

# For the Love of Learning

## Volume II: Learning - Our Vision for Schools

### Chapter 8: The Learner from Age 6 to 15: Our Common Curriculum

The advantage of an excellent Early Childhood Education for children aged 3 to 5 is that, when children begin compulsory schooling at age 6, they will have been prepared to learn during these first three years. There is widespread agreement that the foundation of a good education is laid down in these years, and that the success a child experiences in acquiring literacy and numeracy at this stage is an accurate indicator of long-term success. If, when they begin Grade 1, children are disposed to learn, are able to concentrate, know how to learn in a group, and have high expectations of themselves as students, the probability of creating a learning community in each classroom becomes much greater.

#### The transition to compulsory schooling

At present, teachers attempt to establish a learning community despite the fact that every classroom includes some children who are unable to take turns, wait for the teacher's attention, or absorb the information being offered. While a sound program in the early years does not guarantee that every child will be perfectly ready for formal learning, it will go a long way toward ensuring that they are more ready, socially and cognitively.

The child who is ready to learn needs skilled and nurturing teachers who have clear ideas about what children should learn, and a variety of solid strategies for helping them do it.

As the report *Yours, Mine, and Ours* points out: "Children need positive social interaction as their thinking and language competencies develop."<sup>(1)</sup> This is as true at school as at home: young children depend on teachers to be warm, supportive adults and to facilitate safe and positive peer interaction. Without a sense of safety, it is very difficult for youngsters to pay attention to learning tasks.

Students and teachers must know what the learning goals and expectations are. The curriculum should be a plan, shared by all teachers, that describes where they are attempting to lead students, and the sequence in which they will do so. Annual and long-term goals and expectations must be clear to teachers and students and to parents whose support and help in the overall plan is crucial to its success. We cannot be surprised by confusion and dissatisfaction about what students need to know whether they learn it well enough and are well prepared for the future - if we are not clear about what we expect them to learn, what the learning outcomes are, how we will know they have learned it, and what the standards of acceptable attainment are. Moreover, teachers must have clear guidelines about what is essential and what is not and must be prepared for, and supported in, their work. A common curriculum, commonly described and understood, and with well-defined standards, is the essential underpinning of publicly supported schools.

This chapter is divided into five parts. The first four deal with curriculum components and the supports at the school and community level that are necessary for effective curriculum implementation for children and young adolescents, from Grade 1 to Grade 9 inclusively: that is, what needs to be in place in order for all or almost all students to learn what we agree they should.

The last part concerns curriculum organization and development, and deals with some principles that we think will support effectiveness, efficiency, and equity.

We are suggesting that curriculum guidelines should recognize the primacy of certain skills, and that teachers, in the early grades especially, should emphasize and carefully monitor the acquisition by all students of these foundation skills, within the context of an integrated curriculum.

Because of the emphasis we put on the early acquisition of foundation skills within the context of a core curriculum, the first half of this chapter appears to stress the early years (Grades 1 to 3), although much of what we say applies equally to the whole of the common curriculum, Grades 1 to 9.

Some definitions:

"common curriculum": a curriculum that defines what students of a particular age will study.

"*The Common Curriculum, Grades 1-9*": a document released by the Ministry of Education and Training in 1993, which defines a common curriculum of about 15 subjects organized into four integrated "strands," which comprise the whole of the curriculum for all students for all of the nine years.

"foundation skills": as defined in this report are literacy/communication skills, numeracy/problem solving, group learning and interpersonal skills and values, scientific literacy, and computer literacy. While these foundation skills are represented in particular subjects within the common curriculum, such as English/Français, mathematics, and science, they are also fundamental in most other subject areas.

"core curriculum": all the subjects taught within the common curriculum in addition to the foundation skills.

## **The foundation: The essential elements of the elementary curriculum**

Children begin compulsory education in Grade 1, in the year they reach age 6. For the next nine years, their curriculum is prescribed according to *The Common Curriculum, Grades 1-9* released by the Ministry of Education and Training in 1993.<sup>(2)</sup> The basic curriculum plan for those grades, it was being revised while this report was being prepared, and is expected to be revised periodically.

The curriculum is presented as four integrated strands: language; the arts; math, science, and technology; and a catch-all, self and society, which includes social studies, business studies, family studies, guidance, and physical and health education. *The Common Curriculum* describes what students should know and be able to do by the end of Grades 3, 6, and 9, across a range of subject areas. The curriculum is termed "common" because it applies to all students, and accounts for all or most of their learning time during the school day.

*The Common Curriculum* does not give priority to any particular subjects. It seems to us, however, that some skills really are grounding for further learning; they include the traditional basics - literacy and numeracy - as well as the "new basics" group learning and interpersonal skills and values, scientific

literacy, and computer literacy. Therefore, it is reasonable to ask primary and junior grade (1 to 6) teachers to concentrate on helping students achieve competency in these five areas.

We are not suggesting that these skills be taught without context, or that the context is not important to the learning. We know that best practice does not entail teaching "basic skills" first and "thinking skills" afterwards. Rather, children must be focused on both form and meaning from the beginning, so they understand that reading and arithmetic are supposed to make sense; if the word makes no sense in the sentence, or the answer does not fit the problem, the child must question it and try again. Teaching children how to estimate answers in arithmetic is an example of teaching for meaning, and of giving students the skill to question, and if appropriate, correct a specific response.

A child would have a very firm educational foundation if, by the end of Grade 3, he or she was well able to learn from print; could apply a basic understanding of arithmetic to the kinds of problems that might be encountered in appropriate school projects (constructing, measuring, drawing, graphing, etc.); knew the kinds of questions to ask to test an idea or an argument; and was capable of knowing how and when to ask for help, offer help to others, and work independently or collaboratively.

Young children are not equipped to learn from abstraction, and it is essential that both verbal and quantitative skills be learned through the concrete; that is why arts and hands-on science and other kinds of "projects" are so important. These applied areas of curriculum act to motivate young students, giving them reasons to read, write, compute, and think. Like adults, children need to know the purpose of learning, and a concrete outcome - a chart, a picture, a tower, a play or a debate provides that purpose, whether for reading, writing, measuring, calculating, or co-operating.

Acknowledging the existence of priorities in Grades 1 to 3, literacy, numeracy, group learning and interpersonal skills, as well as an introduction to scientific reasoning gives a focus to the common curriculum in these foundation years. While other subject areas can and must be used to make the abstract concrete, and to enrich children's exposure and experience, "covering" an extensive list of topics or outcomes in myriad subject areas should not be the teacher's agenda. (The other "new basic," computer literacy, should also begin in the primary grades but will probably be developed most after Grade 3.)

In the junior grades (4 to 6), there is a similar need to teach and review the skills required for working together, which are essential for optimal learning. And while basic literacy is most intensely acquired before Grade 4, junior grade teachers must be able to diagnose their students' literacy levels quickly and accurately; they have to know the language and cognitive development continuum so that they can "scaffold" learning for each student - know what the next step is and how to help the youngster achieve it, as well as how to use peers and others to support a learning environment.

The emphasis on numeracy must continue, as students' knowledge of the fundamental arithmetic operations is being extended and consolidated. Scientific literacy should be increasingly emphasized and computer literacy should become a focus.

The fact that these generic skills - communication, problem-solving, group learning and interpersonal relationships and values, scientific and analytic thinking, and computer technology - are acquired continuously as the child develops is illustrated by a recent draft document produced by the College Standards and Accreditation Council of Ontario. It describes communications, mathematics, group learning and interpersonal skills, analytic skills, and technological literacy as the generic skills around

which learning outcomes must be organized at the college level.

We believe that if teachers and parents are to know how well students are acquiring these skills, clear standards must be developed for each skill. At present, the standards for mathematics have been set out; they are in draft form for language.<sup>(3)</sup> We believe that, in addition, they should be established for science, computer literacy, and group learning and interpersonal skills and values. We suggest that the Ministry of Education and Training use the expertise of professional educators to create and assist in field testing standards in these areas

## **Recommendation 5**

\*We recommend that learner outcomes in language, mathematics, science, computer literacy, and group learning/interpersonal skills and values be clearly described by the Ministry of Education and Training from pre-Grade 1 through the completion of secondary school, and that these be linked with the work of the College Standards and Accreditation Council, as well as universities; and that clearly written standards, similar in intent to those available in mathematics and language (numeracy and literacy), also be developed in the other three areas.

These standards should be used as guides by teachers for regularly monitoring and assessing students, using a variety of strategies, including performance and portfolio review (see Chapter 11).

The following is a description of our concept of each of these fundamental skills areas.

### ***Literacy/communications skills***

With or without Early Childhood Education, the primary school grades are correctly seen as laying the foundation of the child's education. In the minds of parents and public, these grades are, above all, about learning to read and write. Parents are right: nothing is more related to a student's success in school (and few acquired abilities are more fundamental to life opportunities) than reading and understanding what is read.

Unless there is a solid foundation, laid down early, students face a long, hard struggle to gain what they should already have. Far too many do not succeed in that effort. All teachers must be capable of finding the student's level of literacy development and raising it, or early literacy gains can be lost. The most critical moment comes early, in Grades 1 and 2.

Basic literacy is not complete by the end of Grade 3, and the ability to read and communicate effectively is acquired and enhanced over many years. If students do not continue to develop their abilities to think and to read, their early learning becomes entirely inadequate.

We should understand literacy as the ability to speak, listen, read, and write well enough to deal with any situation in adult life requiring this most fundamental competency. Becoming literate involves expanding the oral language children bring with them to school (vocabulary, sentence length, grammatical structures) and enabling them to use printed language as effectively as spoken language.

While the public tends to take speaking and listening skills for granted because, unlike reading and writing, they begin to develop long before school begins, employers and educators know that the ability to take direction from the spoken word and to communicate clearly by speaking must also be developed very significantly long after childhood. In fact, one of the least understood and most basic realities about becoming literate is that it is closely tied to experience in communicating orally. That is precisely why

early school success depends so much on the home environment.

Furthermore, development of oral language and development of cognitive skills are closely tied: we need language to think with, and it develops first as spoken language.

Nonetheless, it is high-level literacy - being able to read and write at the level of a well-functioning adult - that tops everyone's list of what students must ultimately achieve in school.

Being fully literate now means acquiring technical literacy. The spread of information technology has made the ability to read technical manuals and directions increasingly important. Historically, this kind of reading has been missing from language and literature classes, being relegated to the special technical classes in which only a minority of students enrol. However, it is increasingly clear that all learners and workers require technical literacy. Even those for whom literacy was once not considered necessary are becoming more dependent on various kinds of information technology - for example, the office janitor who pushes a mop along a hallway now finds it essential: the cleaning fluid at the end of the mop comes in containers with vital information on use, storage, and disposal, as well as on health and environmental hazards.

The material presented to students in language and literature classes beyond the primary grades must include more non-fiction in general and, as youngsters progress into adolescence, more technical literature.

*In other words, the more education U.S. students have, the less likely they are to be able to navigate through the world of consumer technology. Those with master's degrees... might as well be functionally illiterate... in other countries, people with high levels of education were most adept at reading technical manuals... Students don't graduate from high school in the industrialized nations of Europe and Asia today without the equivalent of four years of technical reading and writing.(4)*

Teaching "literacy skills" does not stop once students have learned to read and to write; we move them from literacy to literacies, which we describe as higher levels of competency in communication and such other basics as problem-solving, analytic thinking, and the ability to learn collaboratively as well as individually. These will continue to evolve, not only throughout the school years, but throughout life.

Once children have "broken the code," they have acquired the basic tool for further intellectual development. While literacy is not a prerequisite for critical thinking or even for intellectual brilliance, its lack seriously handicaps any student. Without literacy, group instruction is inevitably slower and more painful. And the reality is that children who do not acquire functional literacy early rarely overcome the serious disadvantage that their handicap imposes in school and in life.

Recognizing this, parents express great concern about the acquisition of literacy and numeracy. There is a strong public feeling that, in the early school years in particular, these fundamental skills must take priority over any other curricula and that teachers must be able to show parents the level of literacy their children have attained in a way parents can understand and support. We agree.

We understand why no issue engages parents more than this. But we do not usually find the long media debates about how children should be taught to read, or at what age a particular landmark should be reached, helpful or enlightening. The debate about how reading should be taught - the "phonics versus whole language debate" as it has often been phrased - has obscured, rather than clarified, the main issue,

which is how solidly all or almost all children are learning to read.

At the present time, most children are able to read and write at an appropriate level by the end of Grade 2. But this is truer of some groups than others, depending on parents' education, immigrant status, and other circumstances. We expect that, if first-rate early-years education is available and widely utilized, the gap between more and less advantaged groups will shrink very considerably: that 80 percent or more of all children, regardless of background, will be able to read and write at the age-appropriate level by the end of Grade 2, and that all students, excepting only those with serious learning problems, will be able to do so by the end of Grade 3. We define that as a school system which, from the beginning, is both excellent and equitable.

