior high schools also provide some career and personal counselling services.

While there is a career awareness presence in the curriculum, the outcomes are not very clearly defined, a very limited amount of time is typically spent on the courses, and careers are but a small component of that time.

A recent Alberta Education publication, *Everyday Career Development*, notes:

... that traditionally, career development issues have tended to be dealt with as problems to be resolved with the help of a guidance counselor; often through the lock-step process of career planning. However, career development is now being viewed, by a growing number

“Both the education and employment communities have long ignored the need for rigorous research on the nature of transition (from school to work), how that transition is experienced, and the effects of interventions.”

*Center for Education,
Employment and Community
Education Development Center,
Newton, Mass.,
Vivian Guilfey
Joyce Malyn-Smith
Cathleen Corbitt.*

of career development practitioners, as meaning more than career planning. In the current and emerging socio-political-economic climate, good education is good career education and vice versa.

A recent Alberta Education study indicates that school guidance counselors spend approximately 15 percent of their time providing career counselling. Teachers of occupations and trade related courses have also, traditionally provided informal career counselling. Longitudinal studies conducted by the Population Research Laboratory, University of Alberta, and others, have found that a significant number of both graduates and nongraduates of high schools lack the appropriate career development knowledge and skills required to make an effective transition from school to the workplace.

Despite an increased focus on the importance of career development competencies in the media and elsewhere, teaching, at all levels, tends to focus primarily on the acquisition of knowledge and skills rather than the application of these competencies in a variety of career-related contexts.

The need for improved career counselling resulting in smoother school-to-work transitions is supported in several ways by the government's business plans. *Meeting the Challenge II: Three-year Business Plan for Education, 1995/96–1997/98*, includes in the definition of Basic Education the following statement: "Schools have the responsibility to provide instructional programs that ensure students . . . are prepared for entry into the workplace or post-secondary studies." Also, the plan specifies: "Departments such as Education, Alberta Advanced Education and Career Development, Health, Family and Social Services, and Justice, will find ways to share resources and integrate services and programs with those of local government agencies and schools."

"Programs which explain career options and opportunities should be developed and presented to students, educators and parents. Success stories in non-university areas of work need to be identified and promoted. Government, business and educators should actively promote the value and benefits of non-university work."

School-to-Work Transition,
Alberta Chamber of Commerce
Education Task Force, 1995.

A strategy under Goal 5 is “Reduce the duplication between secondary and post-secondary education institutions and programs.”

The Business Plan of Alberta Advanced Education and Career Development, under Goal 1, “Develop a Policy Framework for Adult Learning”, includes as a strategy, Number 6: “Provide Labour Market Information and Counselling Services to Industry and Individual Albertans.”

A recently developed Alberta Education Policy on Guidance and Counselling indicates that school boards should provide counselling services, including career counselling, but does not require them to do so. Alberta Education and Alberta Advanced Education and Career Development have developed a wealth of career counselling resources for schools. Alberta Education has also collaborated with the Canadian Guidance and Counselling Foundation and the Alberta Teachers’ Association to develop and sponsor a series of courses in career education for teachers and counsellors.

Recommended Actions

1. That Alberta Education coordinate a review of its existing curriculum to ensure that:
 - a) opportunities to develop career awareness are highlighted in all subject areas and at all grade levels, as appropriate
 - b) career development concepts receive increased and appropriate emphasis in CALM 20
 - c) the learning outcomes related to career development concepts in health courses and CALM 20 are clearly stated
 - d) all junior high school students will experience job shadowing opportunities
 - e) students in Grade 9 will be required to take a course in which the major focus is career planning in lieu of the present Health and Personal Life Skills 9

“Unfocused learning remains one of the prime barriers to achieving excellence for a host of high school students.”

The Neglected Majority,
Dale Parnell, 1985

- f) opportunities are available for all senior high school students to participate in a minimum of one work experience.
2. That Alberta Education develop assessment standards and model assessment tools to assess student understanding of career planning and opportunities in Grade 9 Health and Personal Skills and for CALM 20.
 3. That Alberta Education modify its policy on career counselling so that the policy sets out the following principles and beliefs:
 - a) career development is considered to be every teacher’s concern
 - b) career counselling is distinct from guidance counselling
 - c) schools should involve employers and entrepreneurs
 - d) schools are required to provide career counselling and may do so through a variety of models, including joint ventures with Alberta Advanced Education and Career Development local staff and/or private venture service providers. The model being developed by the Calgary Educational Partnership Foundation provides an example of one such model (see Appendix G)
 - e) all students are required to develop an educational program/career plan in Grade 9, to be updated annually; these plans are to be signed annually by the parent and the school principal or designate
 - f) schools are required to track students (minimally, a statistically representative sample; and ideally, all students) for a minimum of two years after leaving senior high school, and to survey employers and students regarding satisfaction with the students’ preparation for work
 - g) the tracking information referenced in f) is incorporated in ongoing research that examines the school-to-work transition experiences of Alberta students.

4. That Alberta Education and Alberta Advanced Education and Career Development engage in a joint project to provide students/schools with current labour market information, using information highway technology that includes links to employer home pages.
5. That business and industry establish a provincial Careers Education Foundation, one of the purposes of which should be to reward high schools that exhibit high performance in preparing students for smooth school-to-work transitions.
6. That universities be directed to include methods courses that instruct teachers how to enable students to make career-related connections in all courses.

Topic/Issue 8: Independent and Interdependent Lifelong Learning

The prior seven issues and their recommendations can be considered independently of one another. **However, each in its own way contributes to an overriding and interconnecting theme, that of independent and interdependent lifelong learning.**

Preferred Future

The natural zest for learning of ECS students has been nurtured and continues to thrive at high school graduation. Students understand that they live in a changing world where the increase in knowledge is exponential. **They have the skills and attitudes required to be independent and interdependent learners. They carry these skills into the workplace, and demonstrate a willingness and capability to take advantage of opportunities for growth, learning and advancement. In other words, they have learned to take ownership of their own learning.**

Recognizing that the strength of any company depends on knowledge, skills, attitudes and personal well-being of all its human resources, employers take a long-term view of human resource development. They recognize the importance of hiring entry-level workers, and accept responsibility for providing ongoing support and training that will enable them to contribute to the employer and to society as a whole. Managers understand and have a commitment to the principles of a “learning organization,” and they welcome opportunities to provide training in trades, professions and certified occupations.

Alberta society is characterized as having a “learning culture.” People with skills in providing training to adult learners are readily available. Recent graduates from Alberta schools return to their high school for additional upgrading in evening or weekend sessions when employers identify basic skill deficiencies that limit job performance. The quality of Alberta’s human resources is widely recognized in the global marketplace. Industries select Alberta as a base for operations because of the quality of its workforce. Workforce quality is a key component of the Alberta Advantage.

“At the heart of a learning organization is a shift of mind—from seeing ourselves as separate from the world to connected to the world, from seeing problems as caused by someone or something “out there” to seeing how our own actions create the problems we experience.”

The Fifth Discipline: The Art and Practice of the Learning Organization,
Peter M. Senge, 1990.

“... a “learning organization”—an organization that is continually expanding its capacity to create its future.”

The Fifth Discipline: The Art and Practice of the Learning Organization,
Peter M. Senge, 1990.

“Helping individuals develop the competencies to be effective life-long learners should be the top priority of any educational institution.”

The Neglected Majority,
Dale Parnell, 1985.

Current Status

Employers report that too many employees have too little interest in training programs or job enrichment and advancement. On the other hand, most businesses in Alberta, being a microcosm of Canada generally, spend far less on employee training programs than do competitors in other nations.

Some employers report that recent high school graduates regard their learning as being “completed,” and take little responsibility or ownership for their continued learning, including responsibility for learning from coworkers on the job.

There is some evidence of a learning culture in Alberta society; for example, library use is high, there is a substantial viewership of PBS-type TV programs, and high enrollments in adult credit and noncredit courses. However, adult learning opportunities tend to be accessed much more extensively by those who already have high levels of education than by those who have only high school or lower levels of education.

