Educational Accountability in Alberta

Nelly McEwen alberta education

Alberta has actively increased accountability for educational performance since the early 1980s through introduction of the student achievement and diploma examination programs, five evaluation policies, and public reporting requirements. In 1994, the government moved to province-wide planning for more and better reporting of information to enhance public accountability. Accountability focuses attention on performance, communicates how successful the performance is, and proposes strategies for improvement. In this article I describe accountability for K-12 education in Alberta, identifying policies, programs, and strategies that help ensure public accountability for educational results. I also describe Alberta Education's 1994 Three-Year Business Plan, which increases accountability for school jurisdictions and schools.

L'Alberta s'emploie à mettre davantage l'accent sur la responsabilité eu égard au rendement scolaire depuis le début des années 90. C'est dans cet esprit qu'elle a mis sur pied des programmes d'évaluation des élèves et d'examen des diplômes, implanté cinq politiques d'évaluation et formulé des exigences pour ce qui est des rapports publics. En 1994, le gouvernement a opté pour une planification à la grandeur de la province afin d'améliorer qualitativement et quantitativement les informations communiquées. Parler de responsabilité, c'est mettre l'accent sur la performance, déterminer le niveau de réussite à cet égard et proposer des stratégies en vue d'apporter des améliorations. Dans cet article, l'auteure décrit la responsabilité face au public de la maternelle à la fin du secondaire en Alberta en identifiant les politiques, programmes et stratégies qui aident à assurer une responsabilité eu égard aux résultats scolaires. L'auteure décrit également le plan d'action global de trois ans mis sur pied en 1994 en Alberta, lequel augmente la responsabilité des juridictions scolaires et des écoles.

INTRODUCTION

The 1980s saw a new wave of educational reform around the world. Perceived shortcomings in education and international competition in all sectors served as a catalyst for current accountability and reform movements. Alberta's reform effort was stimulated by a series of changes in the political, economic, and social climates of the province. In 1982 Alberta introduced the Achievement Testing Program for grades 3, 6, and 9, and in 1984 reinstated the Diploma Examinations Program at grade 12 as one requirement for high school graduation. In 1984 other reform initiatives included the School Act Review, the Management and Finance Plan, the Review of Secondary School Programs, and the introduc-

tion of five evaluation policies (student, teacher, program, school, and system). Two primary beliefs influenced reform initiatives in Alberta: (1) the student is the central reason for schooling, and (2) education is a purposeful endeavour that can be assessed. To assist in ensuring that these beliefs became operational, Alberta Education promoted a results-based approach to education, providing a better balance among inputs, processes, and results.

The Alberta government is currently undergoing major restructuring aimed at securing a prosperous future for Alberta with an open, accountable government living within taxpayers' means and delivering high-quality services. In 1994 all departments published three-year business plans complete with financial targets: "Demonstrated performance, timely and open reporting, and focusing efforts on results will be the hallmarks of the business planning process" (Government of Alberta, 1994a, p. ii). These plans detail the goals, strategies, and actions to be taken over the next three years; combined with a strong emphasis on results and performance measures, they provide a new definition for accountability in government.

The Alberta Context

Alberta Education is responsible for the education of children from Early Childhood Services (ECS) to grade 12. The School Act² defines the legislative authority for education. Alberta Education provides direction and support to school jurisdictions by establishing the managerial and financial framework and by setting instructional policies, programs, and evaluation strategies.

Responsibility for delivering instruction to children is delegated by the Minister of Education to school jurisdictions operated and managed by an elected board of trustees. Each board hires a superintendent of schools who is the chief executive officer and the chief education officer of the district or division. The School Act defines the roles and responsibilities of students, schools and their staff, and school boards. School jurisdictions are required to file an Audited Financial Statement and an Annual Education Report with Alberta Education by November 30 each year.

Rationale for Accountability

Public education is funded by taxpayers who want and have a right to know if they are getting value for their investment. Such accountability requires public information. An indicator system is a tool to focus reform and to improve accountability by providing better information about the education system's performance. The goals, or intended benefits, of implementing indicator systems are to assess the effectiveness and efficiency of the educational enterprise, to improve education, and to provide a mechanism for accountability. The major purpose of indicator systems is to provide enhanced information about education

for improved planning, policy, practice, and decision making. Accurate and timely information is crucial.