Earlier education should mean fewer children having difficulties in Grade 1, and more moving smoothly into reading. Some who have been in early education will already have received the help they need, and those who have reading-related difficulties in Grade 1 must be identified early.

Any child who might otherwise be left behind should quickly receive in-school, appropriate help, before or very early in Grade 2. This should ensure that nearly all students will be able to achieve the reading, writing, listening, and speaking outcomes specified as appropriate to the end of Grade 3 by then. Increasingly, with early education, those outcomes will be reached by the end of Grade 2, although some "late bloomers" may require longer to attain literacy.

In fact, we suggest that the expectation of literacy attainment for all children (excluding a very few who have serious learning handicaps) by or before the end of Grade 3 should be so strong that it constitutes a "literacy guarantee" to parents.

However, if that guarantee is to be made in good faith, parents must acknowledge that they have a part to play. It is essential that they act on the advice and information that must be forthcoming from educational authorities, provincial and local, concerning the importance of talk and print (in the language used at home) to children's lifelong learning capability.

Just as schools must reach out to parents with borrow-a-book programs, family literacy programs, and other home-school literacy links, parents must take up such invitations enthusiastically.

Although there is controversy on the subject, educators do know a great deal about teaching children to read, and the importance of including a variety of teaching methods. Balanced reading programs include both phonics and "whole language" or meaning-based approaches. (For a brief discussion of the issue of phonics in balanced reading programs, see Chapter 6, where the topic is mentioned in the context of pedagogical expertise.) This knowledge, however, is not always in the hands and heads of the people who most need it - the classroom teachers of young children. Sometimes, it is most familiar to only a very few teachers, those with special remedial responsibilities.

One phenomenon in Ontario education in the last two years has been the excitement generated by a remedial reading program called Reading Recovery, created in New Zealand, for children who show difficulty in learning to read in Grade 1, and adopted by the Scarborough Board of Education. Well designed and well researched, it helps many youngsters; the program involves hundreds of hours of training for teachers, and is delivered one-on-one for 20 minutes a day over several months. Reading Recovery is highly structured, for both students and teachers, who monitor each step of the child's performance. While it does not solve every child's problems and its rate of success is not unique among remedial reading programs, it is certainly a promising intervention for many children.

But to begin with remediation is to begin at the wrong end. In New Zealand, teachers receive very rigorous training in how to teach reading before they teach their first classroom. Teacher training for literacy acquisition is by no means so extensive or intensive in Ontario. But good early education depends on teachers receiving thorough training in their pre-service education, or soon afterward. The ultimate prevention program is excellent teacher education. With it, a greater number of children will learn to read in the regular classroom, without expensive tutorial assistance, and the need for reading "recovery"/remediation will shrink.

There is no lack of technology for teaching adults how to teach children to read; the issue is delivering that technology to prospective and practising teachers, especially those in the primary grades. If that is done - if all teachers of young children know how to be effective reading teachers (and, crucially, if those teachers know how to teach parents and other volunteers, including older children, to be effective reading coaches) - schools can deliver on what must be considered a basic entitlement: that, with few exceptions, all children will be functionally and effectively literate in English or French by or before the end of Grade 3. (This issue is discussed further in Chapter 11.)

Among the learner outcomes statements for the end of Grade 3 in *The Common Curriculum* are the following, which describe what students will be able to do with written material:

- Understand a story and predict what may happen next;
- Learn new words through reading;
- Be able to interpret simple diagrams, charts, and maps;
- Be able to follow written directions;
- Understand the purpose of spelling and punctuation and use them correctly to make meaning clear.

*The Common Curriculum* must become real. The stated goals are realistic for most nine- or ten-year-old children, and they should and could be guaranteed almost universally. The relatively few exceptions will include children who are profoundly handicapped or developmentally delayed; those who are recent non-English or non-French-speaking immigrants; and some who enter school in kindergarten without oral fluency in the language of instruction.

We believe that parents should be encouraged to monitor their children's growing literacy, and that educators should welcome them as advocates for such growth. Parental expertise should be built, not dismissed. One way of doing so is for the Ministry of Education and Training, with the assistance of teachers and librarians, to develop a list of high-quality children's books for parents and teachers, books that are readily available in libraries and bookstores, and group them by reading level, according to age or grade. We suggest that public as well as school libraries organize books according to such categories, to help parents and children select books at the child's level.

Such a simple step would enable parents and children to select books together; parents could deliberately choose to read books to their children that were just beyond the child's independent reading ability. And parents would have a very good idea of their child's reading level and rate of progress, as a basis for discussions with the child's teacher.

The Ministry of Education and Training is in the process of developing standards for measuring literacy at the end of Grades 3, 6, and 9. We believe it is both possible and essential for almost all students to achieve at least an adequate reading standard, and for a large minority to reach a superior level. Clarity is required so that teachers and parents know what is expected. A high level of teacher competency in

reaching and teaching the range of learners in any class is necessary. Such supports as intensive reading-tutoring programs must be provided to children who need them. As well, there must be a continuing commitment, provincially and locally, to assessment for improvement. (See Chapter 11.)

Finally, it is important to remember that literacy is not owned by language arts teachers. Once children have the foundation skills - reading, comprehension, writing, and communicating these must be expanded by all teachers across all subject areas: literature is certainly not the only vehicle for developing literacy skills. In the arts and sciences and in technical studies, teachers have the right to expect students to be able to read for information and to write expressively and correctly. They also have the responsibility to help students develop these skills, no matter what the subject context.

The Commission's interest in fundamental literacy skills and on higher literacies as a primary learning issue is evident in our emphasis on language development as an essential for babies and toddlers in the curriculum of home and care, and the curriculum of the Early Childhood Education for three- to five-year-olds. In addition, Chapter 11 focuses on assessing literacy at the end of Grade 3, to evaluate students' progress and the way the educational system functions for young children.

### *Numeracy/problem-solving*

Narrowly defined, numeracy corresponds to the narrow definition of literacy: a knowledge of the basics - the ability to compute, measure, estimate quantity, and manipulate numbers, in order to deal with the practical demands of life, including money. Just as the person who cannot read a manual or a newspaper, who cannot write a memo or friendly note, will be less employable and will suffer a certain loss of dignity and self-esteem, the person who is unable to check an invoice, understand a simple chart, divide a restaurant cheque, or estimate the cost of groceries is also under a genuine economic and social handicap.

As with literacy, we see the responsibility of the schools going far beyond basic numeracy to genuine mathematical literacy. As well as a solid grounding in simple arithmetic, this includes the ability to solve both abstract and practical problems efficiently by creating algebraic models to represent them; understanding and being able to use mathematical symbols; understanding formulae as generalizations about observed patterns; and being able to solve problems by applying patterns to them.

In this broader definition, genuine mathematical literacy gives a person another way of representing and understanding reality, a mode of critical and analytic reasoning that, in many situations, is the most efficient and effective one, and a language that is essential to the physical sciences.

While we share parents' wishes to have children acquire basic numeracy skills early in their formal education, we are aware that international math testing over the last decade suggests that most children in Ontario, like most of North America, need to have a better grasp, not of number facts and simple arithmetic, but of the language and conceptual basis of math, the patterns on which mathematical models are built.<sup>(5)</sup> When clearly instructed to do so, most students can show they have learned how to add, subtract, multiply, and divide; but they do far less well when they have to move beyond mechanical skill - for example, reading a problem that does not dictate the procedure to follow, and deciding what operations are required, and in what order.

Evidence suggests that appropriate emphasis on problem-solving skills can and should begin as early as Grade 1. Not only is this pedagogically important, it also ensures that, from their first experience with arithmetic, children will understand its practical value and the useful reasons for learning it. Thus, good

pedagogy reinforces students' motivation as well as their competence.

Research into primary classrooms in Japan, Taiwan, and China suggests that the advantage children show on international tests begins early, and that teaching methods in those countries differ from our own in important ways. Although classes tend to be larger, teachers structure class time for maximum interaction with students. Such unproductive practices as long periods of individual seatwork, often in the latter part of the instructional period and without immediate feedback from the teacher, are much rarer in Asian than in North American schools. Students there frequently exhibit their work to teachers and classmates, and discuss how they arrived at their conclusions. Incorrect answers are treated as an opportunity for teaching, rather than as evidence of ignorance or a failure from which nothing can be learned.

There is a clearer focus on teaching for understanding, rather than for memorization and recall. Not only is there less uninterrupted seatwork, there is more direct instruction, more guided practice, more value placed on reasoning. Math educators in North America support these strategies and approaches, and it seems highly likely that, if teachers were better educated in the language of mathematics and in teaching that language, we could reasonably expect to see most young students exhibiting more-than-adequate proficiency in the subject. Our recommendation in this area concerns teacher preparation and on-going education. (See Chapter 12.)

In numeracy as in literacy, it is essential that all young learners have a solid foundation on which to build. The literacy guarantee must apply to numeracy as well; by the end of Grade 3, almost all children should exhibit adequate-to-superior skills in fundamental mathematical operations and be able to apply them to age-appropriate problem-solving.

The Ministry of Education and Training has developed standards that are appropriate for measuring the mathematical skills of young learners; it is essential that parents understand what is expected of their children, be given assistance in supporting their learning, and, through regular reporting, be kept aware of the clear indications of their children's progress in math. End-of-Grade 3 assessment (as recommended in Chapter 11) should bring no surprises, and should affirm children's acquisition of the basic skills, including an understanding of how to read and think about and solve math problems that derive from, and apply to, everyday situations.

### ***Group learning and interpersonal skills and values***

Although it is clear that schools have a primary academic function, there is a growing consensus that they must also recognize the importance of teaching and building on skills that facilitate learning, that enable groups to function harmoniously, and that offer a range of personal and interpersonal skills that are vital to children and adults.

In order to learn at school, students must be able to benefit from group learning situations. In classes of 20 to 35 students, very little instruction can be one-to-one, teacher-to-student. Although effective teachers are aware of each student and constantly monitor individual progress, most classroom learning occurs at the whole-class or small-group level. It involves listening as well as speaking, and is essentially interactive: students must be able to learn from others, from the teacher and from peers.

As well, students must be able and willing to learn in groups that are inclusive, respectful, and appreciative of individual and group diversity. Learners who cannot or will not accept as peers and colleagues persons who are of a different gender, colour, or background are clearly at a disadvantage and are limiting to others.

Furthermore, it has become increasingly obvious that these same interpersonal skills are essential in the workplace. At a minimum, learners/workers must be able to listen, to take turns, to offer help to and accept it from a wide range of others. Beyond that, it is clear that people who welcome the opportunity to learn from and with their peers have significant advantages both academically and in their careers. Many students in Ontario study in classrooms and schools that are richly diverse, as is the local society of which they are part. For these students, interpersonal skills are both complicated and enriched by cultural heterogeneity. Group learning and interpersonal skills in heterogeneous societies are simultaneously more multifaceted and subtler.

In general, Ontario's schools succeed in bringing together young people from extraordinarily diverse heritages to interact positively. Schools must continue to be strengthened in their role as centres for excellence in the development of a citizenry dedicated to equity. In a society as complex and diverse as ours, it is unwise to assume that individuals and groups will interact positively without some support, intervention, and teaching.

If we think of interpersonal literacy as being as much a part of the learning continuum as any other of the foundation literacies, we see tolerance as literacy in a narrow sense; genuine appreciation, welcoming and learning from diversity, is a higher-level interpersonal literacy. And, like other higher level literacies, it is not inborn, but is learned - or not learned from parents, teachers, and peers.

Although home is the primary source of values, school is also an important setting in which they are learned. Teachers and schools teach values implicitly, when they encourage students to work together in groups, to help one another as tutors, and to engage in community service. Teachers often choose books, to read to or to be read by students, that reinforce such values as honesty, compassion, and altruism. Fortunately, many teachers also recognize teachable moments not only in academic but in interpersonal contexts. In the younger grades, teachers often use stories and games to elicit children's feelings about themselves and others, in order to make them conscious of the need for self and mutual understanding.

While teaching values is a controversial and contested area - in a heterogeneous society, values differ among groups and among individuals - it is nonetheless true that making an absolute distinction between knowledge and values is creating a false dichotomy. The curriculum is a statement not only of what we want children and youth to learn; it is also about what we want them to feel for their fellow humans. Thus, we find statements of desired learner outcomes in language in *The Common Curriculum* such as: "By the end of Grade 3, students will use vocabulary that shows respect for people of both sexes and all backgrounds."(6)

Group learning and interpersonal skills are important for school success, but schools and teachers also recognize that students must be educated to behave responsibly; that education is for greater human good, not only for individual success and achievement; and that schools and teachers also have a character-building role to play in the lives of children. A "literacy of values" is part of a general cultural literacy.

