Chapter 4 Subject Areas

Languages

Arts Education

Personal Development

Career Development

Social Sciences

Mathematics, Science and Technology

This preliminary version of the chapter cannot be finalized until all the programs in Secondary Cycle Two have been drafted. The chapter is thus incomplete, but it should still contribute to the reader's understanding of the Québec Education Program.

Table of Contents

4.1 Grouping Subjects to Consolidate Learning

Our way of thinking leads us to be lucid in separating things and myopic in connecting them.
Edgar Morin

This chapter supplements the two preceding ones with succinct descriptions of the six areas in which the subject-specific programs are grouped in Secondary Cycle Two.

Secondary Cycle Two is an important stage of consolidation and integration of learning for all students, whether their objective is to continue their studies or to enter the job market. The school should ensure that at the end of their secondary studies, they feel prepared to enter their lives as young adults. This presupposes that they have acquired subject-specific knowledge and have learned to make connections between knowledge in different subjects.

The nature of the situations and challenges these students will have to face demands that the school provide more than a fragmented education in different subjects. Teachers and other school personnel have to avoid compartmentalization of learning and adopt a common view of the subjects and their respective contributions to the aims of the Québec Education Program, the educational aims of the broad areas of learning and the development of the common skills of the cross-curricular competencies. The challenge is even greater in Cycle Two because this is where the more specialized programs are found.

It is recognized that the subjects are mutually enriching and contribute to the construction of unified networks of concepts and structured ways of thinking. It is important that teachers reflect this in their teaching. It is up to them to show that, while each subject includes a whole range of specific knowledge and important competencies, its potential is increased when it is connected with other subjects.

The subject areas bring out complementary and differentiated perspectives on reality. Teachers should read the competencies and program content in the various subject-specific programs in relation to each other, and should become involved in increasingly collegial action. The subject areas thus become a context conducive to the enrichment of their practices and a factor in the integration and consolidation of learning.

The consolidation of learning, like its integration, is a process that takes time. But time is limited within the constraints of the school timetable. Hence the importance of connecting different elements of learning by approaching concepts through complex and diversified subject-specific and interdisciplinary tasks. This can lead students to make connections between things they learn and to apply what they already know to other contexts.

It is the teachers responsibility to grasp the essen ce of each subject area and its complementarity with the others. By having a better understanding of the learning expected of students, teachers will be better equipped to ensure continuity among their respective actions and to occasionally provide integrative learning situations drawing on more than one subject.

Because of their integrative nature, the subject areas bring out the fact that the aim of instruction is not limited to the accumulation of abstract, isolated knowledge.

4.2 Six Subject Areas

In the perspective of common-core basic education in continuity with preschool and elementary education programs and those of Secondary Cycle One, Secondary Cycle Two contains the subject areas already found in previous cycles—Languages; Mathematics, Science and Technology; Social Sciences; Arts Education; and Personal Development—as well as Career Development, which takes into account the specific orientations of this cycle.

Languages

Programs in the subject area:

General Education Path
Applied General Education Path

- Français, langue d'enseignement
- Secondary English Language Arts
- English as a second language
- Français, langue seconde
- Spanish as a Third Language
- Intégration linguistique, scolaire et sociale

Work-Oriented Training Path

- Français, langue d'enseignement
- English Language Arts
- English as a Second Language
- Français, langue seconde

For Secondary Cycle Two students, learning in the Languages subject area remains fundamental to all studies. Students use the language of instruction, but the great majority of them also use their second or third language in developing their competencies and, where applicable, in their practical training.

While the languages are the focus of teaching and learning in their own right, they cannot be approached without addressing their connection to culture. They are part of each individual's construction of identity. This aspect takes a different form depending on whether the language is the student's native language or second or third language. Thus, while children gradually master their native language and culture, they at the same time construct their personal and social identity. Compulsory learning of English or French as the language of instruction or second language may give rise to internal conflict for some of them, depending on the status or role attributed to the language in their family or their cultural or social environment. This is rarely the case for the third language, because it is generally a matter of choice.