Alberta Advanced Education and Career Development is currently engaged in an Adult Basic Education Reform Project.

Recommended Actions

1. That Faculties of Education and the ATA continue to take leadership in encouraging teachers to expand and enhance methodologies designed to develop independent and interdependent learners who take ownership of their learning. This should include an emphasis on alternatives to lecture-type instruction, such as resource-based learning and “teacher as facilitator” models at all levels from Kindergarten to Grade 12.
2. That business/employers be encouraged to spend more on employee training programs. Trainers should be offered opportunities to retrain, including time spent on the shop floor.
3. That government, businesses/employers, and other stakeholders cooperate to build a learning culture and support

the concept of lifelong learning, and to convey the human resources component of the Alberta Advantage.

4. That there be closer cooperation and coordination, perhaps even amalgamation, between Alberta Education and Alberta Advanced Education and Career Development so that lifelong learning is promoted more effectively.

Topic/Issue 9: Equity: Coordinating Business/Employer Involvement

Preferred Future

To a very large extent, the coordination of business involvement in education takes place at the local or grass roots level.

Educators accept that student learning requires students to have exposure and experience working with business, and businesses acknowledge their role in providing the appropriate experiences that are a necessary part of successful graduation from high school. There is an acceptance that student learning must take place, not only at the school, but also at the work site.

Schools feel free to approach businesses and, similarly, businesses feel free to approach schools with a view to extending student learning. Clearly, the benefits of this coordination focus on the student. Large and small businesses are involved, as well as the public and private sector, and not-for-profit organizations. Employees of these organizations are provided with the opportunity and time to contribute to these partnership arrangements.

Post-secondary institutions are drawn in as well, and coordination involves the three types of organizations.

Current Status

There is a significant level of activity in the province between individual schools and businesses that provide students some exposure to work site learning, as well as some actual working experience. Most of these present arrangements tend to be ad hoc, with widely different levels of agreement between the parties. In addition, there are a number of more broadly based initiatives, the most significant being Careers . . . The Next Generation project, which is partly funded by government and is being championed by the Alberta Chamber of Resources. Some councils and foundations have also been set up to support various communities or at least more than one school; for example, the Calgary Partnerships Foundation. In addition, there are some

national and international initiatives, although the links between these activities and the local activities tend to be tenuous. The lack of structure and coordination limits people's ability to learn from each other, and may cause mistakes to be repeated, and at times may lead to frustration between the parties.

Recommended Actions

1. That Alberta Education and provincial business organizations initiate the establishment of community-based business education councils. The purpose of these councils would be to address potential inequities by providing a bridge at the community level between the schools and business. The councils should define their roles based on local needs. However, potential roles could include:
 - a) facilitate partnership arrangements between individual businesses and schools
 - b) assist with career development for students—promoting the value of all potential careers, bearing in mind the expected marketplace demands
 - c) coordinating the sharing of technological equipment between businesses and schools within a community
 - d) coordinating work site learning opportunities for all educational institutions in the community
 - e) developing community consensus regarding such issues as part-time work guidelines for students and employers
 - f) helping businesses to assess student learning at the work site
 - g) providing “speaker’s lists” and assisting in organizing career fairs
 - h) coordinating employment exchanges or secondments for teachers and business employees at a community level
 - i) business recognition of local achievements and successes.

“Secondment opportunities should be expanded between business and education.”

School-to-Work Transition,
Alberta Chamber of Commerce
Education Task Force, 1995.

“The concept of school-business councils should be explored as a means of improving the communication and understanding process.”

School-to-Work Transition,
Alberta Chamber of Commerce
Education Task Force, 1995.

2. That business organizations and government establish a provincial Career Education Foundation. The Foundation could be modeled on the Science Alberta Foundation. It could assume, on a more ongoing basis, some of the partnership facilitative functions currently being carried out through the Careers . . . The Next Generation project. Other potential roles for the proposed Foundation, some of which have been identified in other sections of this report, include:
 - a) assisting with a public relations campaign to promote the value and importance of all careers, including those that require university degrees, those that require one- or two-year, post-secondary diplomas, and those where individuals enter the workforce directly and obtain qualifications and experience while working
 - b) acting as a “clearing house” for the distribution of ideas and concepts about businesses and schools working in partnership. There also may be a requirement for assisting with the allocation of resources
 - c) assisting with the linking of schools with businesses, using technology, in those instances where schools or businesses wish to be “partnered” but no businesses exist in the local community (or an inadequate variety of businesses exist)
 - d) acting as a network between community-based business education councils in order that these councils can learn from each other. Part of this function could be the convening of an annual conference to serve as a forum for discussion of issues relating to business involvement in education and for showcasing effective local practices
 - e) in addition to networking within the province, the Foundation should link outside the province to facilitate information sharing about what is happening in other provinces, as well as at the national and international levels; e.g., the Conference Board of Canada
 - f) identifying schools that do not have partnerships and encouraging business/employers to be more proactive in establishing partnerships

- g) rewarding high schools that exhibit high performance in preparing students for school-to-work transitions
 - h) establishing and administering a “Blue Ribbon” award program for businesses that are exemplary in providing workplace learning sites or otherwise supporting education.
3. That school systems develop policies addressing the coordination of business involvement (school partnerships, sponsorships) in a manner appropriate to the communities served (also see Topic/Issue 1, Recommendation 1, page 15).

Glossary

- Apprenticeship Board:** The Apprenticeship Board consists of 13 members appointed by the Minister of Alberta Advanced Education and Career Development to represent all designated trades and occupations available in Alberta. The Board is comprised of a presiding officer, six employers and six employees (residing officer may be an employer or an employee).
- Assessment standard:** An assessment standard is the criteria used for judging student achievement relative to the curriculum standards.
- BIAG:** Business Involvement Advisory Group established to represent Albertans and assist the MLA Implementation Team on Business Involvement and Technology Integration in Education.
- Business–education partnerships:** A business–education partnership is a formal or informal agreement or understanding between a school and a business for the purpose of achieving mutual benefits, in particular, enhancing student learning including helping students make a smooth transition to the workplace or to further study.
- Business/Employers:** A broad term that includes private, for profit firms, not-for-profit organizations, and public sector employers (in other words, all employers, including organizations that involve volunteer workers).
- Career counselling:** Career Counselling is the formal process by which a person who understands career development assists another person or persons (career counselling can be a group event) to manage his or her career. Many career counselling activities are not restricted to career counsellors; many people help other people manage their careers. We refer to this informal assistance as career coaching.
- Career development:** Career development is both a field of study and practice, and is the result of career building. The field of career development aims at understanding changes in people’s careers and helping people to undergo desirable changes. As a process, career development includes all the growth and changes in an individual’s career.

Core curriculum:	The programs that all students must complete in school. In Canada, this usually includes a minimum of language arts, mathematics, science and social studies (or history and geography) as well as health and/or physical education.
CTS:	Career and Technology Studies is a modular program arranged in 21 career-related strands designed to develop the competencies of Alberta secondary students in contexts that help prepare them for positive transitions into adulthood, the workplace and further education.
Curriculum:	The totality of the intended learning outcomes, the learning activities, the resources and the experiences that contribute to and comprise learning. In Alberta, the province sets out the intended learning outcomes in documents called “programs of study.” Other aspects of the curriculum are determined at the local level.
Curriculum standard:	A curriculum standard is a set of learner expectations for a course, or for a grade level of a program. Curriculum standards are defined by the general and specific learner expectations outlined in a course or program of studies.
Diploma requirements:	The courses and subjects that a student must complete to graduate from high school.
ECS (Early Childhood Services):	The comprehensive programs and services that contribute to a child’s total development from birth to age 8.
Employability skills:	Employability skills are the generic skills, attitudes and behaviours that employers look for in new recruits and that they develop through training programs for current employees.
Entrepreneurship:	Entrepreneurship is essentially an act of creation requiring the ability to recognize an opportunity, shape a goal and use resources to implement new, thoughtfully planned ventures.
Entrepreneurship skills:	Entrepreneurs should possess good planning, organizational, decision-making and interpersonal skills. These skills, as well as communication, financial management, and research skills, are particularly important for effective entrepreneurship.