Structured educational accountability has a history of more than a decade in Alberta. In 1982, Alberta introduced the Achievement Testing Program to assess the core subjects (English language arts, social studies, mathematics, science) of students in grades 3, 6, and 9. Each year one of these subjects is assessed. In 1984, the Diploma Examinations Program at grade 12 was reinstated as a requirement for high school graduation. English 30 or 33 became a requirement for a high school diploma. In 1988, the Educational Quality Indicators initiative was introduced to help develop provincial and local indicator systems to measure the success of the educational enterprise. As well, Alberta Education has developed a new province-wide Student Information System to provide policy makers and administrators with accurate and up-to-date information about Alberta students.

POLICIES RELATED TO ACCOUNTABILITY

The Management and Finance Plan introduced a policy approach to education. It provided a new approach to funding education in the province and emphasized the development of policies to guide children's education. The role of Alberta Education shifted to monitoring results achieved within school jurisdictions, and a new set of provincial evaluation policies was instituted to ensure that students, teachers, programs, schools, and school systems are evaluated regularly. The Annual Education Report (AER) became the mechanism for school jurisdictions to report results.

Annual Education Report

In the AER, "program" means independent activities and services designed to achieve specific organizational goals, policies, and objectives. Examples of programs are mathematics, vocational education, counselling, and transportation. The Annual Education Report should contain information on selected priority programs and related activities, and may contain information gathered throughout the year from such activities as ongoing monitoring, reviews, evaluations, surveys, planning sessions, and workshops. Specific content and the relative emphasis on various programs is currently discretionary, although Alberta Education may outline information requirements. The reports cover the school year, September 1 to August 31, and must be filed with an Alberta Education Regional Office by November 30.

The AER complements other sources of information, such as the Audited Financial Statement, and ongoing local and provincial monitoring and evaluation, to assist Alberta Education and school jurisdictions in making decisions.

Evaluation Policies

Evaluation policies apply to school boards, accredited private schools, and privately operated ECS (kindergarten) centres. The policies are expected to assist in improving the quality of education. Each policy is accompanied by definitions, legislation, and regulations and procedures. The current reporting and evaluation policies are presented in Figure 1. They are complemented by the development and implementation of policies and procedures at the local level.

Evaluation is an important part of the management of education. The major components of the management of education at both the local and provincial levels are: strategic planning; developing required policies and programs; operational planning and budgeting; implementing; monitoring, evaluating, auditing, and adjusting; and communicating.

The policies linked to accountability will be revised on the basis of educational restructuring initiatives introduced in 1994. Revised policies and regulations will appear in 1995.

PROGRAMS AND STRATEGIES

Education is responsible for ensuring that students learn the skills and knowledge needed to be self-reliant, responsible, caring, and contributing members of society. The schools' first obligation is to provide a solid core program consisting of language arts, mathematics, science, and social studies. Schools will be accountable for their students' achievement of provincial learning standards including employability skills consistent with workplace requirements (Alberta Education, 1994c, p. 5).

Student Assessment

The Student Evaluation Branch develops and administers two provincial assessment programs: the achievement testing program, and the diploma examinations program. Annual reports of provincial results are prepared and distributed to the education community. School and district reports are provided for teacher and school administrator use. As well, the branch publishes a newsletter, *How are Students Doing?*, with timely information about these two programs and about national and international studies.

Achievement Testing Program

This program's purpose is to provide province-wide information about how well students are achieving standards in grades 3, 6, and 9. Each year Alberta students in these three grades complete assessments in one of the four core subjects:

English language arts, social studies, mathematics, and science. Students in these grades are assessed in each subject area every four years. For example, grade 9 students wrote a math test in 1984, 1988, and 1992. In 1992, students also completed math performance tasks as part of the assessment.

Annual Education Report	This is one means to be used by school boards, funded private schools, and ECS private operators for communicating to the public and Alberta Education about programs and results achieved.	
Evaluation	Alberta Education and school jurisdictions will use the results of evaluations to improve further the quality of education provided to students in Alberta.	
• Student	Student learning in education programs shall be assessed to help improve programs, to assist in establishing and maintaining standards, and to assist school authorities with ongoing improvement of student educational achievement.	
• Teacher	To assist in the provision of effective instruction to students, and to facilitate the professional growth and development of teachers, Alberta Education believes that the performance of individual teachers should be evaluated.	
• Program, School and School System	To enhance the quality of education provided to all Alberta students, Alberta Education believes that a systematic process of program, school and school system evaluation should be established. Accordingly:	
	Programs shall be evaluated to assess: (i) their adequacy and effectiveness; and (ii) in the case of instructional programs, their consistency with applicable provincial programs of study or approved programs.	
	Schools shall be evaluated to: (i) assess what is being done well; (ii) assist in the establishment and maintenance of appropriate management, instructional, and program standards that contribute to a high level of student development and achievement; and (iii) make recommendations for improvement.	
	School systems shall be evaluated to assist school authorities with leadership in effective and efficient management and operation of: (i) human, (ii) physical, and (iii) economic resources.	