Contribution of the Languages Subject Area to Students' General Education

The subjects in the area of Languages have a role to play in helping students to structure and affirm their personal, social and cultural identity and take their place in Québec society. In Secondary Cycle Two, they are encouraged to increasingly master and appreciate the languages they are learning and to discover the cultures associated with them. Special attention should be given to openness to other languages and cultures and intercultural dialogue so that students can both gain a better grasp of their own language and culture and broaden their world-view.

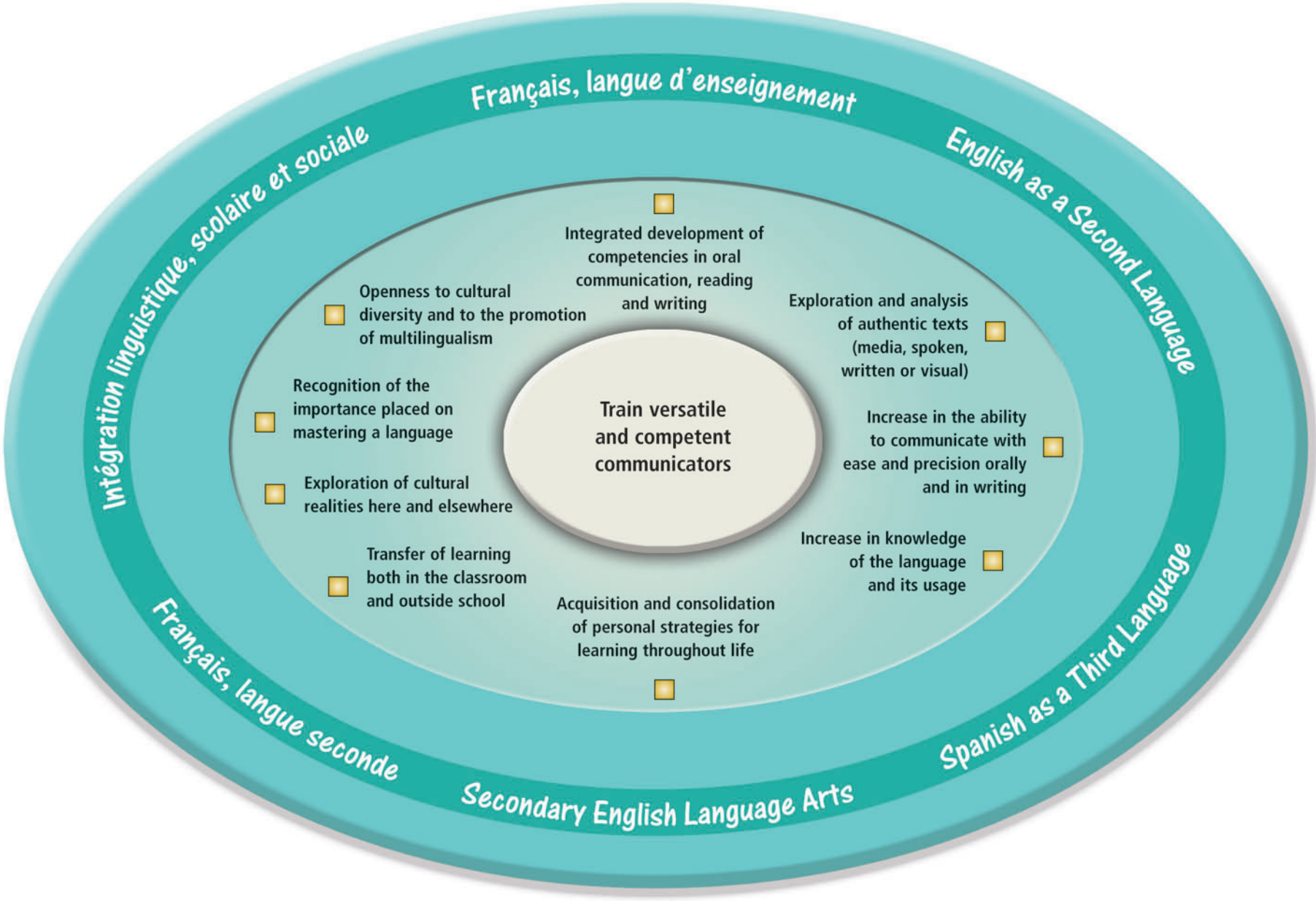
Elements Common to the Subjects in the Languages Subject Area