Information highway technology:	Technology that permits the inexpensive, readily accessible, electronic transfer of information.
Knowledge worker:	Knowledge workers are workers who are extensively involved in the ongoing process of using information technology in the application of the collection of data, calculation and analysis of information, and the communication of knowledge to their coworkers and clients.
Learning expectations:	The intended learning outcomes of a course or program; detailed descriptions of the knowledge, skills and attitudes that a student should acquire in a course or program.
Lifelong learning:	The practice of continually upgrading one's knowledge and skills to remain competitive in the marketplace or to enhance one's personal life.
PAAC:	The Program and Assessment Advisory Committee was established to provide advice and comments to the Assistant Deputy Minister, Student Programs and Evaluation, Alberta Education, regarding program, curriculum and assessment policies from ECS through Grade 12.
Portfolios:	<p>A portfolio is a collection of items (written, graphic, electronic, other) organized to portray the competencies, attributes and accomplishments of an individual. In an educational context, portfolios can be used to:</p> <ul style="list-style-type: none"> • encourage students to maintain organized records of their accomplishments • assist teachers in their assessment of students' achievement • assist students in "selling" themselves to prospective employers and/or to registrars of post-secondary institutions.
Preferred future:	A description of the fundamental characteristics of education desired by education stakeholders; a state which education stakeholders are committed to achieving.
RAP:	The Registered Apprenticeship Program (RAP) provides students with the opportunity to become indentured apprentices while being registered as high school students working toward achieving an Alberta High School Diploma or a Certificate of Achievement. RAP is available in any of Alberta's 51

apprenticeship trades and is administered jointly by Alberta Education and Alberta Advanced Education and Career Development.

Sponsorships:

Providing financial or other support to a group or individual for a specific purpose, e.g., donating a scoreboard to a school.

Stakeholder:

An individual or group that has a special interest in an area such as education.

Trades, services and technical careers:

Trades, services and technical (TST) careers include occupations other than those usually described as professional or managerial occupations. TST careers include, but are not limited to: technicians and technologists, apprentices and journeymen, and careers in a variety of skilled service areas. TST careers usually require entrants to have attained a minimum of a high school credential and usually a post-secondary credential and/or related work experience.

Work experience courses:

Work experience 15, 25 and 35 are courses accredited by Alberta Education. The courses are available, as complementary courses, to high school students as 3, 4, 5, 6, 7, 8, 9 or 10 credit courses at each of the three levels (15, 25, 35). Students may count a maximum of 15 credits toward an Alberta High School Diploma. Work experience courses are locally developed; the learning expectations must, therefore, be developed by the teachers in consultation with students and the students' supervising employers.

Work site learning:

Work site learning refers to learning that occurs in a nontraditional teaching/learning environment. These work sites are usually off-campus; some may, however, be within the school's facilities; e.g., the school's office, cafeteria, shipping and receiving area. Students engaged in work site learning as part of their school program (e.g., work experience, work study, RAP) are deemed to be employees of Alberta Education for the purposes of the Workers' Compensation Board. Schools providing students with opportunities for work site learning are required to follow the legislation and procedures contained in Alberta Education's Off-campus Education Policy.

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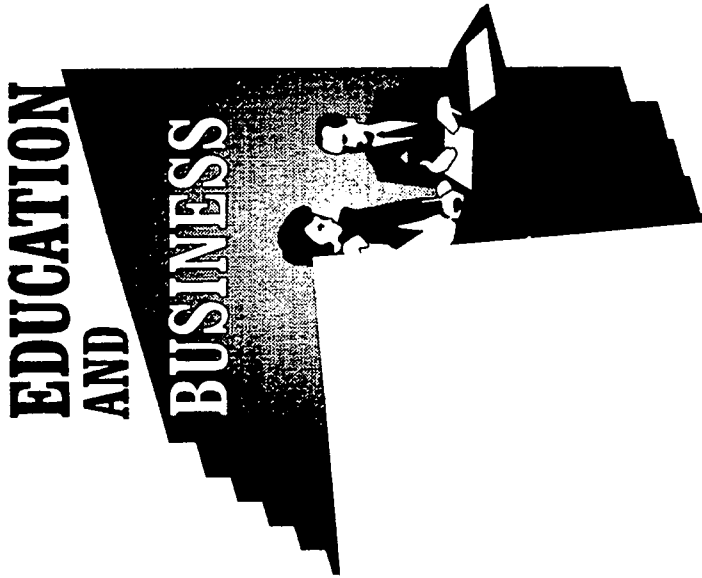
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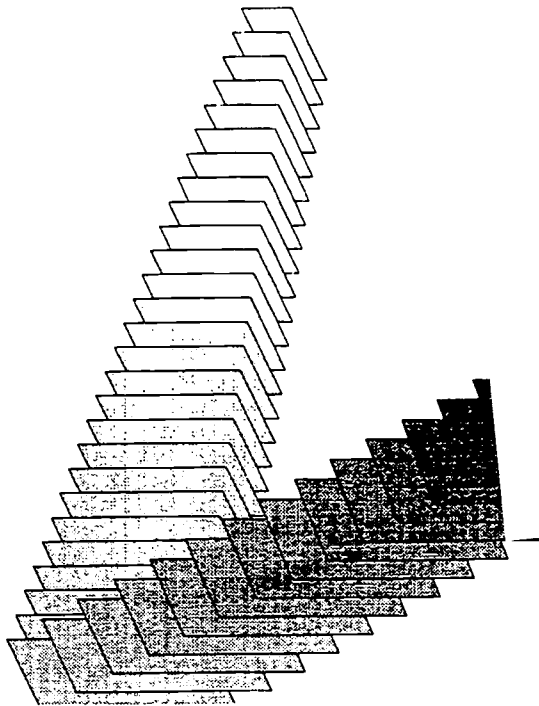
Appendix A^①



ERSHIP

Teachers' Association

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EDUCATION-BUSINESS PARTNERSHIPS

Background

Although schools and the business community have been collaborating in various ways for many years, the idea of forging new partnerships is growing in popularity across Canada as businesses ponder their future survival and schools re-examine their options during prevailing social and economic conditions. Recognizing that schools and businesses could be working more closely together, Provincial Executive Council of The Alberta Teachers' Association established an ad hoc committee in October 1992 to review literature and practice in the area of education-business partnerships, to review and evaluate the involvement of both profit and not-for-profit organizations in partnerships and to propose Association policy on education-business partnerships.

The committee concluded that student learning can be enhanced when business supports the work of teachers. Achieving success requires close cooperation between schools and businesses and firm commitment from both partners. Planning and continual assessment and well-defined goals are essential elements of successful education-business partnerships. As a result of their deliberations, the committee proposed Association policy on the issue. These were approved at the 1993 Annual Representative Assembly.

ASSOCIATION POLICY ON EDUCATION-BUSINESS PARTNERSHIPS

Long Range Policy

The Alberta Teachers' Association endorses education-business partnerships that are consistent with the values, goals and objectives of a school's educational program and that enhance the education program for students.

The Alberta Teachers' Association endorses only those education-business partnerships that are

1. supportive of the teacher in enhancing student learning,
2. pedagogically sound,
3. intentional and purposeful,
4. long-term and developmental,
5. mutually beneficial.

The Alberta Teachers' Association endorses education-business partnerships that uphold the public trust and that protect instructional time from commercial exploitation.

The Alberta Teachers' Association endorses education-business partnerships that recognize and respect the professional discretion of the teacher in selecting teaching methodology and resources and in assessing student performance.