FIGURE 1

Alberta Policies Related to Accountability

(Source: Alberta Education Policy Manual [Alberta Education, 1991a])

Results are reported in terms of three standards. *Curriculum standards* are the broad learnings, sequenced into grades, that students are expected to achieve. They include specific statements of knowledge, skills, and attitudes against which student achievement is to be judged. *Assessment standards* are the scores to be achieved by a student on a specific test or part of a test, or the level of competence on a performance task judged to be "acceptable" or "excellent" relative to the curriculum standards.

Achievement standards state what percentage of students at a given grade in school is expected to achieve the acceptable or the excellent standard. These achievement standards apply to school, jurisdiction, and provincial performance. From discussions with educators, test development specialists, and curriculum specialists, and based on experience with measuring student achievement according to the expectations in the *Program of Studies*,³ Alberta expects 85% of students who complete the assessments to achieve the acceptable standard or higher, including 15% achieving the excellent standard on each major component and on the total test (Alberta Education, 1994a, pp. 2–3). Fifteen percent of students may not be able to demonstrate achievement of the acceptable standard.

Most students in grades 3, 6, and 9 write these tests. In 1993, 102,702 students wrote them; 87.5% of grade 3 students wrote the English language learning test, 89.7% of grade 6 students wrote the social studies test, and 87.7% of grade 9 students wrote the science test. Results are reported in an annual provincial report.

Diploma Examinations Program

This program has three main purposes: (1) to certify the level of individual student achievement in selected grade 12 courses; (2) to ensure that provincewide standards of achievement are maintained; and (3) to provide schools and districts with group results.

There are diploma examinations in eight grade 12 courses: English 30, English 33, Social Studies 30, Français 30, Mathematics 30, Biology 30, Chemistry 30, and Physics 30. The social studies, mathematics, and science exams are available in French translation. Diploma exams are administered in January, June, and August each school year. The annual report for this program provides provincewide results for the entire school year and summaries of results by gender, for population subgroups, and for achievement-over-time studies.

A student's final mark in a diploma exam course is a 50:50 blend of the diploma examination mark and the school-awarded mark. This recognizes that the exam assesses only those learning outcomes in the *Program of Studies* that can be effectively measured in a limited time using paper-and-pencil tests. The school assesses students' achievement in other areas such as research, oral communication, and cooperative learning (Alberta Education, 1994b).

External Assessments

National and international assessments provide an external point of reference: a snapshot of how well students from other provinces and countries do on specific tasks at a particular point in time. These studies provide an opportunity to assess how well students perform relative to their counterparts elsewhere. Countries can interpret their results, draw conclusions, and identify policy implications. This type of information helps provinces and countries set improvement targets because the results provide external comparisons of their education systems.

A sample of Alberta students has participated in a number of international assessments. In 1984, the Second International Science Study, undertaken by the International Association for the Evaluation of Educational Achievement (IEA), assessed the science achievement of students in 23 countries at three levels—grades 5, 9, and 12/13 in Canada. In 1991, Alberta participated in the Second International Assessment of Educational Progress (IAEP II); 13-year-old Albertans were assessed in mathematics, science, and geography. A sample of grade 11 students also participated in the 1992 Stevenson study⁴ of mathematics achievement. In 1995, Alberta will take part in IEA's Third International Mathematics and Science Study; students in three populations (9 years, 13 years, and last year of secondary school) will be assessed.

Alberta is also participating in the Council of Ministers of Education, Canada (CMEC) School Achievement Indicators Program. Thirteen- and 16-year-old students participated in the 1993 mathematics and in the 1994 reading and writing assessments. Science will be assessed in 1996. Table 1 summarizes the provincial, national, and international assessments of achievement of Alberta students.