The languages taught in francophone or anglophone secondary schools in Québec are subjects with their own history and pedagogical culture. The programs in this subject area all have the same purpose: to help students to communicate with ease and precision both in society in general and in class. They all target the synergistic development of competencies in oral communication, reading and writing. Students develop their competencies in their first, second or third language and more easily gain access to the world around them by having many opportunities to interact in class, to listen, to read and to produce a broad range of media, oral, written and visual texts.

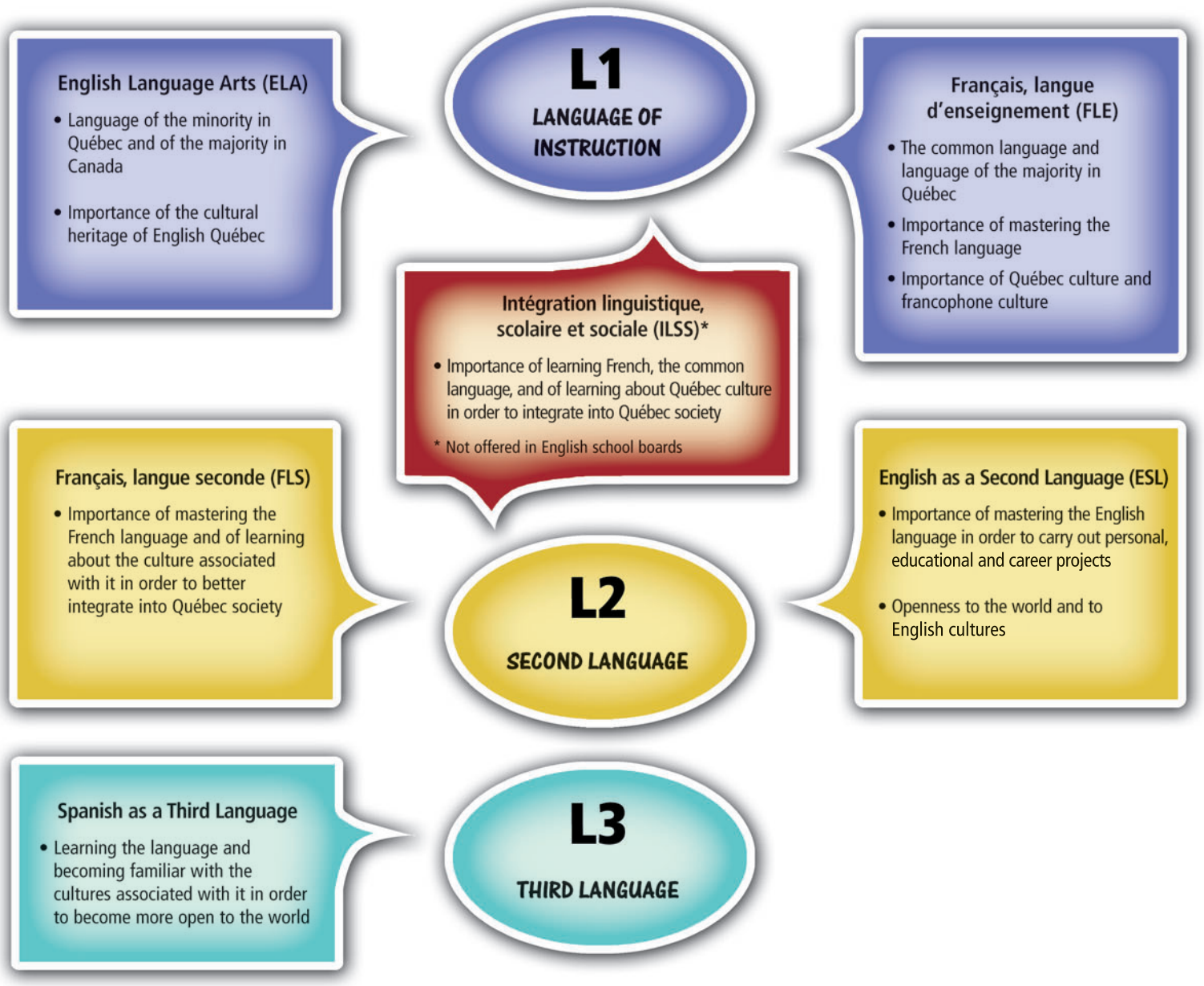
Texts reflect their authors' culture, expressing the identity, values and beliefs of people who belong to different communities and providing opportunities to better understand people from here and elsewhere. Discovering writers, exploring and analyzing texts and discussing their understanding and interpretation of these texts with their fellow students help students to consolidate and increase their language knowledge. As they become increasingly competent in two or three languages and are better equipped to reflect on their learning, they can apply their linguistic and cultural knowledge in various contexts and for various purposes.