The connection between group learning and interpersonal skills and values is also evident in the problems that arise, in school and elsewhere, between male and female students. If schools do not attempt to discourage harassment by peers, and, at the same time, teach good communication skills that can overcome barriers posed by gender (and by race, language, and culture), they lose an opportunity to influence young people positively. That loss may have serious implications for the relationships students have with others throughout their lives.

While it is difficult for schools to overcome negative forces that confront students elsewhere, it is essential that they demand high standards of behaviour from students, while guaranteeing them safety from harassment and bullying.

While teachers must always model good communication skills and positive interpersonal behaviour, they should not be expected to be the sole deliverers of programs that mental health workers and counsellors, for example, are equipped to offer. Such social skills programs as peer coaching and group skills for co-operative learning, which are very clearly classroom oriented, are naturally taught in the classroom, most often by the teacher. But anyone with the requisite expertise can also deliver that kind of training in a classroom setting.

Because co-operative learning and peer and cross-age tutoring facilitate learning, it is essential to teach these to children who would otherwise quickly falter. Having one student tutor or coach another is one of the least expensive and effective ways of increasing learning, for both "teacher" and "pupil." Peers may be more effective communicators than teachers when a student is confused or doesn't understand: for example, thinking of another way to reword the teacher's explanation. Moreover, the student in the teaching role is forced to think clearly and logically, and often to face and fill previously unidentified gaps in her own understanding.(7)

As well, cross-age tutoring is a valid form of community service in the school.(8) As long as all students have the opportunity to help another if they wish (and cross-age tutoring makes this possible for almost all students), it is appropriate for teachers to describe and students to understand that this is service to others. As such, it can begin early and act as a child's introduction to that concept.

*Even closer to schools is the resource of students themselves. Peer tutoring, especially cross-age peer tutoring, has modest effects. But the effects are so consistent, and the effects in terms of self-esteem of both tutors and children tutored so visible, that one authority has labelled peer tutoring an "educational conjuring trick." Peer tutoring is very much more cost-effective in raising pupil achievement than many more widely-advocated strategies... Implementation of effective peer tutoring programs requires goodwill and organization, but little else; it is a resource there for the taking.(9)*

Another part of a life skills curriculum that should be delivered by an educator - though it can be a retired teacher volunteer is the practice of studying: teaching students study skills, such as how to read texts for information, using tables of contents and section headings, and how to review material for tests, etc.

Students need these skills, which can be taught; it is essential that some youngsters not be placed at a disadvantage because they have not been taught at school what others may be taught at home.

It is essential that teachers know and can act according to principles of effective classroom management, and that they know how to help students learn effective interpersonal behaviour working in groups and helping one another - as well as personal organizational and study habits. But they cannot be expected to single-handedly create and take sole responsibility for implementing and maintaining such important school-wide safety initiatives as anti-bullying or conflict mediation programs, although they must know how to support and reinforce them.

Teaching and learning interpersonal or life skills is an area in which community partnerships are absolutely necessary. Teachers need some essential strategies for promoting negotiation and problem-solving among students, in order to implement such processes as co-operative learning and peer

coaching and as a vehicle for curbing anti-social behaviour in the classroom and on the playground. Most teachers have no special knowledge in these areas, and may not know what questions to ask, what strategies to teach, to get beyond negative and reach positive behaviour. Just telling a student to behave differently is rarely enough. Other expertise is necessary, either through more and different teacher preparation, or through the assistance of others with appropriate backgrounds.

It is essential that all teachers know how to model and teach negotiation skills and conflict resolution, as well as other social skills that enable students to work productively together, such as the listening and questioning skills necessary to learning in large- and small-group situations.

While, in theory, the best time to acquire some of this knowledge may be in pre-service, most teachers probably find it useful after they begin teaching, in the context of the school and the larger community. And while all teachers (one could argue all persons) need these skills, teachers of young children are able to establish a firm foundation in this area - an important responsibility.

There are people, including retirees, in a variety of disciplines - social work, mental health, youth work, counselling - who are able to teach and model these skills for teachers as well as for students directly. Involving community helpers, whether salaried or volunteer, also ensures that culturally different habits and customs are understood, and that this diversity is used to support such school-wide group and interpersonal skills as conflict mediation.

If schools are to be effective learning communities, the need for a safe and constructive social environment cannot be ignored. By themselves, teachers cannot develop and deliver programs needed to create that environment.

In order to be "fit" for learning, students must feel safe and secure at school, not threatened in the classroom, on the playground, or elsewhere by others who cannot control their anger, or who react to frustration with verbal or physical aggression. Prevention programs, whether school-wide, in small groups, or for individuals, are also part of interpersonal and group learning skills; schools must depend on the resources of the larger community to deliver a range of such programs.

Other interpersonal skills curricula that could be better delivered by community partners are such aspects of family studies as knowledge of child development as it applies to baby-sitting.

We have identified group and interpersonal skills as an essential literacy - like computers, communication, numeracy, and scientific reasoning. Therefore, we are calling on the Ministry of Education and Training to develop standards in this area, as a tool for measuring achievement and progress over time.

We do not anticipate that elaborate testing or systematic performance assessment will be necessary - they would be artificial, time-consuming, and inefficient when applied here. Neither do we wish to see evaluation in this area left to chance, or neglected. We assume that the most effective way to assess student achievement in group and interpersonal learning goals would be to create a checklist, with learner outcomes stated as a continuum, just as they are in other areas (at the end of Grades 3, 6, and 9). This would enable teachers, on the basis of frequent observations of a student in class, in the hallways, and on the playground, to let parents and students know how well group learning and interpersonal skills are being developed.

At the class and school levels, teachers and administrators can use this data to decide what improvements

are needed, what programs they and/or community helpers should be offering.

### *Scientific literacy*

Scientific literacy includes a basic understanding of key facts that explain natural phenomena, and of scientific principles of analysis, fundamental to critical thinking and to the design and execution of experiments. The need to develop in young children a sense of how to understand natural events and the world around them, and how to think scientifically and analytically - to look at cause-effect relationships, diversity and variation, probability and prediction, and to learn more about something new by comparing and contrasting it with the known - these are necessary and fundamental tools for thinking and comprehending, irrespective of the area of study or work. As well, early science programs can build on and enhance children's natural curiosity, which the school must nurture as an important intellectual force. Children can test their hypotheses and be rewarded with concrete feedback on their thinking.

Since 1984, when the Science Council of Canada issued its report, *Science for Every Student*,<sup>(10)</sup> there has been considerable growth in science education in the province's elementary schools. A report issued by the government in 1991<sup>(11)</sup> concluded that science education in Grades 1 to 6 had improved significantly over the previous four years. Science-related curriculum guides and resource documents were well received and apparently fairly well utilized.

Some science educators, however, feel that there is still too little science in elementary schools, and tie this to the relatively small number of university students who choose the physical sciences as their major field of study; that, in its turn, means that a relatively small number of teachers, especially at the elementary level, have a background in the physical sciences.

The possibility of a link between science in Grade 1 and in Grade 12 was the subject of a research study that followed children who had been given a course of science lessons in Grades 1 or 2, and a comparison group who did not have the lessons. Both groups were interviewed several times over the next ten to eleven years, and were asked questions about scientific concepts. The study probed their thinking about objects or events they had manipulated or observed during the primary science unit. Researchers found that the differences in favour of the science-instructed group were greater at Grade 12 than they had been at the end of Grade 1 or 2. They concluded that:

*The remarkable finding of this study is that a relatively few hours of high quality science instruction in grades one and two apparently served as a kind of advance organizer for many students for later instruction in science... The data suggest that primary grade children have much science concept learning capability that goes unexploited in our schools... it seems evident that much meaningful learning potential remains unexploited in our school children.*<sup>(12)</sup>

There has been considerable interest and concern in science education at the middle elementary level (Grades 4 to 6). There are two obvious reasons why:

First, although Canada exceeds almost all countries in the world in the number of young adults enrolled in university, and ranks near the top percentage of adults with post-secondary education, it is very low, among developed countries, in the proportion of science and engineering degrees being granted. Many people consider this an economic liability for the country, and are concerned that positive attitudes towards and interest in science be developed early.

Second, there is a concern for excellence. International test results suggest that our elementary students are doing as well as most, but not better. "Overall, Ontario students appear to be achieving at around the international average in international studies, but significantly less well than students in British Columbia and Alberta."(13) Science educators are convinced that our students would show greater aptitude and interest in science if they had greater exposure to it in elementary school, and if it were taught in ways that were more relevant and interesting to them.

While the gender gap in math/science achievement and participation has decreased so substantially that it has essentially disappeared before the senior years of secondary school,(14) educators tend to agree that later participation in these disciplines would improve significantly if young women, beginning early and continuing through secondary and post-secondary education, were offered practical and human applications of the physical sciences. This emphasis on meaningful uses of science would seem to be what is needed for all young learners, not just for females, although its absence may have more impact on their long-term involvement. "Gender-fair teaching strategies for mathematics, science, and technology are good practice for all students... [Programs] designed to encourage girls in the primary grades in the use of mathematics depend[s] on problem-solving activities all students would find useful."(15)

Science educators say it is necessary to present a more "authentic" view of science, to emphasize the science/technology/society connection, and to make clear the connections between scientific literacy and the lives and work of Canadians:

*Nothing motivates students to higher performance more than a sense that what they are studying is of real relevance and importance to themselves, their lives and personal aspirations. Science and technology are of enormous relevance to the lives and careers of all young people in school today. Yet too often the way it is taught fails to highlight this relevance. Science is seen as "just another school subject" rather than as the key to a door to rewarding work or exciting opportunity. The ways in which mathematics, science, and technology are taught need to be examined for these links to the real world of students.(16)*

A 1991 survey of Grade 4, 5, and 6 classrooms in one Ontario region(17) showed that most teachers had never invited another person to make a presentation that was related to the science program. The need for community-based education, to enrich programs and make them real for students, extends to all areas of the curriculum.

The issues we have already raised about preparing elementary school teachers to teach math are also true of science. Many teachers take no university-level science courses, and even if they did, it is not at all clear that they would be much better science teachers: it is questionable whether science courses, as taught at the university level, are good models for teaching science to younger students or to anyone who is not a science specialist.

Preparing to teach science must combine preparation in science and in pedagogy (an issue that is dealt with in more detail in Chapter 12). Teachers need models for presenting curriculum in a more integrated and life-like way, connecting scientific concepts with meaningful examples drawn from everyday life.

We believe that scientific literacy is an essential for Canadians, and we urge support for teaching and learning science as part of the common curriculum through more and better science education for prospective teachers, adequate laboratory resources, and development of clear and high standards for student achievement.

## ***Computer literacy***

*[A central curriculum question is]... how, in particular, to redefine the core curriculum in a situation in which technology is becoming part of the general culture, with all the implications that this has for the redefinition and acquisition of the basic competencies needed for the transition to adult life. Computer literacy, for example, has become part of the new basics in education.(18)*

When we speak of computer literacy as a foundation skill, we are referring to the ability to use the computer, equipped appropriately with CD-ROM player, modem, and phone or cable line, as well as output devices such as printers and plotters; to gather information; analyze, organize, and understand that information; and present it clearly and effectively.

Being able to use the central tool of information technology, the computer, is no longer a luxury restricted to a privileged few, or even an option for those growing up in today's world. Computer skills are basic, used not just in the workplace but in the home, for recreation and leisure, and in innumerable other ways.

Many people use computers to "draw" and "paint," adding graphics to work and play. And, as was evident on the TVOnline discussion on education, organized for the Commission, many people spend hours sharing ideas, asking questions, and seeking information through computers.

Aside from their pervasive influence on society, computers and other informational or instructional technologies, used properly, can have a transforming effect on learning and teaching. They can individualize learning and allow students to achieve excellence at varying rates of speed, and can give them access to far more information than what is contained in the school library.

Clearly, acquiring computer literacy cannot be left to chance, to unequal opportunities outside school, or to a few older students who may be interested in the inner workings of the hardware or software. If we do not commit ourselves to making all our students computer literate, we create a significant barrier to their in-school education and to their success as learners throughout life. All classrooms need computers, and all teachers and students need computer literacy. Unless teachers are equipped to guide their students into the world of Information Technology (IT), the remarkable potential of this new learning tool will not be fully realized, and students' opportunities to learn will be significantly curtailed.