The Development of Indicators

The Educational Quality Indicators (EQI) initiative was another project designed to promote results-based education in Alberta. A significant feature was that it introduced a collaborative model to provincial reform initiatives. Alberta Education collaborated with 12 school jurisdictions to develop and implement indicator systems that measure the success of the educational enterprise. Its goal was to assist the provincial government and school jurisdictions in providing better information to improve planning, policy, and decision making. A four-dimensional model of education—partners (schooling, family, society), conditions (context, inputs, processes), student outcomes (cognitive, affective, behavioural), and time (grades 3, 6, 9, 12)—was developed to guide the initiative.

Ten concurrent collaborative action research projects were initiated in 1989 and concluded in 1992. These projects developed indicator systems that include a broad range of outcomes; methods to collect, analyze, and interpret data; and

TABLE 1
Provincial, National, and International Assessments of Alberta Students

Туре	Age/Grade	Time	Program/Study
Provincial	grades 3, 6, 9	annually	Achievement Testing Program core subjects
	grade 12	annually	Diploma Examinations Program core subjects
National	13- and 16-year-olds		School Achievement Indicators Program
		1993	mathematics
		1994	reading and writing
		1996	science
International	grades 5, 9, 12	1984	Second International Science Study
	13-year-olds	1991	Second International Assessment of Educational Progress (mathematics, science, geography)
	grade 11	1992	Stevenson Study of Mathematics Achievement
	9- and 13-year-olds, last year of secondary school	1995	Third International Mathematics and Science Study

ways to report and communicate the information to different audiences. The award-winning final report,⁵ *Achieving Quality* (Alberta Education, 1993a), summarizes the initiative's results; 14 additional reports contain comprehensive information about the individual projects.

Each project focused on specific aspects of educational improvement and accountability. Three projects focused on accountability: they included a comprehensive school system review, school and district profiles, and a model for school and program evaluation. Two projects examined teaching and learning, and five projects examined alternative ways to measure student success. Portfolio assessment, quality student performance, responsible student behaviour, desirable student social outcomes, and affective behaviours were studied.

EQI partners became members of a provincial committee that discussed and recommended to Alberta Education directions to achieve results-based education. These partners recommended that provincial indicators should focus on student outcomes; be based on the goals of schooling and desirable personal characteristics; represent a balance among cognitive, affective, and behavioural outcomes; provide corollary evidence (through tests, surveys, interviews, records); and provide multiple perspectives (of students, staff, parents, stakeholders, and the

public). Participants agreed that 10 indicators could become part of a provincial set of student outcome indicators: achievement, participation, creativity, graduation, attitudes, self-esteem, satisfaction, behaviour, responsibility, and fitness (Alberta Education, 1993a, pp. 150–151).

At the October 1993 meeting of the EQI Network, to which all school jurisdictions and the major educational stakeholder groups were invited, the eight discussion groups agreed that achievement should be reported to the public at the local level. Participants also wanted to see indicators on a wider range of student outcomes, such as participation, completion, attitudes, and satisfaction. They recommended that all school jurisdictions report a small number of these common indicators. Districts could report additional indicators of their choice in their Annual Education Report (Alberta Education, 1993c). A follow-up survey of the individual participants confirmed these recommendations.

Alberta is also involved in national and international indicators projects. It is participating in the CMEC's School Achievement Indicators Program (SAIP), and the Canadian Educational Statistics Council's Pan-Canadian Education Indicators Program (PCEIP). Through CMEC, Alberta is also part of the Organization for Economic Cooperation and Development's Indicators of Education Systems (INES).

A New Student Information System

The Educational Information Exchange (EIE) was established to provide student and school jurisdiction information to Alberta Education, school jurisdictions, and the public. All students in grades 1 to 12 and in public ECS centres will be registered in this new information system. Information about students is required to support a results-oriented approach to education, for accountability purposes, and for improved decision making and planning. The new system will also reduce data burden and data redundancy for school and jurisdiction staff. With the cooperation and support of school jurisdictions, EIE has been implementing a plan to collect additional student data through a number of major phases, to automate schools, and to exchange student data electronically.

Development and implementation of the new province-wide student information system will take place over a number of years in a number of phases: student registration, grants interface, course registration, achievement, and information. With the student registration and grants interface phases underway, the remaining phases should be completed by 1998. The development, testing, and installation of Alberta Education's computer software for the registration phase was completed in September 1992. Pre-registration implementation meetings have been completed with all school jurisdictions and some private schools. The collection of student demographic data and the provision of unique identification numbers to all students in the province has begun. To date, 370,000

students from 44 school jurisdictions are registered electronically with EIE. The remaining students should be registered by October 1995.