The Alberta Teachers' Association advocates that education-business partnerships

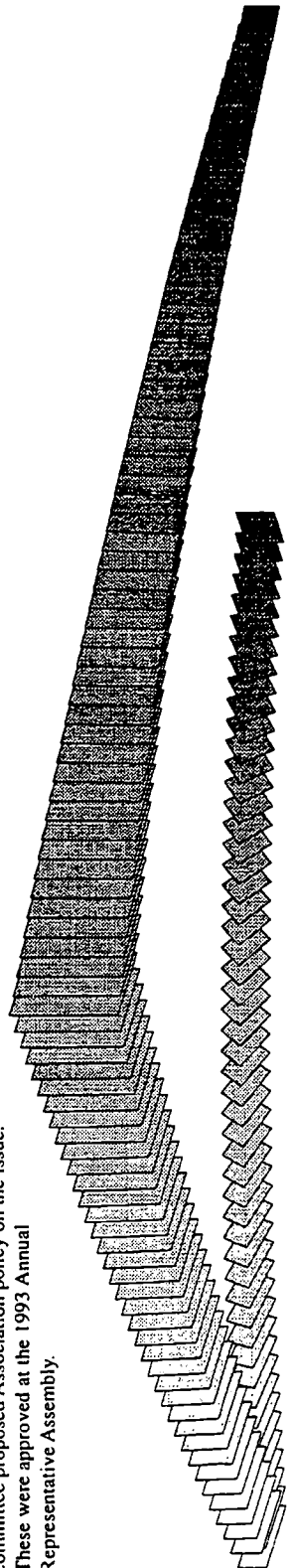
1. emphasize human rather than financial resources,
2. involve voluntary participation by teachers,
3. be approved by school staff,
4. be broadly based to include students, parents, teachers and the community in decision making,
5. demonstrate a strong commitment by all partners.

Current Directive

BE IT RESOLVED, that The Alberta Teachers' Association urge Alberta school boards to refrain from establishing education-business partnerships to compensate for inadequate provincial or local funding for education.

For further information, please contact:

Karen E Ingalls
 Coordinator, Operations
 The Alberta Teachers' Association
 11010 142 Street
 Edmonton, Alberta T5N 2R1
 Telephone
 453-2411 (from Edmonton)
 263-4774 (from Calgary)
 1-800-232-7208 (from elsewhere in Alberta)



Appendix B

ALBERTA EDUCATION 90th ANNUAL REPORT

Some of the data contained in the publication *90th Annual Report: 1994–1995* pertains to issues identified by the Business Involvement Advisory Group. That data is summarized below.

- **Preparation for the workplace.**

Survey results from the Annual Report indicate the percentage of Albertans who agree that high school graduates are prepared for the workplace:

High School Students	80%
Parents	40%
Public	40%
Post-secondary Instructors	35%
Employers	35%

These figures support the view of the I-Team and BIAG that more needs to be done in high schools to prepare students for the workplace. It is also noteworthy that 65% of parents and 70% of employers agreed that high schools prepare students for post-secondary education. Thus, schools are perceived to be doing a better job of preparing students for post-secondary education than for the workplace, a finding consistent with earlier surveys.

- **Business involvement in educational decision making.**

Other data reported in the 1994–95 Annual Report pertained to estimates of the number of Albertans involved in Alberta Education decision making in 1994–95. The estimates for various categories are as follows:

Parents	1 385
Educators	9 170
Business/Employers	645
Public at Large	2 150
School Council Members	550
Others	<u>2 300</u>
Total	16 200

These data suggest that it may indeed be appropriate to expand the involvement of business/employers in Alberta Education decision-making.

- **Business involvement in assisting schools.**

In 1995, a sample of employers was asked whether or not their business had been involved with schools, and if so, in what way. The results of that survey are:

Funding programs	27%
Field trip hosts	21%
Sponsorships	21%
Mentoring/job shadowing	20%
Speakers' events	20%
Career days	18%
Student scholarships	15%
Formal partnership agreements	10%

Given that there are many, many more businesses than schools in Alberta, these are rather impressive results. It is also clear that a lot of desirable involvement can occur without the existence of formal partnership agreements, valuable as they may be.

- **Enrollments in complementary courses (including Career and Technology Studies (CTS) and the Registered Apprenticeship Program (RAP) courses).**

Other interesting data provided in the 1994–1995 Annual Report of Alberta Education relates to the average number of complementary course credits completed by students in high schools of differing sizes. The figures are as follows:

<u>No. of High School Students in School</u>	<u>Complementary Credits</u>
250 or fewer	111
251 to 500	209
501 to 1500	344
Over 1500	532

Since CTS/practical arts and RAP courses fall in the complementary category, these data reinforce the common sense notion that course offerings in this area are more restricted in smaller high schools. Smaller high schools in particular need to look to off-campus opportunities as a way of meeting the needs and interests of the “forgotten majority” of students. A report received by the BIAG from Chinook’s Edge Regional School Division suggests that this indeed can be done.

How to Use the Ethical Guidelines

Ethical Guidelines is a tool for partners that helps them make ethical decisions, while leaving them free to express their individuality through their partnerships. It outlines criteria for business-education partnerships that guide partners in making informed decisions.

These guidelines are not exhaustive: they stimulate dialogue. Partners discuss what the guidelines mean and analyse their appropriateness and importance to the partnership. They then explore how they can work collaboratively to establish a strong ethical basis for their business-education partnership.

How Do These Guidelines Fit with Organizations' Codes of Ethics, Practice and Conduct?

The guidelines serve to complement existing codes of ethics, practice and conduct. Current and prospective partners can use the guidelines to address aspects of their partnership relationships that may not be treated in their organizations' own codes.



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Fax: (613) 526-4857

Information for Sound Decisions Since 1954

Business-Education Partnerships Forum

The Forum is a multi-stakeholder group committed to promoting ethical and effective business-education partnerships. It developed Ethical Guidelines for Business-Education Partnerships in consultation with the Corporate Council on Education and more than 200 representatives from businesses, education institutions, teachers' organizations, student groups and government organizations across Canada.

Member Organizations

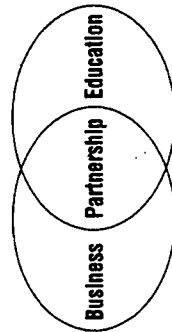
AGT Limited
AIESEC Canada, Inc.
Alberta Education
Avenor Inc.
Bank of Montreal
Bell Canada
Bishops College, St. John's
Calgary Board of Education
Canada Post Corporation
Canadian Microelectronics Corporation
Canadian National Railways
Canadian Partnership Network
Government of New Brunswick
Human Resources Development Canada
Imasco Limited
Imperial Oil Limited
Investors Group Inc.
National Defence
Noranda Forest Inc.
Northern Telecom Limited
Pliley Bowes of Canada Ltd.
Royal Bank of Canada
Shell Canada Ltd.
South Simcoe Public School
Syncaude Canada Ltd.
TransAlta Utilities Corporation
TransCanada Pipelines
Treasury Board of Canada Secretariat

Ethical Guidelines for Business-Education Partnerships

Why Ethical Guidelines?

The purpose of Ethical Guidelines is to describe for current and prospective partners the key components of an ethical business-education partnership and to provide them with a rational basis for addressing ethical issues that relate to the ideals, obligations and effects of their partnerships.

Ethical partnerships safeguard learners' interests, build trust and mutual respect, regulate themselves, and make informed decisions that benefit everyone involved.



The Business-Education Partnerships Forum encourages current and prospective partners to use the Ethical Guidelines as a framework for dialogue and discovery in creating, developing and maintaining sustainable business-education partnerships.



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^① Ethical Guidelines for Business Education Partnerships: Why Ethical Guidelines? Brochure 1995 E/F (Ottawa: The Conference Board of Canada, 1995). Reprinted with permission of The Conference Board of Canada.

Ethical Guidelines for Business-Education Partnerships

Business-education partnerships are mutually beneficial relationships between employers and educators that are designed to enhance learning for students and other learners. They may involve other education stakeholders as partners, including students, employees, parents, communities, labour, and government organizations. Most business-education partnerships are co-operative relationships in which partners share values, objectives, human, material or financial resources, roles and responsibilities in order to achieve desired learning outcomes.