Given that, the Ministry must establish clear outcomes for the computer literacy skills students must acquire as they progress through school. The Ministry must differentiate clearly between learning *with* computers and learning how to use computers. The machines must be used to help students learn how to learn, as well as to strengthen their learning in biology, history, and instrumental music; but they must also learn to be comfortable, competent computer users, knowledgeable in harnessing computer power in their work and their play. These skills will give them an edge in the job market and will also give them the confidence to continue learning, to access information for their own benefit, and to make the best use of computers for personal interests.

The value of the computer, properly used as a tool for young learners, is boundless. That's why we have classified technology as one of the four engines that we believe are crucial to the reforms to the system that are now necessary. In Chapter 13, we discuss in detail the role of the computer in supporting learning and teaching, and (in Chapter 11) assessment, as well as in professional development for

teachers.

## **Core subjects**

The core curriculum is that array of discipline-specific subjects to which students are expected to be exposed so that they can become educated, productive members of society. Typically, the core subjects occupy almost all the formal curriculum of elementary school; by secondary school, students are given more options, and the core subjects occupy much, but not all, their attention.

While we believe that the foundation skills underlie all learning, and at no time more than in the early years of schooling, we are not suggesting that the rest of the common curriculum be neglected, or be viewed as a frill. Nor are we suggesting that students delay their introduction to the arts, the social sciences, or broad-based technologies until after they have mastered the foundation skills. On the contrary, all of the core subjects of the common curriculum have an important place in the education of children, from the beginning, as a context for learning and applying foundation skills. Similarly, foundation skills are not finally acquired at the end of Grades 3 or 6; they must be built upon throughout the years of formal education, and beyond. Students certainly must continue to study literature even after they become literate, and mathematics even after they can perform the fundamental operations. Similarly, they must, over the years, acquire increasing knowledge and understanding of history, geography, the arts, and the many other subjects that comprise the common curriculum.

Whereas the foundations, as we described them, are generic skills that apply across all subject areas, the rest of the core curriculum is the knowledge base to which students apply those generic skills. We want students to develop communication, problem-solving, group learning, interpersonal, analytic, and computer skills within a content-rich context. One cannot argue a point about constitutional rights, judge an argument on municipal election reform, or analyze an experiment in biology without a base of knowledge of the subject. Thinking is always about something, and the more knowledge of the subject, the more developed and substantive the thought. Expert performance in a subject requires subject-specific knowledge as well as thinking and learning skills.

It is also true that students learn not only bodies of fact but specific and essential thinking skills within disciplines. Maps, musical scores, and diagrams are generalized ways of organizing information for understanding and recall, although they derive from particular subject areas.

Different subjects depend on different patterns of thinking: the way arguments are developed and evidence is organized differs according to subject. Well-educated people are able to read and understand across a range of subjects not only because they begin with a knowledge of content, but because exposure and familiarity tell them how to read and what to expect in different disciplines and genres.

It is important to note that the core curriculum may be delivered in a variety of ways (for example, with subjects segregated or integrated); differently at different age levels; and differently in different schools. What it implies is that, across schools and teachers, there is some common content and that assessment will be based on that content to create a degree of consistency in what is taught and what is learned.

While many teachers and parents are concerned that the curriculum may be crowded, and that foundation skills may be neglected or core subjects slighted, we did not hear any suggestions from the public about dropping any of the 15 subjects that are part of the common curriculum. Language and literature, mathematics, and science, each built on a foundation of literacy, are certainly part of the core curriculum

all through school.

Few people disagree with the idea that computer literacy is also a fundamental part of core curriculum, and there were no suggestions that history or geography or art not be offered to all students. Each subject has many advocates, and a traditional and accepted place in the curriculum, although newer additions to the elementary curriculum, such as business studies, are less likely to be seen as part of the core curriculum.

There was more discussion in the public hearings and briefs of a few core subjects because people were concerned they might be neglected now or in the future. We comment on these briefly, reminding the reader that we are not attempting to include all core curriculum subjects in this discussion.

### ***The arts: Dance, drama, music, visual arts***

The arts are an integral part of any complete education; and they can and should be a very rewarding part. They are unique as a way of taking in information and as a vehicle for communication and self-expression. The point is that what is best understood or expressed in music, in movement, or in a drawing cannot be paraphrased in words. Students denied access to the arts are denied literacies and are impoverished as learners. All young people should receive at least an introduction to the arts in school. Art and art education will be a major source of fulfilment and the most developed mode of learning and communicating for some students; they will at least open an important door to the world for others.

In contrast to the idea that non-essentials might crowd out the fundamentals, many people connected with the arts argued that in a time of decreasing resources and increasing anxiety about economic competitiveness, budget cuts already affect delivery of the arts curriculum: there is no money to increase or even replace the inventory of musical instruments, no money to sponsor artists in the schools, no funds for trips to museums and galleries, and the like.

This is a concern for two reasons, we believe; first, the arts are part of the core curriculum and not inherently less valuable as part of a well-rounded education than any other subject; they are not "frills" and should not be treated as such. Not only does every student have the right to be introduced to the arts as an area of cultural knowledge, learners also need ways of making abstract ideas concrete. Like science, art is a hands-on way to apply mathematical and logical reasoning skills, explore ideas, and have the satisfaction of making something with what one has learned.

Second, art is the major route to learning for many students, their most developed "intelligence" and their best way of solidifying foundation skills. Drama, for example, has been shown to motivate students who otherwise avoid writing to write - and write well. Music is mathematical in structure, and some evidence suggests that it may be similarly related to understanding and describing spatial relationships. Saving money by targeting arts programs probably does a disservice to all students, and can impose a particular hardship on many of them.

Any school system that fails to open up the spirit of the arts to its students is unworthy of public support.

### ***Career education***

An opinion, commonly heard by the Commission, is that schools often neglect the part of their mandate, beyond the traditional academic subjects, that other people consider important. This other function of schools involves making students aware of the kinds of work that are available, and of the personal

attributes and educational preparation suited to a variety of occupations and careers. The point was frequently made that students are interested, from the youngest grades, in what adults do, and that this interest should be cultivated in a planned way; that would enable students, by the time they are beginning to consider their high school options, to do so on a very strong base of knowledge and information about the opportunities that exist, the preparation needed for different careers, and a sense of their own interests, abilities, and suitability.

Students and parents across the spectrum articulated their desire to see career and occupational awareness and preparation built into the curriculum, beginning well before secondary school. This desire was generally phrased, not as a request for specific occupational channelling or training, but as a perceived need to help students see the link between formal education and the world of work, and help them plan their courses in keeping with their interests and strengths, and the opportunities available. We believe this is a sensible notion, one that is well worth pursuing.

While education in the career planning sense may best be described as part of the core curriculum from Grade 7 on, it is clear to us that it must rest on an earlier and continuous exposure to the resources of the local community; it must be an experience-based program in which young students learn to think about their interests, aptitudes, and responsibilities within a community framework. For that reason, we view community-based education with a strong component of career awareness as an essential part of the core curriculum in elementary school beginning in the primary grades. Every zoo trip is an opportunity to learn from and about the people who work there: Who feeds the animals, and how did keepers train for their jobs? Who decides what plants to put in different enclosures, and what do they have to know in order to do that?

Community-based "career" education also means that students walk through the neighbourhood with local hosts, and visit such neighbourhood workplaces as libraries and fire stations. It means science projects that involve municipal employees: park workers, engineers, and others, and taking students to important natural sites nearby. Children come to school knowing that the most important resource in their world is other people. Schools must build on that knowledge systematically, so that, from a young age, children appreciate and value human diversity, understand that they can learn from everyone they meet, and have a sense of the role education and training play in the lives of adults in their community.

The complement of learning about what other people do and how they prepare for it is an understanding of one's own strengths and interests, of the learning or development needed to grow more competent in those areas. These self-appraisal and reflective skills are explicitly built into effective career-awareness programs.

Like all curricula, the career education component is developmental: it starts as a self- and community-awareness program (including an emphasis on community service), and, for adolescents, develops into explicit career education to help students make informed plans for their future occupation.

The school's community is as essential to this as it is to the interpersonal and life skills curriculum. It is impossible for teachers and other school staff members to meet all students' needs for exposure to a variety of learning environments. As pointed out in Chapter 6, the teacher's role is as general practitioner/diagnostician: knowing who can provide special help and when it is needed.

Teachers cannot be experts in occupations ranging from aerospace to zoology. They depend on local individuals, businesses, and agencies to support their students' search for diverse role models and

hands-on opportunities for educational experiences just as other people provide physical and mental health supports for students, recreational and library programs to supplement the school's facilities, and a host of other professional and voluntary services.

If school-level integration of services and resources is to be achieved, changes will have to be made in the way services are funded, in who undertakes co-ordination of efforts between the school and the community. As well, ways must be found to increase the use of information technology by teachers and students - of both sophisticated computers and simple telephones that must be available in all classrooms to all teachers and learners.

Community-based education also includes an early introduction to the value of community service and the need to take on that responsibility, with visits to homes for the aged, blood-donor clinics, and the like. This simple but fundamental expansion of the curriculum to include the human, the built, and the natural community around the school is the foundation upon which a continuous career education curriculum is built. This is true even though students will not define this aspect of community-based curriculum as career education until they are entering adolescence.

Because this kind of education has not been systematically developed and implemented in the past, teachers need numerous examples of community and workplace visits, and preparatory and follow-up activities, to support age-appropriate, community-based career awareness programs. We would hope that the Ministry of Education and Training would arrange for the preparation and distribution of such materials in the future. Teachers also need support at the local level to co-ordinate such a program, and we will recommend that support in Chapter 10, in the section on career education.

*But there is more to linking schools to communities than preparation for work. The essence of "environmental" education, of "global" education, of studying "history," "science," or "English," can be the means of coming to understand one's community in all its dimensions. There is too often a sense in which the school experience, while trying to prepare its students for a broad variety of experiences in life, merely abstracts them with something disconnected, irrelevant (to them) and alienating. If school is to be a place worth staying in (for a student) it must be a place where connections are made, where learning is meaningful and where people learn more about coping with the complex realities of their many communities.(19)*

Some French-language schools and classes have the additional problem of lack of a local French-language community resource base; therefore, there is a need for long-term planning and organization for community-based learning when French-language resources are not as visible or accessible in the immediate society. In such a case, identifying community resources and creating networks may be done most efficiently through centralized planning, within a general language-planning policy of French-language schools, to ensure that French resources are available in the milieu, regardless of geographic region or concentration of francophones.

## **History**

History, as many people reminded us, is more than a collection of dates and facts: like good literature, its stories provide repeated opportunities for wonder, questions, debates, clarification, and thinking through difficult issues to logical conclusions.

Teachers must give students the opportunity to relate the past to the present. In many cases, the conflicts

that beset us currently are older than Confederation; students, who will be voters, must understand those links.

Canadian history, because it is the story of all Canadians, cannot be accurate without being truly inclusive; it must not ignore the country's history before European contact. It should be taught so that students know and appreciate the diversity at our core from then until now and are more tolerant of the stresses that inevitably accompany heterogeneity, and can consider those in the context of our common humanity and basic community values.

Besides being information-filled, history (Canadian history, world history) is also value-filled, and offers opportunities for thoughtful consideration of ethical issues. Students are eager to discuss notions of justice, altruism, and ethics, and such discussions are an essential part of an adequate education. While they must also occur throughout the curriculum - in literature, science, art - history is extremely important as a context for such exchanges because it is the reality of the human record, and the basis for thinking about who we are as a people, and what we want to become. Issues of majority rule, of minority rights, and of the rights of minors, of the way freedom and responsibility must complement each other, of community responsibility, of individual versus collective rights - all these are issues that educated people must have experience in considering and debating. All have moral and value-laden dimensions that should not be avoided but, instead, should be exploited as an opportunity to develop critical thinking that engages students' desire to mature, and to gain expertise and responsibility.

### *Official languages and international languages*

#### **Official languages**

English as a second language:

English becomes compulsory as of Grade 5, as stipulated in the Education Act. (It will be recalled that anglophones must start taking French by no later than Grade 4.) In either case, initiatives for teaching the second language sooner, even as early as nursery school, are permitted.

The attraction of English and its dominant position as an international language are such that compulsory formal instruction in Grade 5, at about age 10, strengthens skills acquired in French, the weaker, less visible language in the surrounding society. It is felt that some 80 percent of school activity should therefore be conducted in French. Students can then hope to achieve a minimal level of competency in French, which is critical to good cognitive development, before learning the second language.