Learning strategies are another element that is common to the programs in the Languages subject area. Students are expected to broaden and consolidate their repertoire of learning strategies in Secondary Cycle Two, and they should learn to manage them effectively in order to attain a higher level of autonomy. By doing so, they acquire the ability to learn throughout their lives.

Finally, the programs in Languages reflect the importance of mastering one's native language and learning several languages in a world in which multilingualism and linguistic diversity are increasingly prevalent. Being able to understand texts and express themselves in different languages should enable Secondary Cycle Two students to recognize and appreciate their own culture and be open to cultural diversity. Thus, a better knowledge of their first, second or third language and a better understanding of their learning process should enable them to become competent, versatile communicators who respect cultural differences in today's globalized world.


Français, langue d'enseignement
English as a Second Language
Spanish as a Third Language
Secondary English Language Arts
Français, langue seconde
Intégration linguistique, scolaire et sociale
Train versatile and competent communicators
Integrated development of competencies in oral communication, reading and writing
Exploration and analysis of authentic texts (media, spoken, written or visual)
Increase in the ability to communicate with ease and precision orally and in writing
Increase in knowledge of the language and its usage
Acquisition and consolidation of personal strategies for learning throughout life
Transfer of learning both in the classroom and outside school
Exploration of cultural realities here and elsewhere
Recognition of the importance placed on mastering a language
Openness to cultural diversity and to the promotion of multilingualism

CONTRIBUTION OF THE LANGUAGES SUBJECT AREA TO STUDENTS' GENERAL EDUCATION



Mathematics, Science and Technology

Programs in the subject area:

General Education Path
Applied General Education Path

- Mathematics
- Science and Technology
- Applied Science and Technology
- Environmental Science and Technology
- Science and the Environment
- Options in Secondary V

Work-Oriented Training Path

- Mathematics
- Technological and Scientific Experimentation

Mathematics, science and technology are among the major manifestations of human thought and are an integral part of our collective cultural heritage. With roots dating back to prehistory, mathematics, science and technology have evolved through the achievements of previous civilizations. They were part of the construction of architectural wonders and paved the way for major discoveries and the exploration of the universe.

The subject-specific knowledge and technical objects associated with this subject area reflect the historical, social, environmental, economic and cultural context in which they were developed. Advances in mathematics, science and technology have played a role in changing our environment and determining our way of life. For instance, spinoffs of information and communications technologies have revolutionized the way we work and communicate, and even the way we think.

Mathematics, science and technology have long been intrinsically linked, and their evolution and internal dynamics reflect their synergy. The design or representation of certain technical objects, the development of mathematical models and the representation of scientific phenomena all demonstrate the essential connections among these subjects.