The grants interface phase began in 1993 with the goal of using data from the new system to derive basic grants for jurisdictions. The new processes and procedures will be fully implemented by the fall of 1995. To date, the grants business process redesign component is completed and pilot projects to test the new business processes have begun in several school jurisdictions.

EIE has provided schools and jurisdictions with advice about and support for student record automation and electronic exchange of data. Alberta Education recently approved in principle SPEEDE/ExPRESS (Standardization of Postsecondary Education Electronic Data Exchange/Exchange of Permanent Records Electronically for Students and Schools), a new international standard for the electronic exchange of student data, for use in Alberta.

PROVINCIAL REPORTING

Alberta Education publishes annual reports of provincial results for the achievement testing and diploma examinations programs, and other reports with additional information about education in the province. These serve the purposes of accountability.

Student Achievement

The Annual Report for the diploma examinations program provides province-wide results for the entire school year. It helps school administrators, teachers, trustees, and Alberta Education evaluate the effectiveness of education programs. Three other reports are also provided. Percentage Distribution of Marks in Diploma Examination Courses is a three-page report distributed to educators in schools, jurisdictions, and other educational institutions approximately three weeks after the January and June examinations are written. School and Jurisdiction Reports for each course with a diploma exam are distributed to superintendents and principals soon after the January and June administrations. These reports provide results at the question and subtest levels for each school and jurisdiction, information useful in assessing the strengths and weaknesses of local programs. Examiners' Reports for each course, distributed at the same time as the School and Jurisdiction Reports, are written primarily for teachers. Provincial results are linked to course standards as set out in the examination blueprint and information bulletins.

The *Annual Report* for the achievement testing program provides aggregated results for the province; its purpose is to help school administrators, teachers, trustees, and Alberta Education evaluate the effectiveness of educational programs. Two other reports are also provided. *School and Jurisdiction Reports*

for each achievement test are distributed to superintendents and principals early in the school year. These reports serve the same functions as the School and Jurisdiction Reports in the diploma examinations program. Assessment Highlights for each subject area are written primarily for teachers and are distributed in September. Provincial results are linked to provincial standards as outlined in the test blueprint and information bulletins, and information is presented about the achievement test, performance assessment, and context questions.

The newsletter *How are Students Doing?* reports results of the achievement testing and diploma examinations programs, and other national and international studies. The information from this newsletter is usually reported in the popular media.

Public Reports

In addition to the achievement reports, Alberta Education produces other publications to inform the public about education in the province. The department's *Annual Report* has been published since 1906. *Facts and Figures*, Alberta Education's statistics report, was introduced in 1988 to provide more comprehensive information about education; it includes information on context, inputs/resources, and outcomes/results (Alberta Education, 1992b).

In 1991, the strategic plan *Vision for the Nineties: A Plan of Action* (Alberta Education, 1991b) established 13 priorities for education in Alberta. *Achieving the Vision* (1992a, 1993b) was released to report to the public about progress toward achieving these priorities. A two-page *Report Card* rating Alberta's performance on the priority directions was distributed widely throughout Alberta.

At the local level, each school jurisdiction is required to publish an Annual Education Report. Its requirements were described in the policy section. At the same time, each district produces an Audited Financial Statement. Some school jurisdictions also publish school profiles and distribute these to parents in the schools.

THE 1994 THREE-YEAR BUSINESS PLAN

In *Budget '93* (Government of Alberta, 1993), the Government of Alberta introduced the concept of three-year business plans for each department, agency, and organization receiving government grants. In *Budget '94* (Government of Alberta, 1994b) and its companion document *A Better Way* (Government of Alberta 1994a) the government presented its three-year business plans for each of its departments.

Alberta Education's plan is called *Meeting the Challenge: Three-Year Business Plan 1994/95 to 1996/97* (Alberta Education, 1994c). It contains the department's mission and mandate; spending targets; goals and strategies for education;

implications; results and performance measures; and roles and responsibilities of schools, school boards, and the Department of Education. The plan provides direction for the future of education; it is the product of two years of discussions and consultations with Albertans on the concerns and priorities for education in the future.