Canadian employers and educators support business-education partnerships that:

- Enhance the quality and relevance of education for learners
- Mutually benefit all partners
- Treat fairly and equitably all those served by the partnership
- Provide opportunities for all partners to meet their shared social responsibilities toward education
- Acknowledge and celebrate each partner's contributions through appropriate forms of recognition
- Are consistent with the ethics and core values of all partners
- Are based on the clearly defined expectations of all partners
- Are based on shared or aligned objectives that support the goals of the partner organizations
- Allocate resources to complement and not replace public funding for education
- Measure and evaluate partnership performance to make informed decisions that ensure continuous improvement
- Are developed and structured in consultation with all partners
- Recognize and respect each partner's expertise
- Identify clearly defined roles and responsibilities for all partners
- Involve individual participants on a voluntary basis



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This document was developed by the Business-Education Partnerships Forum, a program of the National Business and Education Centre, The Conference Board of Canada.

Appendix D

PROGRAM AND ASSESSMENT ADVISORY COMMITTEE TERMS OF REFERENCE October 1994

A Program and Assessment Advisory Committee has been established to provide advice and comments to the Assistant Deputy Minister, Student Programs and Evaluation regarding program, curriculum and assessment policies from ECS through Grade 12.

Membership

The Program and Assessment Advisory Committee shall have 12–14 members, including the following:

- three teacher members to be nominated by the Alberta Teachers' Association (one from ECS–Grade 6, one from Grades 7–9, one from Grades 10–12)
- one member to be nominated by the College of Alberta School Superintendents
- one member to be nominated by the Alberta School Boards Association
- one member to be nominated by the Alberta Home and School Councils' Association
- one member to be nominated by the Universities Co-ordinating Council
- one member to be nominated by the Council of Presidents of Colleges and Technical Institutes
- one curriculum supervisor/administrator from a school system central office appointed by Alberta Education
- one student appointed by Alberta Education
- one school principal appointed by Alberta Education
- one teacher appointed by Alberta Education

Committee Role

Within the context of general government and Alberta Education policy, including directional statements, business plans, or other general statements of policy, the Committee will advise the Assistant Deputy Minister on the following matters:

- general programming, curriculum policies and *Guides to Education* (Handbooks) issues
- curriculum and cross-disciplinary frameworks that provide direction to curriculum development in specific subject areas
- frameworks for assessment standards
- the structure, format and nature of publications to communicate curriculum and assessment directions
- policies relating to the review, classification and authorization of learning resources (student and teacher)
- development process issues; e.g., nature of input required from other sources, implementation timelines, advisory structures

The Committee will not review or provide advice on program approvals or learning resources in specific subject areas. However, programs of study and related publications will be provided to the Committee as information to inform the Committee's deliberations. In addition, there will be opportunities for the Committee to receive presentations from various stakeholders and publics.

Chairmanship and Secretariat

The Committee will be chaired by the Assistant Deputy Minister or designate, who will be a non-voting member. The Policy Unit of the Curriculum Standards Branch will provide secretariat services.

Frequency of Meetings

Normally, two to three, two-day meetings will be held annually.

Employability Skills Are Critical

Employability skills are the generic skills, attitudes and behaviours that employers look for in new recruits and that they develop through training programs for current employees. In the workplace, as in school, the skills are integrated and used in varying combinations, depending on the nature of the particular job activities.

The Council recognizes the need for employers to accommodate individual differences and to provide equal opportunities for women, native people, visible minorities and people with disabilities.

How Are Employability Skills Developed?

Employability skills are developed in school and through a variety of life experiences outside school. The student, the family and the education system, supported and enhanced by the rest of society, share this responsibility.

How Does This Profile Fit with the Goals of Education?

All the skills listed in this profile are already either explicit or implicit in general educational goal statements of the provinces and territories. Drawing attention to skills necessary for employability is compatible with and can enhance a school's efforts to meet its other goals and objectives.

Corporate Council on Education Core Purpose:

We are a catalyst to engage business and education in partnerships that foster learning excellence to ensure that Canada is competitive and successful in the global economy.

Member companies:

AGT Limited
Air Canada
Atlantic Provinces Telecommunications Council
Bank of Montreal
Bell Canada
British Columbia Telephone Company
Canada Post Corporation
Canadian Microelectronics Corporation
Canadian Occidental Petroleum Ltd.
CP Rail System
General Electric Canada Inc.
IBM Canada Ltd.
Inasco Limited
Imperial Oil Limited
Inco Limited
National Defence
Noranda Forest Inc.
Norcen Energy Resources Limited
Northern Telecom Limited
Royal Bank of Canada
Shell Canada Limited
Syncrude Canada Ltd.
TransAlta Utilities Corporation
TransCanada Pipelines
Xerox Canada Ltd.

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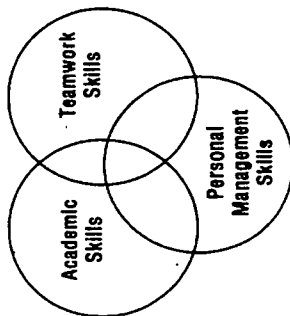
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Appendix E^①

Employability Skills Profile

What Are Employers Looking For?



The academic, personal management and teamwork skills outlined in this profile form the foundation of a high-quality Canadian workforce both today and tomorrow.


The Corporate Council on Education invites and encourages students, parents, teachers, employers, labour, community leaders and governments to use the profile as a framework for dialogue and action.



The Conference Board of Canada

^① Employability Skills Profile: What Are Employers Looking For? Brochure 1996 E/F (Ottawa: The Conference Board of Canada, 1996). Reprinted with permission of The Conference Board of Canada.

EMPLOYABILITY SKILLS PROFILE: The Critical Skills Required of the Canadian Workforce

<p>Academic Skills</p> <p>Those skills which provide the basic foundation to get, keep and progress on a job and to achieve the best results</p>	<p>Personal Management Skills</p> <p>The combination of skills, attitudes and behaviours required to get, keep and progress on a job and to achieve the best results</p>	<p>Teamwork Skills</p> <p>Those skills needed to work with others on a job and to achieve the best results</p>
<p>Canadian employers need a person who can:</p> <p>Communicate</p> <ul style="list-style-type: none"> Understand and speak the languages in which business is conducted Listen to understand and learn Read, comprehend and use written materials, including graphs, charts and displays Write effectively in the languages in which business is conducted <p>Think</p> <ul style="list-style-type: none"> Think critically and act logically to evaluate situations, solve problems and make decisions Understand and solve problems involving mathematics and use the results Use technology, instruments, tools and information systems effectively Access and apply specialized knowledge from various fields (e.g., skilled trades, technology, physical sciences, arts and social sciences) <p>Learn</p> <ul style="list-style-type: none"> Continue to learn for life 	<p>Canadian employers need a person who can demonstrate:</p> <p>Positive Attitudes and Behaviours</p> <ul style="list-style-type: none"> Self-esteem and confidence Honesty, integrity and personal ethics A positive attitude toward learning, growth and personal health Initiative, energy and persistence to get the job done <p>Responsibility</p> <ul style="list-style-type: none"> The ability to set goals and priorities in work and personal life The ability to plan and manage time, money and other resources to achieve goals Accountability for actions taken <p>Adaptability</p> <ul style="list-style-type: none"> A positive attitude toward change Recognition of and respect for people's diversity and individual differences The ability to identify and suggest new ideas to get the job done—creativity 	<p>Canadian employers need a person who can:</p> <p>Work with Others</p> <ul style="list-style-type: none"> Understand and contribute to the organization's goals Understand and work within the culture of the group Plan and make decisions with others and support the outcomes Respect the thoughts and opinions of others in the group Exercise "give and take" to achieve group results Seek a team approach as appropriate Lead when appropriate, mobilizing the group for high performance
<p>This document was developed by the Corporate Council on Education, a program of the National Business and Education Centre, The Conference Board of Canada.</p> <p>This profile outlines foundation skills for employability. For individuals and for schools, preparing for work or employability is one of several goals, all of which are important for society.</p> <p>The Conference Board of Canada 255 Smyth Road, Ottawa, Ontario K1H 8M7 Canada Telephone: (613) 529-3280 Fax: (613) 528-4857 "Information for Sound Decisions"</p> 		

Appendix F^①

SCHOOL-TO-WORK—IN MAINE AND ACROSS THE COUNTRY

The Maine Youth Apprenticeship Program, developed under former Governor McKernan's administration, was already under way when Congress passed the School-to-Work Opportunities Act.