Contribution of the Mathematics, Science and Technology Subject Area to Students' General Education

This subject area gives students opportunities to continue developing rigour, reasoning ability, intuition, creativity and critical thinking. Through systematic observation, questioning, experimentation and the use of the languages of mathematics, science and technology, students construct representations of the world in which they live and better understand and adapt to it. Thus, dealing with situations in which they apply mathematics or do technological and scientific experimentation encourages students in the Work-Oriented Training Path to solve problems.

Some of the knowledge they acquire also makes it possible for students to find sources of aesthetic pleasure in their environment. For example, they may recognize a particularly harmonious design in a technological object, discover a geometric figure in a crystal or a flower, observe patterns in nature, architecture or music, or contemplate a satellite image of a region of the globe or a photograph revealing the complexities of the human body.

From an ethical point of view, it is important to remember that although most mathematical, scientific and technological advances contribute to our individual and collective well-being, some of them have had a profound impact on the social, political and ecological balance of the world. The short-term effects of these advances are often stressed, while the long-term effects, which are difficult to foresee, are too often played down. If students are to appreciate the ethical questions arising from these changes in our world, they must develop a broad general knowledge of this subject area as well as a concern for social issues.

Lastly, the Mathematics, Science and Technology subject area broadens students' world-view by exposing them to different areas of human activity. It furthers their construction of identity by contributing to intellectual development and promotes creativity, autonomy and self-confidence. Students are empowered by mastering the languages of mathematics, science and technology, which enable them to process information and find relationships among data, while interpreting, analyzing and managing situational problems enables them to exercise critical judgment and take part in discussion of the major issues of the day.

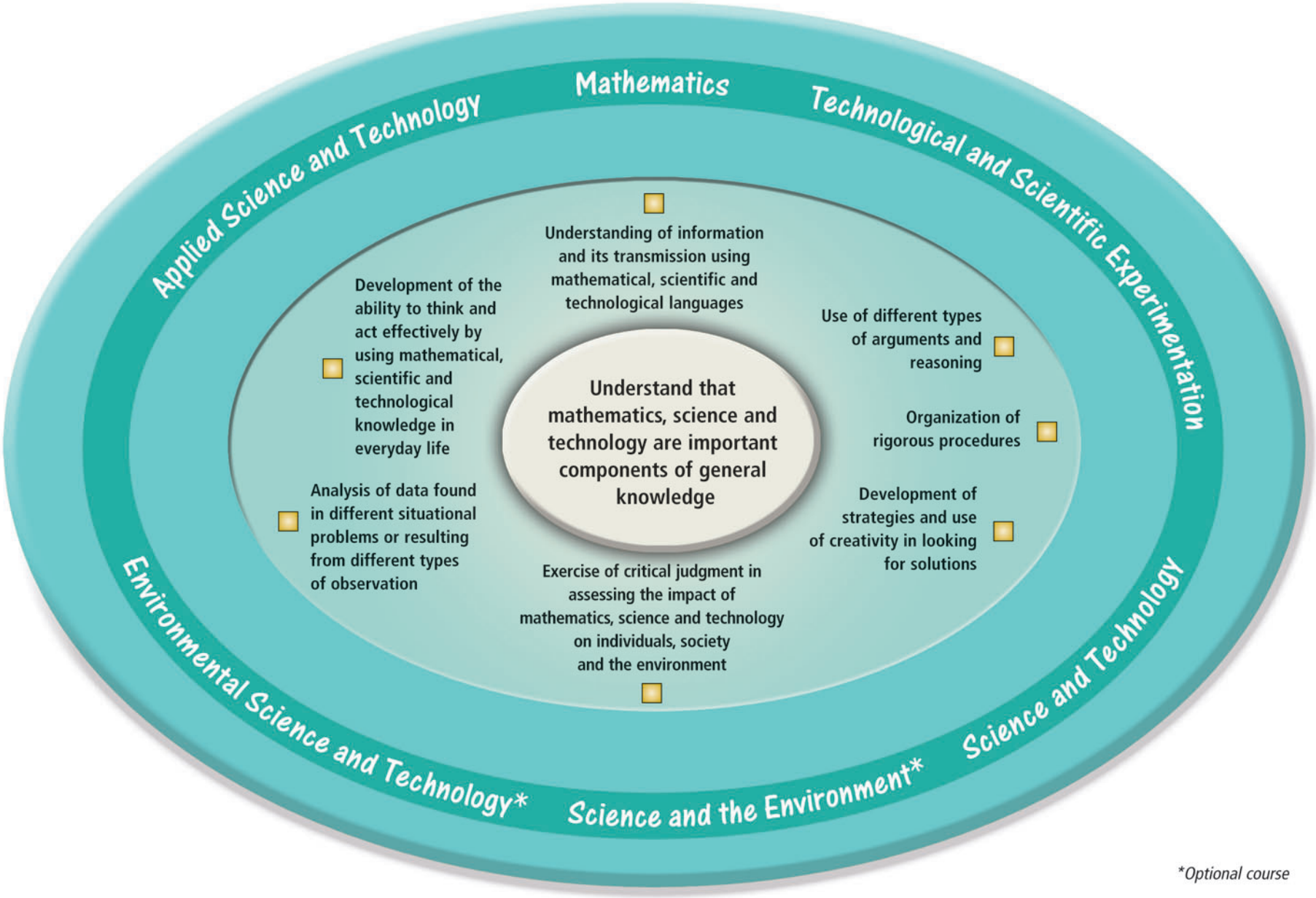
Elements Common to the Subjects in the Mathematics, Science and Technology Subject Area