The fact that the elementary classroom teacher teaches all subjects, including English, may pose problems for second-language learning, particularly if the teacher has limited competency in, or expresses a negative attitude towards, the second language. The teaching of English by someone other than the classroom teacher may help the student to make a clear-cut distinction between the two languages used at school and in society, and thereby help to achieve additive bilingualism in the Franco-Ontarian community, that is, bilingualism that is firmly entrenched. A public information document clarifying the role and place of English in Franco-Ontarian schools would promote a better understanding of the situation on the part of parents and other social interveners. We would point out that it is a specialist teacher other than the classroom teacher who teaches French as a second language in anglophone classrooms at the primary level.

The following passage defines the concepts of "additive bilingualism" and "subtractive bilingualism" as

used by Franco-Ontarian educators and researchers.

*Additive bilingualism is stable and promotes social integration of the members of a community without devaluing their language and culture. Subtractive bilingualism is transitional in nature; it is a stage in the processes of assimilation and acculturation. Only additive bilingualism can ensure the long-term survival of a weak linguistic community. A broadened definition of additive bilingualism encompasses the linguistic, cognitive, affective, and behavioral aspects of language development; a high degree of competency in the mother tongue and the second language in both interpersonal and cognitive-academic communication; the maintenance of a strong ethno-linguistic identity and the development of positive beliefs about one's language, culture, and community, along with positive attitudes towards other languages, cultures, and communities; extensive and continuous use of one's mother tongue without diglossia, that is, without usage being confined to too limited a number of social functions.(21)*

Like French-language programs, English-language programs must address the new school clientele. They must therefore include, based on local needs, beginners' programs aimed at anglophone students, and francophone students having no English competency; programs for students having moderate competency; and finally, programs for students having a high degree of bilingual competency. We feel *The Common Curriculum*, Grades 1-9 addresses these various needs.

The other official language in anglophone schools: French in English-language schools is part of the common curriculum, most commonly taught as a subject like any other, by a French specialist teacher. However, a number of English-language schools offer FSL (French as a second language) in an immersion program, in which students learn other subjects, such as geography or science, in French. Canada has been a world leader in developing language immersion programs for young learners.

At present, the only other languages that may be offered at the elementary level are American Sign Language (ASL) and La Langue des Signes Quebécoise (LSQ), the English and French sign languages, which are permitted as languages of instruction for students with hearing problems; and Native languages, which may be taught as subjects.

## **International languages in Ontario schools**

In addition to achieving a high level of language skills in both official languages, many parents and communities want their children to have opportunities to learn other languages as well, in both elementary and secondary school. The rationale varied among groups, but all had the same goal: to give their children more of a chance to become or remain bilingual or multilingual in a bilingual, multicultural country.

Some are most interested in the cultural benefits of learning another language, and argued that learning another language and about the culture from which it springs helps students appreciate other people, here and in other countries. Another language gives them access to the literary riches of other cultures (available to non-readers of that language only in translation) and to other windows on the world.

Others saw foreign language acquisition in terms of travel and personal enrichment. Slightly altering the old adage "When in Rome, speak as the Romans do," they suggested that their children would be better able to make their way in other societies if they have a grasp of the language.

Still other groups emphasized the importance of knowing other languages in this era of global business. In June 1994, Northern Telecom made a significant grant to the University of Toronto to develop an Ibero-American program. (Ibero-America is defined as Spain, Portugal, and the Spanish- and Portuguese-speaking countries of Latin America.) The purpose is to develop closer business and cultural collaboration between Canada and Ibero-American countries.

Clearly, business sees the need to develop language skills among Canada's young people. As a trading nation, being able to speak the language of our trading partners is an advantage. Northern Telecom wants to do more business in Latin America and needs more people who can not only speak the languages, but have some cultural and business knowledge of those countries.

Still others are seeking ways to maintain the linguistic skills conferred on children by their heritage. In October 1993, the Heritage Languages Advisory Work Group presented its report to the Minister of Education and Training. The report focused on strengthening the International Language Program (Elementary),\* which provides non-English/non-French instruction, primarily after school and on weekends, generally by non-certificated instructors. It should be noted that, while most students in the program share the cultural heritage of the particular language, classes in the program are open to all students, regardless of background.

Ontario benefits from the rich variety of linguistic abilities that result from the number of immigrants in the province. At a time of increasing global competition, we are told that the ability to speak the languages of other trading nations can make the difference between a deal and no deal. This is one reason for supporting the idea of having students add a language instead of trading one tongue for another.

The Work Group called teaching and learning international languages "a positive economic investment in our students." In addition, there is the evidence that strength in one language enhances proficiency in others. Thus, non-native speakers of English/French are likely to carry over language-learning strengths from their native language, if they continue to use it, into the language of the school. (See also the discussion of bilingual and immersion programs in Chapter 10.)

The Commission strongly agrees that learning international languages, in addition to English and French, is valuable and should be encouraged. At present, there is virtually no international language instruction in elementary school and relatively little in secondary school. The International Languages Program (Elementary) is typically viewed as a frill or extra, rather than being made part of the formal school program, even in schools that extend the day so that these languages can be taught during school hours, rather than after school or on weekends.

We understand that, at the secondary level, the proportion of students taking languages other than French and English has decreased over the years. For example, of the more than 111,000 students who received their secondary school diploma in 1992-1993, 49 percent (55,000) had at least one OAC (a credit toward university admission) in English, and 18 percent (20,000) in French. But the largest numbers in all the other languages (such as Spanish and German) were less than one percent - in the range of 400 to 500 students. We are thus eager to see children offered the opportunity to learn an additional language while they are young and especially able to acquire native-like oral fluency.

## **Recommendation 6**

**\*We recommend that the acquisition of a third language become an intrinsic part of the common curriculum**

from a young age up to Grade 9 inclusively, with the understanding that the choice of language(s) taught or acquired will be determined locally, and that the acquisition of such a third language outside schools be recognized as equivalent by an examination process, similar to what we term challenge exams within the secondary school credit system.

The learning of a third language, like the learning of English, may present special challenges for Franco-Ontarian, French-language schools, for consolidating and enriching the spoken and written French of their young people. Franco-Ontarians and newcomers, however, have as much of an interest in learning a third language as do Ontario's other communities.

Because of the local variation in context for offering and learning a non-official language, we are not suggesting that all schools be required to do so, and we are not, therefore, suggesting that *The Common Curriculum* be amended to include one or another international language. We do, however, wish to encourage schools wherever possible to offer their students this wonderful opportunity, and we suggest that one excellent use of the local curriculum option that we are recommending be available to schools (see Recommendation, below) would be to offer an international language to all students in an elementary school (or to all students beginning in a particular grade).

### ***Physical and health education***

We heard a good deal from professional organizations, from parents and from students, about the importance of physical education; the most common recommendation was that all students should be involved in at least 30 minutes of continuous physical exercise daily. This is based on sound fitness guidelines, and we believe the idea should not be ignored. It is another area in which curriculum delivery should be shared with non-school staff, such as recreation workers and health agents. Daily or thrice-weekly physical exercise programs can be led by a variety of trained and volunteer staff who are not teachers.

Physical education, usually based on games and sports activities, has long been a part of public education, based on the widely held belief that physical exercise and exertion improve mental sharpness and the ability to concentrate. As well, society has become increasingly aware of the importance of exercise for health, and in that sense, a physical education program that includes regular exercise should serve as the basis for lifelong participation in health-promoting activities.

The Commission heard many voices raised in favour of expanding the amount of physical exercise in the daily program at both the elementary and secondary levels, including advocates who were particularly eager to have female adolescents appreciate the value of physical exercise as a source of strength and self-esteem and as a much healthier weight-control strategy than stringent dieting. They believe all students should be required to have daily physical exercise throughout their school career.

While competitive sport is a well-established part of school life, physical exercise for fitness is the universal need of young people (and adults). We believe there is abundant evidence that daily physical exercise is a strong component of health.

### **Recommendation 7**

\*We recommend that all elementary schools integrate a daily period of regular physical exercise of no less than 30 minutes of continuous activity as an essential part of a healthy school environment. Schools that have problems scheduling daily periods should, as a minimum, require three exercise periods per week.

All schools should encourage students, parents, other community members, and health and fitness professionals to become involved in delivering exercise programs at school and in creating healthy schools. Students who choose to engage in regular sports programs or physical education classes at school could be exempted from exercise sessions.

While we firmly believe this policy will benefit all students, we are convinced that female students, in particular, will profit from lesser emphasis on competitive sport, traditionally very male dominated.

As well, we believe that health education - drug and sex education and parts of the family studies curriculum - should be delivered by community partners on whom the schools can draw. Increasingly, as schools attempt to deal with such health crises as drug use, violence, and HIV, non-academic concerns have sometimes taken time away from the core curriculum and have used teacher time inappropriately. Although they are not part of the academic curriculum, these are essential areas of instruction for students, but they need not be delivered solely by teachers.

Both the life skills and career education components of community-based or partnership education are incorporated into a program known as the Healthy Schools model. Developed in Europe and North America, it now exists in a Canadian version that evolved in British Columbia, where the program is called "Learning for Living" and extends from the primary grades to the end of secondary school. It includes curriculum-based instruction, services for students, and an emphasis on a healthful school environment, i.e., a sound social climate as well as healthy physical surroundings.

We believe the model of a continuous, elementary-secondary emphasis on health promotion is a positive development in curriculum. We also note the emphasis on healthy environments that is the essential rationale of all public health programs, and that has recently expanded to include healthy communities.

Physical and health education can be seen both as part of the core curriculum and as components of a healthy school, one in which staff model, and students appreciate, the link between exercise and health. In addition to physical exercise and physical education, healthy schools emphasize a safe and healthy environment, community participation, with students and teachers taking responsibility for making health-related decisions.

The healthy schools initiative is an excellent example of education that can be community-based, rather than depending exclusively on teachers to plan or deliver the curriculum. It is the kind of initiative around which student energy can be mobilized, and it may be extended to include such activities as participation in community "runs" for charity, as well as in other kinds of community service, inter-generational programs, and diverse strategies for building students' experience in decision-making; it emphasizes the willingness to accept real community responsibilities. Part of this ambitious agenda belongs within the core curriculum, and part of it can occur outside class time.

We believe that a comprehensive school health model, as recommended by the Canadian Association for School Health, and as exemplified by the Learning for Living Primary-Graduation curriculum in British Columbia, is a healthy direction for Ontario schools, and suggest that the Ministry of Education and Training work with appropriate professional groups and partners to learn from the B.C. experience, and encourage and support a healthy school emphasis within the core curriculum, that is strongly community-based and that incorporates mechanisms to facilitate collaborative planning and funding between the school system and public or private agencies concerned with physical and mental health.

***Technology (broad-based)***

Like art, broad-based technological studies, which challenge students to apply mathematics and science to materials and processes - to design and develop objects and techniques as ways to solve problems - are extremely important, and it makes good sense to include them in the elementary curriculum, from the early years onward. Broad-based technologies include: communications, construction, technological design, hospitality services, manufacturing, personal services, and transportation.

As part of the core curriculum, technology offers all students the opportunity to apply the problem-solving and reasoning strategies they acquire in math, science, and language to concrete problems of design and use of tools and materials. All students need a basic understanding of how physical materials and processes are produced and applied, and many learn best when they are given frequent opportunities to make the abstract concrete. This is most obvious for young learners (through Grade 6), but even students mature enough to deal with abstraction benefit some very strongly - from testing their knowledge concretely and appropriately.

Students whose way of learning is more spatial than linguistic benefit especially from the inclusion of technological education in the core curriculum. But it is also true that technological education helps to develop literacy skills, in an applied and immediately relevant way, because it requires the student to read manuals, make lists, write requisitions, and give and follow oral and written instructions.

## **Continuity in curriculum and learning, Grades 1-6**

The organization of elementary schooling supports the possibility of good communication and good relationships between students and teachers, and between teachers and parents. Because students in Grades 1 to 6 spend most of their time each year with one teacher, they and their parents can establish a relationship of personal knowledge and trust with her. In the same way, the teacher has a manageable number of students each year with whom she can quickly become familiar, both as teacher and diagnostician. But what is missing is continuity of supervision over the years, and continuous monitoring of the student's academic well-being.

While parents are often well aware of their children's development - the gaps that have been closed and those that have not, the gifts that have been noticed and exploited positively by one teacher but not by another - the school has no structure or process that guarantees continuous monitoring from teacher to teacher, and across the years. Too often, only when a child is in serious difficulty do teachers examine the student's record and begin to ask questions that should have been asked earlier.

Even when learning issues are addressed in a timely way, there is no assurance that next year's teacher will be aware of what has happened, and of how to build on it. We think it is important for all students and their parents to be assured that there is an educator, one person, who is keeping track over time of each student's progress.