School-to-Work was signed into law in May 1994; it will run until October 1, 2001. With an appropriation of \$250 million for 1995, it establishes a national framework administered jointly by the U.S. Departments of Education and Labor that has already provided development grants to states for comprehensive school-to-work programs. The Act also provides for implementation grants, which eight states have received so far. Fifteen to 20 more will be awarded in 1995. In addition, 15 partnership grants to bring together local employers and educational institutions and 21 urban/rural opportunities grants for high-poverty areas have been sent to local communities. All of these grant awards, as well as special grants for programs serving Native American youth, are expected to increase.

Existing or planned transition programs such as Tech Prep, cooperative education, and youth apprenticeships provide the foundation for the kinds of initiatives to be fostered statewide. Grant criteria include emphasis on high standards, especially those listed in Goals 2000: instruction that integrates work and school; linkages among secondary schools, junior colleges, and universities; and workplace monitoring and instruction.

Students who complete funded programs successfully will receive at least two credentials: a high school diploma and a certificate attesting to skills recognized and respected by employers. Some students may also receive a two-year college degree or they may opt for further education. For information, contact: Department of Education, 202/260-7278; or Department of Labor, 202/219-6871.

The Maine Youth Apprenticeship Program prepares high school students for the world of work through a combination of intensive classroom learning at school and structured workplace experiences. The program is based on the assumption that young people need better training to succeed in a competitive, global economy and that the challenge is best met if businesses become true partners in the education process.

The involvement of employers includes assessment of students' performance, creation of relevant curriculum, and the development of occupational skill standards specific to given industries. The three-year program provides a direct link to higher education, with students attending high school during the first two years of their participation and a technical college during the third and final year.

1ST YEAR: 11TH GRADE

Students spend about 50 percent of their time at school and 50 percent of their time at work in alternating blocks, starting in February. They work full time during the summer.

2ND YEAR: 12TH GRADE

Students continue alternating their time between school and work (50 percent of their time at each) and spend summers at their work-sites. Students receive high school diplomas.

3RD YEAR: TECHNICAL COLLEGE

Students alternate in blocks of time between school and work (about 50 percent) at each. Apprentices who attain established skill levels receive Certificates of Skills Mastery listing specific occupational skills mastered.

Apprentices, who must survive a competitive selection process, earn about \$85 a week as long as they are enrolled (whether they are in a school-based or workplace-based block), with a raise each year, and they receive one year of free tuition at a technical school. During this time, the students are considered employees, not of the firms where they work, but of the Center for Youth Apprenticeship, the office housed at Southern Maine Technical College that oversees the program. The money comes from the \$5,000 payments per apprentice that businesses make to join the program. In return, the program guarantees the quality of the apprentices' academic skills (the guarantees are based on proven outcomes in academic testing rather than records of time served in class) and promises to provide remedial retraining free if an apprentice fails to measure up to expectations. The program also provides liaison and technical help to the businesses, schools, and the students, and offers training and support to the business and the "meister" (the mentor/supervisor) who oversees the student.



Andrew Jensen, left, a youth apprentice at Maine Medical Center in Portland, reviews some telecommunications software.

Students' classroom work consists of rigorous courses in math, science, English, and social studies (sometimes in "applied" versions of these subjects), and students must demonstrate high levels of both academic and social skills to succeed.

Apprenticeships are offered in many career fields, including manufacturing, allied health, machine tool, computers, customer service, banking and finance, and others.

In January 1995, 35 Maine high schools combined with 57 state businesses to offer youth apprenticeship opportunities to a total of 70 students. Over the next five years, officials hope that all high schools in the state will participate.

For information about Maine's Youth Apprenticeship Program, write or call: Center For Youth Apprenticeship, Southern Maine Technical College, Fort Road, South Portland, ME 04106; 207/767-5210.

—Sybil Eakin

TECHNOS, VOL. 4 NO. 1, SPRING 1995 7

^① Sybil Eakin, "School-to-Work—In Maine and Across the Country," *Technos: Quarterly for Education and Technology*, Volume 4, Number 1, Spring 1995, page 7. Reprinted courtesy of Technos Quarterly at Techos Press, a division of the Agency for Institutional Technology (AIT).

Appendix G

CAREER RESOURCE CENTRES PROJECT

Project Overview

The Career Resource Centres Project is an initiative sponsored by the Calgary Educational Partnership Foundation (CEPF) and designed to facilitate the establishment of a Career Centre in each high school in Calgary and adjacent district high schools.

With funding support from Human Resources Development Canada (HRDC), a Career Centre was established in 17 Calgary and area high schools. These centres were initially funded for a one-year period ending March 1, 1996. HRDC has recently confirmed that it will extend its funding to support the existing centres to June 30, 1996.

The CEPF is seeking financial support from the federal government, the provincial government, participating school boards and business and industry to extend the Career Resource Centres Project for an additional three years in each of the 50 high schools in Calgary and adjacent area school jurisdictions.

A listing of the 17 schools currently participating in the Career Resource Centres Project follows.

Background

The mission of the CEPF is to:

Enhance learning opportunities by facilitating powerful partnerships between businesses, educators and school communities.

The Career Resource Centres Project is attempting to fulfill this mission by facilitating the establishment of career resource centres in high schools that enable career education and planning to be integrated into secondary school systems to better prepare students for the transition from school to work or to post-secondary education.

The project is designed to establish a Career Resource Centre in Calgary and adjacent area high schools and to involve families, communities, educators and businesses in enhancing the career awareness and career readiness of youth.

With funding provided by HRDC, each of the current 17 centres is staffed by a paid coordinator and, in some schools, additional support and assistance is provided by a certificated staff member, usually a school counsellor.

In each centre, the Career Development Coordinator provides resources and services to assist students with the career development process. Students learn to identify, develop and document the employability skills (identified by the Conference Board of Canada) they personally develop.

An interim assessment of the project found that the Career Resource Centres have been well received in the high schools, have been used extensively by students and teaching staff, and were fulfilling a significant need by students for career information and guidance.

In meeting students' needs for career information, Career Resource Centre Coordinators were found to be able to:

- assist and complement the work of the school guidance counsellors
- provide one-on-one career consultations and assistance to students
- work with teachers to provide an integrated approach to career awareness and career planning
- expand school and community linkages that enable students to understand the relevance of school curriculum to their career aspirations.

A model of the services offered by each Career Resource Centre follows.