The plan calls for more and better reporting of educational information to enhance public accountability. It contains nine goals and 14 expected results. Thirty-one measures of educational performance will be used to assess the achievement of key results and to ensure restructuring is enhancing school-based decision making as well as strengthening provincial cost and quality control. Achievement of results will be reported in the province's annual report on educational performance. Other information-gathering initiatives may be required to supplement the annual results report. School jurisdictions and schools will be required to use designated measures and to report annually on student achievement and on school and jurisdiction performance; this is a major change from the existing requirements, which permit school jurisdictions to decide what to report in their Annual Education Report.

The first goal focuses education on what students need to learn; this goal requires that high standards be established, communicated, and achieved. The final goal is to establish a more accountable education system. The remaining goals are concerned with administrative and financial accountability. Table 2 presents the goals, expected results, and measures in the plan.

The proposed strategies for establishing a more accountable education system are:

- 1. Expand the provincial achievement testing program to test grade 3 students in reading, writing and math skills, and to test grade 6 and 9 students in the four cores subjects each year.
- 2. Develop diploma examinations in Math 33 and Social Studies 33.
- Require school jurisdictions to develop business plans and report publicly on salaries and administrative costs.
- 4. Use provincial and local performance measures to assess and report regularly on the effectiveness of Alberta's education system.
- Conduct value for money audits and comprehensive management reviews of schools and school systems.
- 6. Require school jurisdictions to report on designated indicators to Alberta Education and the public.
- 7. Provide information to the public on the performance and cost of the education system.
- 8. Establish joint responsibility of school boards and Alberta Education for selecting school superintendents. (Alberta Education, 1994c, p. 10)

The Minister of Education has established five MLA implementation teams to assist in implementing the plan's key directions: (1) regionalization and amalgamation of school boards, (2) redefining roles and responsibilities, (3) creating a framework for funding school boards, (4) developing an accountability frame-

TABLE 2

Goals, Expected Results, and Measures in the 1994 Three-Year Business Plan

Goal	Expected Result	Measure
1. Focus education on what students need to learn; ensure high standards are established, communicated, and achieved.	Alberta's learning standards meet the expectations of Albertans.	1.1 Percentage of Albertans who are satisfied with the province's learning expectations and standards. 1.2 Percentage of employers, post-secondary institutions, and Albertans who are satisfied with high school graduation requirements. 1.3 Third-party assessment of Alberta learning standards. 1.4 Comparison of Alberta curriculum learning expectations and standards with those in other provinces and countries.
	Students achieve the standards in the provincial curriculum.	 1.5 Percentage of grade 9 students who graduate from academic and occupational courses/programs in four years. 1.6 Percentage of students who achieve an acceptable or higher standard on provincial achievement tests and/or diploma exam courses. 1.7 Number of high school students who receive Rutherford scholarships.
	Students receive the education they need to prepare them for entry into the workplace and post-secondary studies.	1.8 Percentage of students, parents, employers, post-secondary instructors, and the public who are satisfied with the preparation of students for the workplace or post-secondary education.
	Alberta students perform favourably compared to students outside the province.	1.9 Performance of Alberta students in selected subjects compared to students in other provinces and countries.
2. Provide more choice of student programs and increase parental/community involvement in education.	Parents have opportunities to choose schools and programs for their children within the public education system. Business and the community have a meaningful role in education.	 2.1 Percentage of parents who are satisfied with their children's schools. 2.2 Number of school jurisdictions where students may choose local school. 2.3 Number of employing organizations offering educational opportunities to students. 2.4 Percentage of parents, businesses, and community representatives who are satisfied with their role in decision making.