We do not think that, at this early level, it is necessary for students to meet regularly with a teacher other than that year's classroom teacher. But we do believe that students, and especially their parents, should know that someone is aware of how the student is doing over time, and that this teacher (or principal or vice-principal), who is a kind of case manager for the student, can be contacted by parents concerned about an issue related to their child's progress, about which the current teacher may be unaware or insufficiently informed.

We do not consider it advisable for only the principal, or only the principal and vice-principal, to fulfil

this responsibility: it would be difficult, except in exceptionally small schools, for them to do so well on behalf of many dozens or hundreds of children. If all certificated staff are involved, it is unlikely that any one of them would be responsible for more than 20 to 30 students, a number that makes it possible for the adult to know each student personally - particularly because the group for whom they have responsibility would change by only a few students per year.

## **Recommendation 8**

*\*We recommend that, at the Grade 1-5/6 level,\* an educator monitor a student's progress during the years the student is at the school, and be assigned responsibility for maintaining that student's record.*

The educator will ensure that each of the child's teachers is aware of that record, will be aware of and act on behalf of the continuity of the student's progress, and will be a contact for parent(s) or guardian(s) when there are questions related to progress over those years. Excellent school transition programs for young students would include contact and communication between the educator who monitored their progress through Grade 5 or 6, and the educator who becomes responsible for their educational planning at the next level.

## **The transition to adolescence: Special consideration of the needs of learners from age 12 to 15**

While there is no change in curriculum content between Grades 1 to 6 and Grades 7 to 9, there are significant changes in the way schools are organized and curriculum is delivered.

As well, there are important changes in the students. First, they must begin to consider where their interests and achievements are leading them, and to become more future-oriented in terms of secondary and post-secondary educational and career choices.

Second, they increasingly demand to be treated as adults: to make choices, participate in important decisions, and take control over their own lives, including their lives at school.

We suggest that there are some inherent contradictions between the way schools are organized and the needs of the young adolescent learners, and offer some suggestions for ways of meeting their needs more effectively.

### ***Relational needs***

Adolescence is "a period of rapid and uneven physical growth and unsettling emotional development. It is a time when most human beings experiment with the limits of acceptable behaviour and physical risk. Peer pressure is strong. Vulnerability is high."(22) And, at the same time that adults are sensitive to increased vulnerability among adolescents, the young people themselves are seeking increased autonomy.

Acknowledging these realities has led to considerations about ways of providing stability and, at the same time, of challenging students of this age. Some of their identified needs include a strong requirement for positive peer relationships, for caring adult relationships, for opportunities to learn what they do well, and to be recognized for that as part of constructing a positive self-image.

Finally, they need to participate meaningfully in the world around them, including the world of school,

where so much of their time is spent.

As students move into adolescence, at age 12 or 13, they have to deal with warring feelings. On one hand, they are eager for more autonomy and, on the other, they feel increasingly self-conscious and easily alienated. They seek independence from parents and other adults, and closeness to peers; at the same time, they are anxious for adult approval and disappointed and angry when teachers and other adults fail to appreciate them or are not sensitive to their feelings.

While, at this age, students often yearn for the change and sense of maturity they associate with a large, departmentalized secondary school, there is evidence that such large and relatively impersonal institutions are not in their best interests, academically or socially. Large schools do provide economies of scale in terms of facilities and equipment, but research suggests they are not optimal learning environments for adolescents.<sup>(23)</sup> For this reason, educators increasingly urge that the size of schools be decreased in order to provide a sense of community, and a peer group that has some constancy.

When existing buildings are large and cannot be replaced within current budgets, as is the case in much of Ontario at present, the preferred strategy is to create what is called a school-within-a-school, a kind of separate house system. Students may take some classes (technology and lab classes, for example) outside their "school" or "house," but take most of their other core classes within their school unit. An ideal school-within-a-school is often described as between 100 and 500 students, with a group of teachers attached to that unit to teach such subjects as language, mathematics, science, and social studies.

In these "houses," and in large, conventional junior-high and secondary schools as well, there are distinct advantages to having each teacher specialize in and teach two subjects, rather than just one, in order to provide greater flexibility.

An additional strategy for creating a sense of community in a French-language school is a well-structured program of "animation culturelle" (activities that develop pride in, and a sense of belonging to, a pluralistic Franco-Ontarian community) integrated into the school curriculum. This is particularly important because students in a French-language school in an English-language culture may feel ambivalent about their linguistic and cultural identity, and are likely to need, and will benefit from, an emphasis on cultural solidarity that creates mutual respect and support among francophone students and between the students and their teachers.

Central to developing community within a Catholic school is the shared spiritual and sacramental tradition of the students and staff. The school is a community of faith, and many Catholic secondary schools have chaplains and pastoral teams who focus the school's energies on liturgical events, retreats, community outreach, social justice projects, and the needs of the students themselves. For many students, these services and activities become an essential part of the school experience, and are frequently vehicles that help them cope with personal and home problems.

Another way of offering some stability and sense of community to students who move from class to class without any constant peer group is to establish a teacher advisory system: each teacher acts as advisor to a group of about 15 students, who meet together often - usually daily.

In a school organized on the rotary system (a different teacher for each subject), which often begins in Grade 6 or 7, teachers may have as many as 250 students on their register, and cannot possibly know all or even most of them individually. While there are certainly advantages to having specialist teachers -

they can offer students more depth and precision in subject areas - it is not surprising that some students feel quite alienated and unnoticed in large, departmentalized schools. This situation is exacerbated by the credit system, which now begins in Grade 10, and replaces the stability of a fairly constant peer group with a different set of students for each subject.

No teacher, however well prepared and hard working, is likely to be successful with students if she does not communicate that they are important to her as individuals as well as learners. In earlier grades, where teachers have responsibility for a single group of students, that can and most often does happen, although it becomes more difficult as the number of students in the class increases.

But when teachers have hundreds of students on their roll, and see them for only 40 or 50 minutes a day - when students spend these brief periods with seven or eight teachers per day - the opportunity for real interpersonal contact and caring is seriously attenuated. At the very time when students most need to develop a relationship of trust with an adult other than a parent, something else is required.

Even in a modified rotary system, sometimes used for Grades 6 to 8, students usually have at least four teachers, and teachers have many more than a hundred students. (The modified rotary, however, has real advantages over full rotary: students can remain together as a group for at least half the day, and it can be seen as a helpful transition between the typical elementary and secondary structures, as they exist at present.)

Advisory or mentor arrangements create a role for teachers, not as either instructor or evaluator, but as advisor and advocate. Ideally, the contact between student and teacher is maintained during their years in the school, giving students and their parents an optimal opportunity to establish a personal and trusting relationship with the advisor.

While some of the advisory group meetings may be brief (a daily ten-minute "check-in" for attendance and announcements), other, longer, regular meetings, usually scheduled once or twice a week, give students an opportunity to discuss issues of concern to them. As well, individual advisor-student meetings occur regularly, to provide an opportunity for student and advisor to share information and concerns, discuss the student's progress, and decide whether the student needs other kinds of support or whether teachers or parents should be involved in any decisions. The advisor functions as co-ordinator of each student's program, collecting necessary information from other teachers, and acting as a contact point with the school for parents.

Even when students have a teacher-advisor and a small advisory group with whom they meet regularly, they still benefit from a unit in which there is a real possibility that they will have face-to-face contact and familiarity with all members of the school community. We suggest that much smaller school units ranging between 100 and 500 students - and teacher advisory programs create optimal learning situations for adolescents.

We want to create contexts that support students and give substance to the rhetoric of "communities of learners." We believe this will happen when there are smaller learning units, such as schools-within-schools, or house systems, that can create stronger bonds between students and students, between students and teachers, and between teachers across disciplines and departments.

## **Recommendation 9**

\*We recommend that the Ministry of Education and Training and the local boards of education provide

incentives to large middle (and secondary) schools to create smaller learning units, such as schools-within-schools or houses.

In addition to downsizing schools, stronger learning communities can be achieved by creating teacher-advisor relationships for students.

The teacher-advisor program has additional important potential for supporting a stronger, more informed involvement of parents in the education of their adolescents, at a time when youth often do themselves a disservice by trying to exclude parents from that process.

*As an absolute minimum, any serious attempt to reduce the alienation that is a major cause of dropping out must begin by providing every student with an assured and regular relationship with at least one caring adult within the school system.(24)*

### ***Planning needs***

The need that many, if not all, adolescents have for a more personal relationship with a teacher coincides with what becomes, beginning in Grade 7, a strong need for educational and career guidance. As students enter adolescence and what is traditionally considered middle or junior high school, they become more concerned with their future, and with the choices they are aware must be made, beginning in three years, when the curriculum becomes more specialized.

At this point in their schooling, students will begin thinking in a more focused way about their interests, the subjects they want to pursue, and even the kinds of education, training, or work they might choose after high school. If they have been exposed to a multitude of community settings and work sites, through an active community-based, career-awareness program in their earlier years in school, they will be well prepared to begin this thinking.

Nonetheless, students and their parents need an informed person at school who will talk with them about the various options at the secondary level. The role is one of an educational advisor/career planner. Beginning in Grade 7, students, parents, and the teacher should be participating in a semi-annual review of the student's overall progress and experience to date, including both academic progress and other learning experiences.

The Ministry of Education and Training has announced that it intends to develop guidelines for a Comprehensive Achievement Profile, a cumulative record of a student's achievements from Grade 7 to Grade 9. We suggest that this document would better be termed a Cumulative Educational Plan (CEP), and be viewed as an essential education- and career-planning tool, to be maintained through Grade 12.

In our view, the process of creating the CEP is at least as important as the final product. The value of such a process is that it demands that teacher, student, and parents regularly review what the student is learning and what opportunities and experiences she is acquiring, so that decisions about courses and futures are made on the basis of reflection and discussion begun years before any hard choices have to be made; this also allows many opportunities for exploring new alternatives.

To be of value, such a process must not be rushed or mechanical. The conversation cannot last for just five minutes, and participants must share a common understanding of its purpose. In order to develop and support this kind of program, teacher-advisors will need guidance from administrators or counsellors, who will have to review the CEPs periodically to ensure that the process is working.

The major purpose of the CEP is not simply to record student history, but to serve as a planning guide in the short and long term. What interests and talents has the student exhibited? What difficulties, if any, need to be addressed so that she can work towards a chosen goal, whether in Grade 8 or later? By the time the student reaches Grade 9, she and her parents will have been through this process four times. Thus, there will be a history of discussions about the student's interests and goals, and all parties will be reasonably prepared to make decisions about the secondary school program.

## **Recommendation 10**

\*We recommend that, beginning in Grade 7, every student have a Cumulative Education Plan, which includes the student's academic and other learning experiences, is understood to be the major planning tool for the student's secondary and post-secondary education, and is reviewed semi-annually by the student, parents, and by the teacher who has a continuing relationship with and responsibility for that student as long as she or he remains in the school.

The CEP is part of a stronger student orientation, beginning in the elementary years, to career and self-awareness. It is also part of an emphasis we believe essential: the school's responsibility for continuous and purposeful monitoring of student progress.

It is conceivable that schools may want to merge the CEP conference with the end-of-term meeting with parents; in that case the teacher-advisor would have to be prepared to discuss the student's current marks as well.

We do not expect teacher-advisors to be career counsellors, nor do we intend that students should be completely dependent on subject teachers for career counselling. In Chapter 10 we make recommendations to support both teachers and students in this important area.

### ***The need for choice, decision-making, and control***

Key determinants of adolescent health may be defined as supportive environments on the one hand, and control over decisions and choices on the other. While adolescent students are likely to benefit from consistency and stability, this is the period when they ask for choice and control. One of the main complaints we heard from these and older students was that they had very little sense of control over their lives at school: decisions are made by others, and they do not feel they are acquiring experience that will equip them for decision-making later on.

Students are not often asked what they think of their program, or their teachers, or whether the school is meeting their needs. When they are asked, their response is generally thoughtful and practical, which suggests that, in addition to giving them satisfaction, consulting the students provides principals and teachers with real input for improving their schools.

Students told us that student councils in many schools are perceived as acting as social conveners only, arranging dances and the like. They added that, as a whole, students do not see council members as representatives of the student body, and hence do not treat them as such. Clearly, if student councils are to represent students and to develop leadership, there must be some preparation for understanding the role of such organizations, not only for those who are elected, but for all students, and perhaps for staff as well.

Even when student councils do provide real leadership and decision-making opportunities, they do so for only a very few students. Most students will not hold office or become sports heroes. In the classroom as

well in a wide variety of co-curricular programs, opportunities can be created for greater student participation and responsibility.