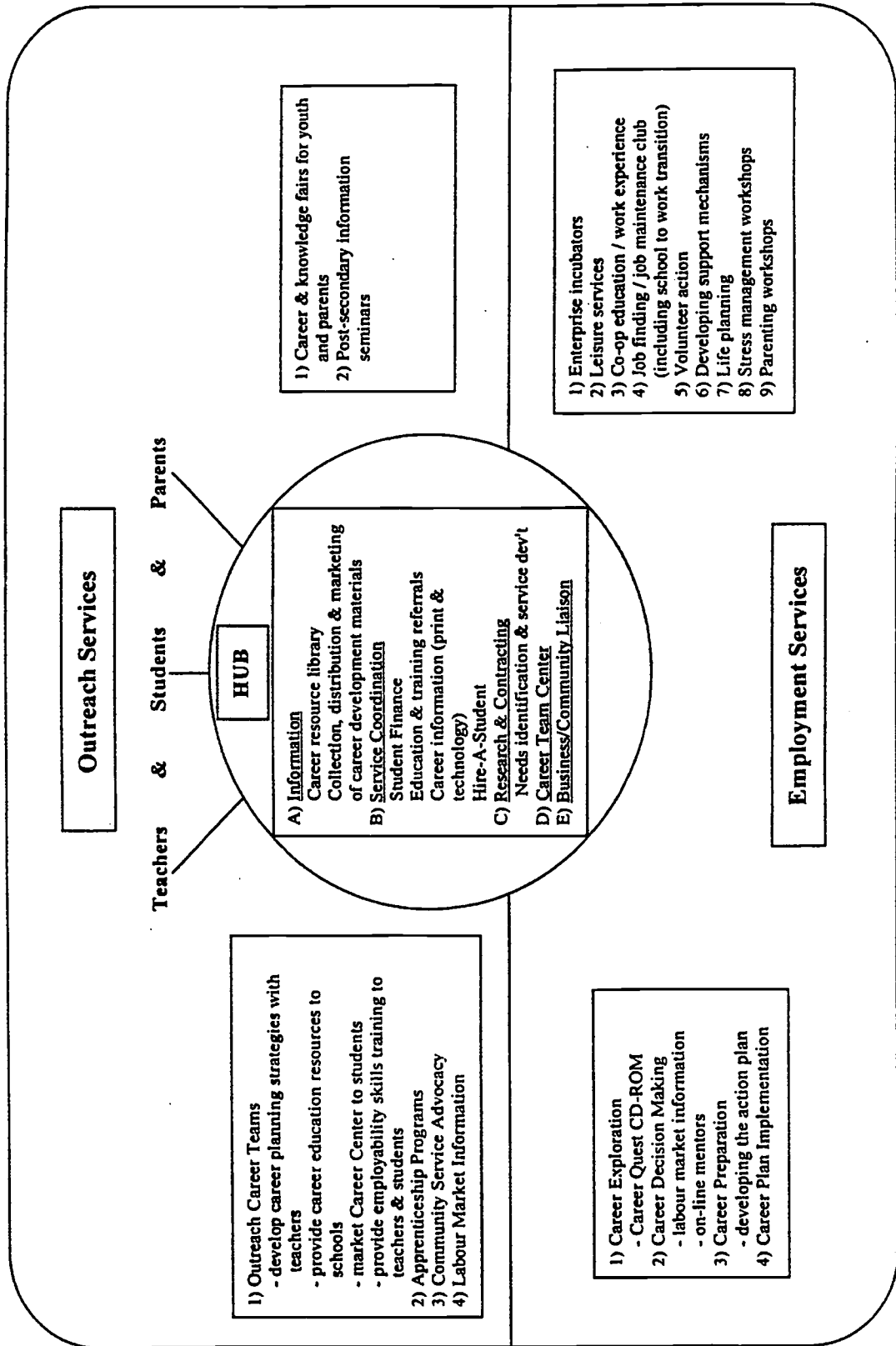
Proposed Funding

A project plan currently in development indicates that a total of \$1 355 000 will be required to establish and operate Career Resource Centres in 50 senior high schools for the period September 1996 to August 1999. Of this sum \$130 000 would be provided by the CEPF with the remainder being requested from the federal government, the provincial government, participating school boards and the corporate sector.

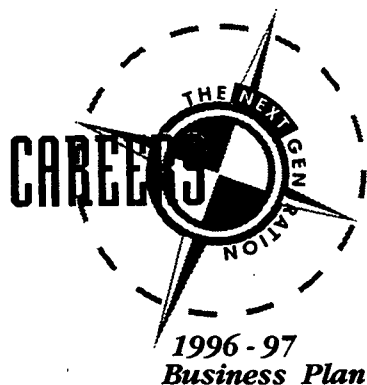
SCHOOLS WITH CAREER CENTRES IN PLACE

Senior High Schools by District	Location	School Population
Calgary Board of Education		
Bowness	Calgary	1 018
Crescent Heights	Calgary	1 554
Ernest Manning	Calgary	855
Forest Lawn	Calgary	1 103
James Fowler	Calgary	1 477
John G. Diefenbaker	Calgary	900
Lester B. Pearson	Calgary	1 262
Terry Fox Junior High School	Calgary	635
Calgary Catholic School Board		
Bishop McNally	Calgary	959
Father Lacombe	Calgary	1 065
St. Francis	Calgary	1 476
Rocky View School Division		
Beiseker Community School	Beiseker	275
Bert Church	Airdrie	700
Chestermere High School	Chestermere	456
Cochrane High School	Cochrane	825
Springbank High School	Springbank	431
Golden Hills Regional Division		
Strathmore High School	Strathmore	480
TOTAL		15 471

Career Resource Center For Youth



Appendix H^①



EXECUTIVE SUMMARY

Alberta Chamber of Resources
Alberta Advanced Education
and Career Development
Alberta Building Trades Council
Alberta Chamber of Commerce
Alberta Education
Alberta Teachers' Association
Alberta School Boards Association
Alberta Society of Engineering Technologists
The Canadian Manufacturers' Association
College of Alberta School Superintendents
Construction Owners Association of Alberta
Council of Presidents, Public Colleges
and Technical Institutes of Alberta
Human Resources Development Canada

Introduction

CAREERS... *The Next Generation* is about our youth. It is about nurturing their natural curiosity and creativity and their potential for excellence. It is about preparing them for rewarding careers and it is about the encouragement of strong values of citizenship. It is about hope for the future. Our young people are our most important Alberta Advantage.

For our businesses and other employers, CAREERS... *The Next Generation* is about developing our workforce — the too often neglected human resource in our enterprises. While much is being done in terms of training, team building, empowerment and other human resource initiatives, not nearly enough is being done in working with our youth, their parents and their teachers in communicating workplace expectations and values.

CAREERS... *The Next Generation* is a grass roots, bottom-up initiative. It is about assisting communities throughout the province in the development and articulation of skill and educational values— key elements in community economic development and in the quality of our life. It is about community self reliance in identifying needs and developing solutions.

The Future of Learning

Our vision of the future of learning includes the growing importance of integrating worksite learning with classroom learning — so that the workplace becomes an extension of the classroom. Such integration increases the relevancy of classroom learning, and it provides greater opportunities for youth to experience a variety of career options, easing their transition to the workplace.

Objectives

The project has three key objectives:

- More rewarding careers for young people; young people better equipped to manage change. More young people who will consider careers in trades, technologies or other skilled occupations.

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CAREERS... *The Next Generation*
1996 - 97 Business Plan

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- More competitive businesses and industries as a result of a more highly skilled and motivated workforce; workforce development at an earlier age.
- Communities that are embracing new ways of addressing issues of youth and workforce development. Communities that are more self reliant in dealing with these issues.

The Implementation Model: Co-op PLUS

The CAREERS implementation model is based on a superior co-op model (alternating periods of study and work.) We call it *Co-op PLUS*. There are two distinguishing features of the model: 1) a rigorous entry selection process; and, 2) rotation of the work experience component.

- In the trades, employers create educational positions and pay the appropriate apprentice wage rate (no wage subsidies). A commitment is made for the duration of the apprenticeship, but there are no guarantees of a job on achieving journeyman status. In return, employers are assured quality applicants (immediate value for money) through a rigorous selection process.
- This model is being expanded into the high schools, starting with the Registered Apprenticeship Program. Next, it is being expanded well beyond trades occupations. This is the area of largest pay off, both in terms of student numbers and the vast number of occupations. Working more with high school students means that there is less emphasis on screening for co-op positions and more emphasis on growing the right values and skills.
- At the community level, stakeholders are visualizing a "total quality" system of suppliers and customers embracing new concepts of youth and workforce quality.

CAREERS... *The Next Generation* is becoming the model of choice for the future.

1995-96 Accomplishments

Response by employers, educators and students in the first two years has been very favourable. Employers see a need to invest more in the quality of their workforce and in the young people of the community. Educators see a need to establish stronger links with the business community as the workplace becomes more of an extension of the classroom. For their part, young persons welcome the opportunity to earn while they learn, and they appreciate the distinctive experiences that they receive through this program.

The most significant accomplishment in the first two years of the project has been the introduction and acceptance of new ways of doing things

- with our youth
- with employers
- with our workforce
- with educators
- within our communities.

Significant cultural and value changes are occurring and stakeholders are approaching skill and educational issues in new ways: new linkages are being formed between employers and educators in addressing youth issues; employers are creating new educational positions; there are new employer role models, new educator role models; there are new youth role models; and new concepts of quality are being realized — for example, a whole network of suppliers and customers embracing new concepts of youth and workforce quality.