TABLE 2 continued

Goals, Expected Results, and Measures in the 1994 Three-Year Business Plan

Goal	Result	Measure
3. Improving the coordinated delivery of services for special needs children.	Students with special needs have access to the services they require.	3.1 Percentage of Albertans who are satisfied with accessibility, effectiveness, and efficiency of programs and services for atrisk and special needs children.
4. Improve teaching.	Teachers have the skills and knowledge required to help students learn. Teachers have the authority to make instructional decisions in the classroom.	 4.1 Percentage of teachers whose assignment matches their areas of specialization. 4.2 Percentage of teachers who are satisfied: • they have the skills and knowledge required in the classroom, • with their authority to make instructional decisions, and • with services to support their teaching.
5. Restructure the governance and delivery of education to achieve increased efficiencies and effectiveness.	School jurisdictions and schools are effective and efficient.	 5.1 Percentage of instructional expenditures compared to other expenditures. 5.2 Relationship of instructional costs to instructional results. 5.3 Percentage of students who are satisfied with: • the assistance, support, and encouragement they receive from school staff, and • the recognition they receive from schools for their educational achievements.
6. Ensure that all school boards and schools are adequately and equitably funded.	All students have equitable educational opportunities.	6.1 Number and type of course and program offerings by school and school jurisdiction.6.2 Differences in per pupil expenditures by school and school jurisdiction.
7. Reduce and restructure the Department of Education.	The Department of Education's operations are managed effectively and efficiently.	 7.1 Percentage of the department's clients who are satisfied with the services it provides. 7.2 Percentage reduction in Education's budget and staffing levels. 7.3 Reduction in the cost per unit of department services. 7.4 Percentage of Albertans who are satisfied that the department uses all educational revenues efficiently and effectively for educational purposes.

TABLE 2 continued

Goals, Expected Results, and Measures in the 1994 Three-Year Business Plan

Goal	Expected Result	Measure
8. Ensure that the cost of education is reasonable and under control.	The cost of delivering education is reduced.	8.1 Percentage reduction in cost per student per school day (from 1992/93). 8.2 Interprovincial comparisons: • per pupil expenditures • per capita expenditures. 8.3 Percentage of parents who are satisfied that they are receiving value for their tax dollars in their schools. 8.4 School construction costs per square metre compared to the construction of similar buildings.
9. Establish a more accountable education system.	The education system demonstrates greater accountability.	 9.1 Percentage of Albertans who are satisfied with access to and effectiveness of information from the province, school jurisdictions, and schools about the education system's performance. 9.2 Percentage of parents who are satisfied with the information they receive from schools about their children's educational achievement.

work and performance measures, and (5) improving business involvement and technology integration. These teams will work with multi-stakeholder consultation groups and Alberta Education officials to help develop more detailed implementation plans in the five areas. The Accountability Framework and Performance Measures team will consult on and assist in the development of an accountability framework for education using the performance measures outlined in the plan as the basis for annual provincial, school jurisdiction, and school reporting to the public on the state of education.

CONCLUSION

In the interests of public accountability, Alberta has published educational results for more than a decade. Since the early 1980s, student achievement in the core subjects at four grade levels has been assessed and reported. Local reporting of educational results has been a requirement since the mid-eighties. The new Three-Year Business Plan will enhance public accountability. Achievement testing at grades 3, 6, and 9 will become more comprehensive beginning in 1995. School jurisdictions will also be required to report more and better information

about their student achievement, administration, and financing. Greater local involvement of parents and the community will be required.

Will these strategies improve the quality of education and the results students achieve? Can a clearer mandate and a more focused and businesslike approach lead to better management in education? Will greater accountability increase the public's confidence in the societal investment in education and in the quality of young Albertans' learning? Enhanced accountability is predicated on these premises.

Expanding the provincial achievement testing program to assess the core subjects every year will certainly focus attention on student learning, especially at grades 3, 6, and 9. Increased assessment signals the importance of achievement. What is assessed becomes what is valued, which becomes what is taught. The challenge for Albertans will be to use the results of provincial assessments to improve educational practices that can help students learn more effectively, and to minimize such negative effects as narrowing the curriculum and teaching to the test.

Reform requires leadership, collaboration, and communication. The government has demonstrated leadership by establishing goals and financial targets for education over the next three years. If the reforms are to be successful, the government must collaborate with its partners—teachers, administrators, parents, trustees, stakeholder groups, and the public. Each group must know what is expected of it and how it can work with others to contribute to improvement. Communication is critical. Accountability reports must be targeted to specific audiences since interests and information needs vary.

An important component of the new reform strategy is the inclusion of opinion. Of the 31 measures, 13 deal with stakeholders' satisfaction with various aspects of education. This adds a qualitative dimension to the discussion of educational results as perceptions provide a balance to the quantitative measures and a diversity of perspectives on educational success. Tracking opinions over time will indicate if stakeholders perceive that education is improving.

Alberta's reform agenda is ambitious. Albertans will gain a better understanding of the complexity of education through the accountability tools of annual planning and reporting. Cooperation among educational partners will help ensure that current reforms benefit students. If public education is to continue to enjoy taxpayers' support in times of shrinking resources, public confidence is essential. Accountability focuses attention on performance, communicates how successful the performance is, and proposes strategies for improvement.