Most students, including those still in elementary school, appreciate the opportunity to make choices among topics and assignments. Even having options among test questions gives students a sense of greater freedom and control. By the time they are in adolescence, students regard the "contract" assignment, which puts control for acquiring, organizing, and presenting information squarely in their hands, as offering them real responsibility - which, with practice, they are probably quite able to fulfil.

Similarly, community-based education and work experiences, such as community service assignments, job-shadowing, and co-operative education, put students in adult-like roles, with significant responsibility and without heavy school-based supervision. The popularity of co-operative education among employers, as well as among students, suggests that most students who take these opportunities do not abuse them.

There are many ways of increasing students' experiences and opportunities for making choices and decisions in what they are learning and how, and in the organization of their schools. The essential component is that teachers and administrators understand the importance of treating students respectfully, as maturing young men and women whose opinions are worthy of consideration, as well as the importance of giving them greater control over the learning and social environment of their schools. Inevitably, a 14-year-old is immature in the eyes of adults; but maturity depends not only on age, but also on practice, and practice depends on being given freedom and responsibility. Students need the support of adults to become adult.

Adolescence is the beginning of the transition to adulthood, and any transition is best made gradually, not abruptly. To expect students to be docile, passive, and dependent until they reach 18 or 19, and then to become mature and self-sufficient the day they graduate is to undermine a smooth passage to adulthood.

We suggest that a very useful planning tool for senior elementary and secondary schools would be to create a checklist of ways students could be involved in decision-making at both the classroom and the school level. Senior students, working with teachers and administrators, could create and field-test such tools, which could be used by student councils and school staff to develop and periodically assess the school's atmosphere in terms of student opportunities and responsibilities.

In the same way that a school uses results of a literacy test to better understand how student needs and curriculum fit, a tool that assesses the school climate can be used to improve the school, and it has the advantage of being one the students can "own" and use. Recommendations concerning the collection of information from students, by students, for the purpose of improving education at the school and board level are made in Chapter 15.

At the end of Grade 9, students must make a choice of which courses they will take the next school year. While this choice is not, and should not be, binding or excessively constraining, it is highly significant. Making the decision, which is the first step away from a common curriculum into a set of options that lead in different directions, is easier if the student and her parents and advisor have been examining and re-examining her interests and achievements since Grade 7, and if she has had significant opportunities - in and outside class - to reflect on her interests and performance, as well as to work in the community and to make decisions that affect her daily life in school.

One of our major goals in this report is to build a system that, from the early years, focuses students on

the connection between themselves and the community of which they are a part, emphasizing work and career as important, not only to their own livelihood but to the role they will eventually play in their community. We want to help students become aware of the connection between what is learned in school and what is used in life so that, by the time they reach the end of the common curriculum, they will have a rich understanding of themselves and their communities on which to base their choice of post-secondary education and work.

In this chapter, we have described what we think is the essential content of and the essential supports in the school and community for a common curriculum - one that ensures that all children and young adolescents have the opportunity to obtain a solid and rich basic education that will equip them for increasing specialization at the secondary and post-secondary level. Our emphasis has been on the young learner, and the curriculum that will meet her growing needs.

In the following section we discuss some aspects of The Common Curriculum about which we heard considerable comment and controversy. These issues include the destreamed Grade 9, learner outcomes as a way of structuring the curriculum, the integration of subjects, and the opportunity for local additions to the common curriculum.

## **The curriculum as the basis of a learning system through Grade 9**

As we explained earlier, a common curriculum from Grades 1 through 9 has recently been defined by the Ministry of Education and Training. This is an attempt to define learning as continuous over the nine years, in place of previous curriculum documents that usually separated primary (Grades 1 to 3) from junior (Grades 4 to 6) and intermediate (Grades 7 to 10). The continuum of learning across subject areas in The Common Curriculum is described by learning outcomes (descriptions of what students will know and be able to do) at the end of Grades 3, 6, and 9. We have recommended that, in addition, such outcomes be prepared for the end of Grade 1, so that the curriculum of Early Childhood Education flows into the curriculum that starts with the beginning of compulsory schooling.

Many people spoke to us about the common curriculum. While we heard little argument about the range of subjects to be covered, there was considerable concern about the specific document, *The Common Curriculum, Grades 1-9*, its content and format.

*The Common Curriculum* is a departure from previous practice in three major ways:

- It includes Grade 9, based on the decision that, like Grades 1-8, Grade 9 is now non-streamed, and all students follow the same program.
- It describes curriculum in terms of its intended results for the students, rather than in terms of teacher inputs.
- It describes curriculum in four "strands," rather than as more than a dozen separate subjects.

We briefly discuss each of these innovations.

### ***The inclusion of Grade 9***

The public is divided on the subject of destreaming Grade 9. Those who oppose it and prefer streaming believe that students gain advantages when they are divided on the basis of their prior level of achievement, and are taught in more homogeneous groups. Others support destreaming in Grade 9, and

believe that students will benefit from an additional year of common curriculum before they make a choice about their secondary program, which is, indeed, the purpose of destreaming. It is an attempt to respond to the high drop-out rate among students outside the university-preparatory (advanced level) stream and the fact that certain groups (defined by class and/or race) are under-represented in courses designed to prepare students for university.

We note that research offers little support for the idea that all or most students benefit from streaming in Grade 9,<sup>(25)</sup> and we accept the idea that postponing specialization until Grade 10 is likely to help more students than not. As well, we are aware that this is the most common type of curriculum organization in Canada.

### *The focus on learner outcomes*

## **The quantity, quality, and effectiveness of learner outcomes as a way of organizing curriculum**

*The Common Curriculum* outlines what students should learn by the end of Grades 3, 6, and 9, by listing the expected "learner outcomes" in each of four broad, integrated subject areas. The idea of focusing curriculum on what should be learned, rather than what should be taught, makes sense. Schools exist, after all, not to create employment for adults but to ensure education of youth. But neither, it should also be said, do statements about learner outcomes guarantee they will be attained. In other words, they contain no magic, and there is no reason to assume that learning or teaching will change simply because learner outcomes have been written.

Furthermore, while they may be helpful in communicating to teachers, parents, and others (including the students themselves) the sequence of learning that is expected, they may, if improperly or over-used, convey the false impression that all learning is perfectly sequential, which it is not.

While we heard little opposition to the idea of basing curriculum on learner outcomes, we did hear complaints about the quality and quantity of the outcomes specified in *The Common Curriculum*. Many people found them too numerous and too vague, and insufficiently clear for communicating to students, parents, and teachers the actual and concrete expectations of learners they imply.

While it is certainly dangerous to insist on outcomes that are easily measured, at the expense of highly valued but less easily gauged results, there is little value in statements that do not communicate clearly, to teachers or parents or students, what is intended, or how one would know if the outcome had been achieved. How will parents or teachers be enlightened by the statement that, by the end of Grade 3, students will "recognize the values presented in literature"?

We agree that the outcomes stated in *The Common Curriculum* are both too numerous and too vague. For example, there are 25 outcomes expected of students by the end of Grade 3 in reading. They range from the fairly specific and concrete ("use such features as the table of contents, index, and glossary to find information") to the very general and non-specific ("use their knowledge and experiences to interpret what they read"), and reflect no particular order or degree of priority and importance.

We believe that if teachers are to check their course plans against a blueprint of essential learning, and if parents are to understand what they can expect their child to be able to read and absorb, they need fewer and clearer guideposts - or, if not fewer, then certainly a presentation in which major outcomes are

grouped, and examples are given. The same is true in all curriculum areas.

Major outcomes should be presented to parents as a fairly brief, descriptive list, which could appear on a report card, to give concrete indicators of a student's progress so that a "satisfactory" in reading, for example, is broken down to tell the parent something about the particular reading activities and skills the student shows competence in.

While *The Common Curriculum*, revised as of December 1994, tries to address these concerns, it cannot fully succeed. Inevitably, there is a continuing tension between the need for clear, measurable learner outcomes and the need to ensure they are not overwhelmingly detailed and specific. It may be that learner outcomes are best expressed in fairly general terms, and illustrated with very concrete examples, used only as examples, and not meant to be exhaustive. Additional documents, such as standards (at least in foundation subjects) and course descriptions, will certainly be needed by teachers if they are to have sufficient guidance on what they are expected to teach and what students are expected to learn.

By itself, *The Common Curriculum* is insufficient for informing teachers and parents about programs. While it is sensible to make learner outcomes the basis of curriculum design, it is also necessary to indicate what major areas, topics, or skills might be emphasized in an annual program, in a way that is not restrictive, but permissive and helpful in choosing priorities among alternatives.

Teachers want and need some guidance about the elements of a subject to be addressed in order to achieve the learner outcomes described at three-year intervals. To argue backwards: if, by the end of Grade 3, a large number of children are unable to use such features as tables of contents, indices, etc., how will Grade 1, 2, and 3 teachers know how to improve the lessons to meet that target?

What is missing now is a set of curriculum guidelines that describe at least some of the sequences. Without such common guidelines, there is no assurance of consistency in or between schools in what is taught and learned. Curriculum guidelines are frameworks within which specific programs can be elaborated in each school or class. Existing provincial guidelines below the Grade 10 level are not congruent with *The Common Curriculum* and must be redesigned. This is not necessarily a long and arduous process; existing materials may be adaptable. But some work is necessary at once, to give teachers and parents some guidance, support, and reassurance.

We believe the Ministry of Education and Training should support the development of updated course guidelines based on the learning outcomes of *The Common Curriculum*, which will help teachers understand what they are expected to teach and what students are expected to learn each year. Such documents should encourage continuity from year to year, and avoid unnecessary duplication of effort at both the planning and delivery levels, and should help to create consistency both vertically (from Grades 1 to 9) and horizontally (within and across schools and boards).

The course guidelines must not be overly specific: if content is too closely prescribed, programs can become rigid, and teachers forced into a passive mode: as their opportunity to exercise professional judgement is eroded, their commitment to excellence is weakened. Guidelines that are appropriate and not overly detailed will encourage consistency without creating stultifying rigidity and an overwhelming concern for "covering" the curriculum that overrides the teacher's judgment about what students are learning, and how well they are learning it.

While teachers do not need a detailed user manual for each course, it should not be necessary for each teacher to invent her own course guideline. Instead, she should be free to supplement the basic guidelines

by selecting unit topics or modules (detailed examples of which, in menu form, should be available as curriculum support documents or within the guidelines, as examples and appendices). The teacher's job is not to write curriculum, but to decide how best to present it, based on available resources and on her knowledge of the students' interests and prior achievements.

Parents (and students) also need course descriptions, in order to understand what is expected. These descriptions should be brief, but convey enough information to give parents a picture of what their children will be learning, and so that older students beyond the primary years - have an overview of the course. (Even quite young students can use a look at the year's plan as a very good example of preparing and organizing for learning.)

For example, this excerpt from a Grade 3 guideline called a "core knowledge sequence" describes the music component of the curriculum, Grades 1-3:

*In the first grade, students were introduced to three parts of music: melody, rhythm, and harmony. In the second grade, students studied melody in depth; in the third grade, they will study rhythm; and in the fourth grade, harmony. Students will also identify more of the musical instruments and their sounds. Children begin learning to read notes.(26)*

An individual Grade 3 teacher might add some detail - for example, the instruments children will have a chance to play, the fact that they will learn songs from several countries and cultural traditions, and a list of appropriate stories and books about music and musicians they could read with their parents. This level of information would tell parents what their children are learning in music in a way that encourages parental conversation and involvement in the child's learning experience.

If parents and the general public can gain easy access to course descriptions that have clear learner outcomes, they can understand concretely what students are supposed to learn. Assessment in foundation skills, based on clearly stated standards, will tell them how well those areas are being learned. Public systems depend on public support, which, in turn, depends on public information. And it is much easier for parents to support and monitor a child's progress if they have a map. These will give teachers and parents a clear idea of the basic structure of each year's course or subject, and should include suggestions to parents for supporting their children's learning.

One important element, traditionally missing from curriculum guidelines, is a group of suggestions to teachers on helping parents enhance the work of the school. One reason many parents feel so frustrated about dealing with their child's school is that, when they ask how they can help their child at home, they may be told not to worry, because their child is doing well suggesting that parents are superfluous to their child's learning and growth.

Parents should have a way of connecting to the child's school life, and should be encouraged to show interest. Parents' desire to help should be welcomed, not discouraged. Teachers must appreciate the value, for children, of the connection between home and school - an emotional value that has strong consequences for academic success.

If conventional curriculum guidelines have sorely neglected the home-school link part of the curriculum, so have courses designed to prepare teachers for their profession. Teachers need specific examples linked to specific curriculum pieces, so that they can give parents concrete, positive suggestions on what they can do at home as particular projects or topics are being covered at school. We suggest that course guidelines for teachers include suggested summaries for parents and students, which teachers can

distribute (with any additions they wish to make) early in the year, at a first parents' meeting or another suitable occasion.