Other accomplishments with a forecast to March 1997 are indicated in the table on Performance Indicators at the end of this section.

1996-97 Initiatives

As we enter the third year period of CAREERS... *The Next Generation*, the main initiatives will be:

Consolidating and Strengthening the Commitment

A major initiative in the coming year will be building on the growing accomplishments of the first two years — the growing and acceptance of *Next Generation* principles. Major areas of focus will include:

- *Providing active support in solidifying and expanding the CAREERS concepts in existing communities.*
- *Introducing the CAREERS project to new communities.*
- *Convening a provincial conference in Red Deer (April, 1997). This will provide a very visible and tangible forum bringing together educators, employers, students and parents around the common goals.*
- *Expanding the Co-op PLUS model beyond trades occupations.*

New Initiatives With High School Students

As we move to a second and third phase in many of our communities, much more effort will be placed on working with youth in our schools: assisting them in more informed career decision making; encouraging more to consider careers in trades, technologies and other skilled occupations; enabling them to see the relevancy of their curriculum through applied learning experiences; encouraging the use of employability skills portfolios; and communicating workforce expectations much earlier. As we increase our efforts in working with youth, the emphasis changes from screening of high school graduate candidates to growing appropriate values and skills. Major initiatives with high school students include:

- *Expansion of the career planning workshops for students started in the first two years of the project.*
 - *developing and implementing an extensive train the trainer model in order to encourage community involvement and in order to assist in workshop delivery.*
- *Introducing and implementing employability skills concepts.*

- *Implementing CTS and Tech Prep — actively linking classroom curriculum with workplace learning.*

CAREERS... The Next Generation: A Successor Organization

At this writing, CAREERS... *The Next Generation* is two-thirds of the way through the three-year time frame that started in April, 1994. Given the strong record of success to date, a CAREERS Foundation or Endowment is planned to provide appropriate long-term framework and funding. A Foundation would:

- be private sector driven but with broadly based support from other stakeholders;
- be grass-roots/community driven;
- fill a catalyst, facilitator role to communities;
- assist in information sharing — minimizing “reinventing the wheel;”
- be financially self-sustaining;
- encourage secondments and volunteer support as much as possible.

Major tasks in 1996-97 will be

- *the refinement of the needs and principles in the discussion paper,*
- *the identification of the preferred foundation model,*
- *the development of an appropriate structure,*
- *marketing to Albertans.*

Expanding Business and Industry Involvement

While we have had excellent support from many businesses and industries throughout the province, we require a broader base of involvement. Employers can get involved by

- creating *Co-op PLUS* educational positions within their organizations;
- “opening doors” in communities in which they operate;
- getting involved in specific projects such as career fairs and our 1997 Conference;

- providing advice for our future direction; helping get the word out;
- secondment of personnel to our CAREERS implementation team;
- Post 97 participation.

We plan to:

- attract additional secondments to the implementation team;
- actively seek advice and assistance from

industry in expanding the CAREERS... *The Next Generation* message to corporate Alberta;

- attract active Foundation participants.

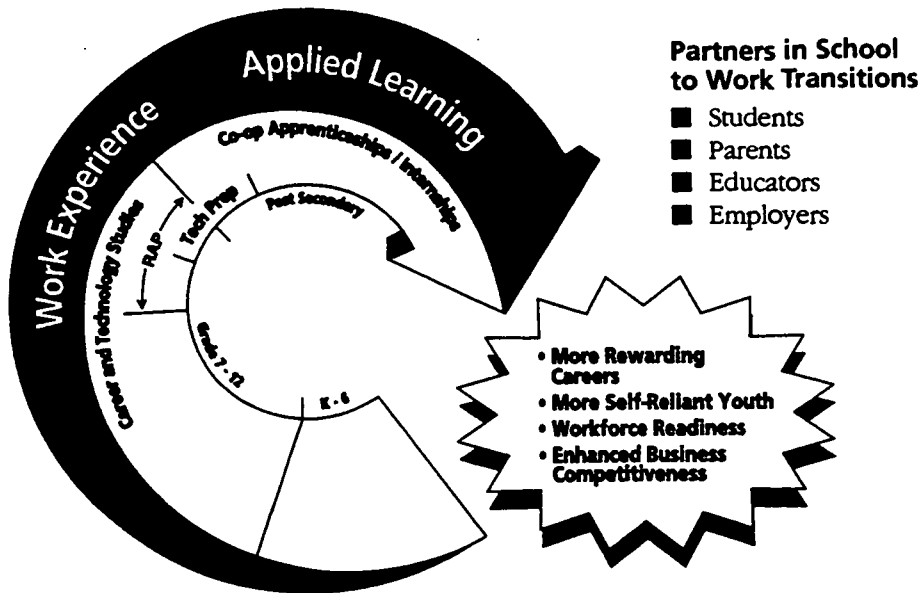
Performance Indicators

The estimated two-year totals (1994-1996) and three-year performance targets are indicated in the table below.

Performance Indicators	Two-Year Total 1994-96	1996-97 Targets	Estimated Total 1994-97
Communities in which:			
- the Co-op PLUS model is introduced	2	14	16
- community steering committee is established	2	10	12
Co-operative Education Apprentices	104	226	330
Co-operative Internships — Tech Prep	60	140	200
Registered Apprenticeship Program (RAP) Placements	12	200	212
Number of Participating <i>Next Generation</i> Employers	40	200	240
Students participating in <i>Next Generation</i> Career Workshops	All Grade 12's in small centres.	All Grade 12's in small centres.	All Grade 12's in small centres.
	Interested Grade12's in Edmonton and Calgary.	Interested Grade12's in Edmonton and Calgary.	Interested Grade12's in Edmonton and Calgary.
	Grade 9's and Grade 10's.	Grade 9's and Grade 10's.	Grade 9's and Grade 10's.
Classroom Trainers recruited and trained.	16	14+	30+
<i>Note: Over the three-year period, employers will have invested more than \$10 million in creating Co-op PLUS positions.</i>			

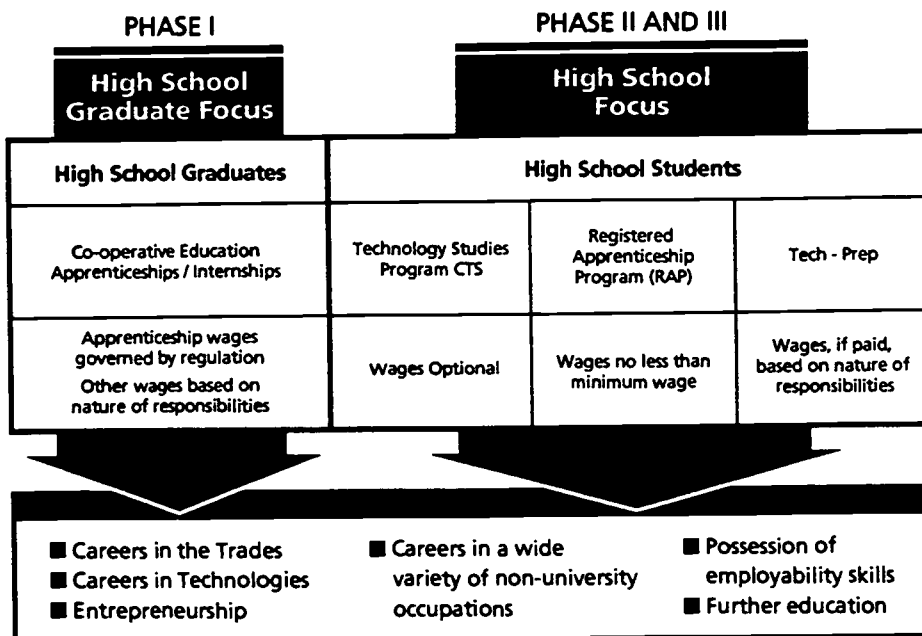
The Future of Learning

The Increasing Importance of Work Experience / Applied Learning



RAP = Registered Apprenticeship Program

Implementation Phases and Principle Areas of Focus





U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement (OERI)
Educational Resources Information Center (ERIC)



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