NOTES

Alberta withdrew its diploma examinations in 1973 in response to professional associations' request for local accreditation and the recommendation of the Worth (1972) report. Within three years, the Minister's Advisory Committee on Student Achievement (MACOSA) was established to study problems around student achievement and to recommend solutions. MACOSA (1979)

- recommended periodic assessment of students' knowledge, skills, and attitudes in selected subjects. This type of assessment would serve two purposes: to provide feedback to the public, including reports on how local systems meet educational goals and objectives set by the province, and to inform decision making on the maintenance and improvement of the quality of instruction.
- The 1994 School Act received Royal Assent and became law on 25 May 1994. The amendments put into action key directions of the government's restructuring plan. Among the major changes are: equitable and fair funding to all school jurisdictions, a more meaningful role for parents in the education system, increased decision making at the school level, and greater accountability to the province.
- Alberta has a program of studies for every provincial course offered in elementary, junior high, and senior high school. For every course there are statements of program rationale and philosophy, general learner expectations, curriculum standards/specific learner expectations, and basic learning resources, all revised and updated regularly. The oldest courses are in senior high school industrial arts, which will be replaced by the provincial implementation of Career and Technology Studies (CTS) strands in 1997/98; interim modules in about 50% of the CTS program were available in September 1994. The newest courses are in senior high science, mathematics, and music. The programs of study for individual courses are packaged in separate sets for elementary, junior high, and senior high schools. Each elementary teacher receives the whole elementary set, whereas high school teachers receive only programs of study for the particular courses they teach.
- ⁴ Harold W. Stevenson completed a study of the mathematics achievement of grade 11 students in Alberta, Virginia, Minnesota, Japan, Taiwan, and China. In addition to writing the achievement test, students answered questions about their personal backgrounds and attitudes. The results were presented to Alberta educators and reported in newspapers (the *Edmonton Journal*, 25 October 1993 and the *Globe and Mail*, 29 October 1993) but have not yet been formally published (see Stevenson, 1995).
- Achieving Quality won the Outstanding Publication Award for Policy Studies at the 1994 meeting of the American Educational Research Association in New Orleans.

REFERENCES

Alberta Education. (1991a). Alberta Education policy manual. Edmonton: Policy and Planning.

Alberta Education. (1991b). Vision for the nineties: A plan of action. Edmonton: Policy and Planning.

Alberta Education. (1992a). Achieving the vision 1991 report. Edmonton: Policy and Planning.

Alberta Education. (1992b). Education in Alberta: Facts and figures 1991. Edmonton: Policy and Planning.

Alberta Education. (1993a). Achieving quality. Final report of the Educational Quality Indicators Initiative. Edmonton: Policy and Planning.

Alberta Education. (1993b). Achieving the vision 1992 report. Edmonton: Policy and Planning.

Alberta Education. (1993c). Educational quality indicators network: Summary of the inaugural meeting. Edmonton: Policy and Planning.

Alberta Education. (1994a). Achievement testing program provincial report: June 1993 administration. Edmonton: Student Evaluation.

Alberta Education. (1994b). Annual report: Diploma examinations program: 1992–93 school year. Edmonton: Student Evaluation.

Alberta Education. (1994c). *Meeting the challenge: Three-year business plan 1994/95 to 1996/97*. Edmonton: Author.

Government of Alberta. (1993). *Budget '93: A financial plan for Alberta*. Edmonton: Provincial Treasurer.

- Government of Alberta. (1994a). A better way: A plan for securing Alberta's future. Edmonton: Provincial Treasurer.
- Government of Alberta. (1994b). *Budget '94: The financial plan in action*. Edmonton: Provincial Treasurer.
- Minister's Advisory Committee on Student Achievement. (1979). *Student achievement in Alberta*. Edmonton: Alberta Education.
- Stevenson, H. W. (1995). A comparative study of the academic achievement of Canadian and U.S. high school students. Unpublished manuscript, University of Michigan, Center for Growth and Development, Ann Arbor.
- Worth, W. H. (1972). A future of choices: A choice of futures. Report of the Commission on Educational Planning. Edmonton: L.S. Wall.

Nelly McEwen is in the Policy and Planning Branch, Alberta Education, 11160 Jasper Avenue, Edmonton, Alberta T5K 0L2.