For example, using the description of the Grade 3 music curriculum above, teachers could include suggestions to parents for listening to music with their children, could suggest some children's music tapes available at libraries (including the school library) and book and music stores, could mention music-related television programs that parents could watch with children, could describe some simple rhythm and harmony games and tunes to play and sing together, and so forth.

## **Recommendation 11**

*\*We recommend that curriculum guidelines be developed in each subject taught within the common curriculum, to assist teachers in designing programs that will help students achieve the learning outcomes in The Common Curriculum. These guidelines should include concrete suggestions on how teachers can share with parents ways to help their children at home.*

## **Outcomes and time**

Perhaps the single most significant rationale for serious attention to learner outcomes is that, if they are clear and precise, they can be far superior as an indicator of learning to amount of instructional time devoted to a subject. What is important about the elementary science curriculum, for example, is that, from it, students learn to recognize and understand certain natural processes and ways of asking questions scientifically - not that they have attended school 180 days in the year and been exposed to an average of 20 minutes per day of science instruction. Of course, without instruction and exposure they are very unlikely to learn; but exposure by itself is no guarantee of learning and, in fact, some very productive exposure that results in learning may happen outside the classroom.

Focusing on learner outcomes makes it possible to abandon the strict number of days or hours as a measure of "product" and allow for the reality that people learn at different rates. Then the teacher's and the school's commitment must be to monitor individual understanding and achievement very regularly, allowing those students who need it more time for learning; this can be done through additional tutoring and practice time during the school day or by making use of time during the summer.

By insisting that all students learn material within a set time, usually one school year, we have created a whole category of students who are seen as handicapped. Sometimes they are called slow learners, a term that is sometimes confused with learning disabilities. And we have tried, usually with little success, to create different, often separate, learning programs for each of these groups. Learning outcomes offer an alternative approach, one that suggests that learners differ, not categorically but along a continuum according to rate of learning, and that these rates vary by subject matter. A person may learn mathematics slowly but learn French at an above-average rate. Another person may be slower than average in all or almost all subject areas, but be quite capable of attaining the target outcomes if given more time to do so.

Making time a variable rather than a constant is most important when students are acquiring the foundation skills on which their future learning depends. If these are solidly acquired, students will be able to apply themselves to such subjects as literature, history, mathematics, and geography with some confidence. While learning rates will continue to vary, we would expect that students whose rate of learning is much slower than average would, with solid foundation skills, move closer to the average.

While it is essential to allow for variability in learning rate, it is also true that there is and will be a range of achievement. Thus, for example, some students will receive a higher mark than others, but everyone in the range may be performing at an acceptable level, with the highest achievers showing more than adequate mastery. The standards being developed in language and mathematics by the Ministry of Education and Training reflect that range, by describing several "standards of performance" for each major area of the curriculum. In mathematics, there are four standards or levels of performance, called "limited," "adequate," "proficient," and "superior"; students are expected to reach either the "adequate" or the "proficient" level.

If there was more flexibility in learning time, we could expect the range in performance to narrow to the degree that achievement at the "limited" level would drop to a very small percentage of students; some students would take longer to achieve at an "adequate" level; and those who were achieving at the "proficient" and "superior" levels would move more quickly through the curriculum.

Many of the more traditional strategies for attempting to help slower learners have been largely unsuccessful. Repeating a grade, for example, is rarely associated with greater academic success; most often, students who do so do not seem to benefit after the second year, and are again at the bottom of their class, unable to keep up. Eventually they swell the ranks of the high-school drop-out population.<sup>(27)</sup> If a student has learned some, but not all, of what classmates have shown they understand, she does not need to be put back to the beginning, but needs help at the place she has reached.

Rather than putting her in a different program with a different and less challenging curriculum, where she has no chance of completing the same work as her peers, her best chances for success will probably come from being in that same program, with support and assistance, so that she can move with them. In some cases, additional catch-up time can be made available during the summer.

In a few schools, for example, all courses are broken into small units, meant to last ten months (one school year) for most students, but flexible enough to be compressed for students who can move faster, or to stretch longer (14 months) for slower learners or for learners who are slower in a particular subject area. Evaluation is frequent, as are reports to parents. It should be noted that schools organized that way are offering this level of individualization, monitoring, and reporting to all their students, not just to a few slower learners.

Another aspect of helping students learn more quickly has to do with lessening the likelihood they will forget what they have learned. Schedules that shorten the long summer break - whether they are year-round with month-long breaks twice a year, or extended school years in which students attend school 200 or 210 instead of 185 days - may have a significant impact, especially for young learners. There is some evidence that the long summer break is counter-productive for students who are already disadvantaged in terms of school achievement.<sup>(28)</sup> Some studies suggest that the "summer forgetting" phenomenon, which affects few advantaged but many disadvantaged students, might, by itself, account for much of the widening gap between the two groups in the later elementary years and beyond.<sup>(29)</sup>

Some summer programs have been implemented, such as the summer book-by-mail program in some downtown Toronto schools, which showed success in eliminating or narrowing the summer learning gap. While year-round schools are most often recommended as a way of avoiding the need to build new schools to accommodate growing enrolments (and, therefore, to save money), it is important to point out

that the year-round school has positive implications for learning, particularly for disadvantaged students, and that this is particularly true in the early years, when students are acquiring foundation skills. For this reason, we suggest that in some circumstances the idea of year-round schools and/or extended school-year calendars should be given careful consideration.

## **Recommendation 12**

\*We recommend that the Minister of Education and Training amend the regulations to enable school boards to extend the length of the school day and/or school year.

For students who can move more quickly through one or several subjects, we recommend that exams similar to the challenge exams at the secondary level (see Chapter 9) should be available. A student who shows, on such an exam, that she is ready to move ahead to the next level should be helped to do so, whether or not the eventual result is acceleration (skipping a grade).

## **Recommendation 13**

\*We recommend that the Ministry of Education and Training work with curriculum and learning specialists to develop strategies (based on sound theory and practice and enriched with detailed examples) for providing more flexibility in the amount of time available to students for mastering curriculum.

Schools that want to move ahead on implementing aspects of these more flexible systems should receive incentives and be supported throughout the process; field-based monitoring and evaluation must be built in; and information on the process and the results should be quickly communicated to educators and the public, using electronic as well as other media for sharing and discussing the work as it progresses.

### ***Curriculum integration***

*The Common Curriculum* presents subjects as clustered, or integrated, into four strands: language; the arts; mathematics, science, and technology; and self and society. So, the learner outcomes for history, for example, are embedded in the area called "Self and Society," which also includes outcomes pertaining to geography, family and business studies, physical and health education, and other subjects.

There is little research on curriculum integration, especially with regard to its potential for improving achievement or mastery. The notion of curriculum integration derives from the fact that, outside of formal education, most learning is integrated; therefore, it is both a more natural and a more attractive way to learn. Nonetheless, we cannot assume, in the absence of research, that curriculum integration will prove to be more effective as a way of presenting information to students than the more conventional delivery of discrete subjects.

It is certainly true that a more integrated, less fragmented, curriculum was a hallmark of some of the schools that most impressed us as engaging their students in the learning process. The argument can be made that the more life-like the model for learning presented in school, the greater the likelihood that students will transfer the habit of learning to the rest of life. Students may find learning by topic (e.g., a unit on fish and fishing that includes science, math, and technology) more interesting and motivating than learning in discrete subject/disciplines (although there is the risk they will not realize that, while learning about fishing, they learned some biology, some geometry, and some environmental science, and will not be able to reassure their parents when asked what they are learning!).

Another logical argument in favour of integrated curriculum is that it organizes a disparate and extensive menu of courses into some reasonable framework; this makes it more coherent for both teachers and learners, and addresses, to a significant extent, the curriculum overload problem.

Finally, and perhaps most important, integration of subjects may promote, in teaching and learning, the practice of bringing together - synthesizing - different kinds of information when working on a problem. Being able to transfer knowledge, understanding, and skills from one situation to another is a very critical component of learning. At the simplest level, it makes the difference between being able or unable to learn from experience, and without it learners are severely handicapped. At a more complex level, where most learners function, it marks the difference between a basic and a more-than-basic level of understanding. The reader who can apply and transfer generalized knowledge from one situation to another is the level 4 or 5 reader (the "proficient" or "superior" one), rather than the level 3 reader (who is only "competent" or "adequate"). It is this latter standard of literacy that is too often not attained by our students.

Integration of subjects certainly does not guarantee this greater level of understanding, and is not essential to it; but integration may help promote teaching for the higher levels of understanding that should be the heart of the repertoire of all learners.

*The primary integration is of learning and life, the problem of compartmentalization of learning is a subset of the bigger problem of learning not being meaningful to the learner. Whether or not students integrate their learning in biology with their learning in literature is a good question. Whether they integrate their learnings in these areas with their daily thought and action and view of the world is a much more critical question. The focus of all our integrative efforts, therefore, must be the students themselves.(30)*

Curriculum integration is intuitively appealing, and it has significant potential for making school-based learning more coherent; therefore, while we would like to see it supported throughout the common curriculum and beyond, we recognize substantial structural barriers to its implementation, in addition to the need for more and longer-term evaluation of its results. For one thing, it is not supported by universities when they pressure secondary schools to prepare students for the disciplines the universities recognize and teach - a pressure that is very effective in shaping secondary school curriculum.

As well, an integrated curriculum does not guarantee that teachers will teach the essential skills of each subject logically and cumulatively if there is no specific plan for doing so - if, for example, mathematics is entirely embedded in, and determined by, science and technology projects.

Because we are concerned about the potential dangers of losing a comprehensive and sequential view of learning in fundamental and core subjects, we have recommended that written standards be developed by subject in the foundation areas.

While the task of developing integrated curriculum that does justice to the various subjects is not impossible, it is not familiar or easy, and requires considerable expertise. A very real concern about integrated curriculum is that it takes considerable time, as well as expertise, to design it in such a way that it is not superficial and does not inadvertently omit crucial components in the development of bodies of knowledge.

*Integrated studies can degenerate into theme work and topics which contain no real challenge and involve students copying copiously from resource books... Effective*

*integration is secured according to agreed-upon high-level principles which bring different subjects together... Discussion about, agreement upon, and planning around key skills, concepts and attitudes at the school and district level is exceptionally important in achieving effective integrated studies.(31)*

While a great deal of extremely valuable professional development may occur when teachers in a school work together to build an intelligently and thoroughly integrated curriculum, it is unrealistic to expect that the time necessary for this process is available in many or most schools. In order to integrate subjects, teachers need an extensive menu of topics or themes keyed to the learner outcomes in the subjects to be integrated, sequenced appropriately. They need an abundance of good examples on which to draw. Otherwise, the amount of planning necessary for this kind of teaching will seem overwhelming, and a disincentive to trying.

Because we believe the teaching and learning of the common curriculum will be enhanced by the availability of many concrete examples of integrated curricula in the four "strands," at a variety of grade levels, we suggest that the Ministry of Education and Training, with the help of teachers and others with curriculum-writing expertise, create a "menu" of examples of integrated curricula keyed to the learner objectives of the common curriculum.

## ***Inclusiveness of The Common Curriculum***

As mentioned earlier, educators and the public assume that *The Common Curriculum* describes all the subjects and learning outcomes that are expected to be included in school from Grades 1 through 9. And many educators and members of the public fear there isn't enough time in the day to cover what is described. We have argued that time and crowding are not the main issues, but that focus and clarity of purpose are.

We also believe that there should be room for local options within the curriculum of a school. We recognize the importance of local priorities - schools and communities with an interest in seeing young people become more involved in environmental issues, or in community service; the desire to ensure that students have more understanding of, and exposure to, local government or to local artists and writers; a school being distinguished by the special emphasis it puts on science or computers or Native studies. Such local priorities can be addressed by allowing up to 10 percent of school time (the equivalent of one half-day per week, or one full day biweekly) to be devoted to subjects that are outside of, or represent an expansion of, the common curriculum.

The local option component would be part of the school's program, subject to the same guidelines regarding curriculum and monitoring as any other part. It would be necessary for the Ministry of Education and Training to provide criteria of acceptability; local proposals would have to conform to these in order to be approved by the Ministry. But the idea is to enable school communities to be able to articulate their own special interests on behalf of their youth, in a partnership between parents and educators.

## **Recommendation 14**

*\*We recommend that local schools and boards be allowed to develop and offer programs in addition to those in The Common Curriculum, as long as those options meet provincially developed criteria, and as long as at least 90 percent of instructional time is devoted to the common curriculum for Grades 1 to 9.*

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