Both subjects, each in its own way, help students to understand, appreciate, describe, conjecture, investigate, reason, explain, solve problems, conceive, transform and anticipate. Both of them also:

- enable students to look at different situations or phenomena from a mathematical, scientific or technological point of view
- enrich their culture
- help them to understand how activities associated with this subject area affect individuals, society and the environment

They encourage students to use their knowledge and cognitive and metacognitive strategies to interpret and act on their environment. The ability to generalize and to model are essential in dealing with the issues raised in these subjects. These issues are often associated with a way of life, and they demand reflection and decisions. This promotes the development of aptitudes and attitudes that enable students to deal with new situations.

MATHEMATICS, SCIENCE AND TECHNOLOGY
ELEMENTS COMMON TO ALL SUBJECTS IN THE SUBJECT AREA



*Optional course

Diversified Programs

Diversified programs are offered for mathematics as well as science and technology to meet the educational needs of Secondary Cycle Two students.

Mathematics

In mathematics, the following three options are offered in the last two years of Cycle Two: the *Cultural, Social and Technical* option (4 credits per year), the *Technical and Scientific* option (6 credits per year) and the *Science* option (6 credits per year). In the first year of the cycle, students complete their basic mathematical education (6 credits) and select one of these options for the beginning of the following year. Their educational path has no bearing on the option they may choose. In each case, they will continue to develop their competencies and add to their mathematical knowledge so that they will be better prepared for vocational or technical training or preuniversity education and for life in society. Regardless of the option chosen, students must complete a major independent assignment in the last year of the cycle. Although this assignment has a specific focus (comprehensive activity for integrating mathematical learning, exploration activity or detailed investigation activity) depending on the option involved, it is aimed at helping students to develop a positive attitude toward mathematics, to become aware of what they have learned, and to cultivate an appreciation for the cultural significance and widespread use of mathematics.

Science and Technology

In science and technology, the programs differ according to the educational path chosen: the *Science and Technology* program is part of the general education path, and the *Applied Science and Technology* program is part of the applied general education path. Both programs help students develop their scientific and technological literacy, enabling them to become active, critical and informed participants in debates on social issues, to use the products of science and technology responsibly and to take concrete, practical and innovative action in these areas. These last two aspects are of particular concern in the applied general education path.

Generally speaking, scientific issues are addressed in the *Science and Technology* program. The compulsory concepts are combined to address a different theme in each of the two years of the program. In the first year (6 credits), the theme examined is *The Human Organism*. In the second year (4 credits), the central theme is the environment, which is divided into four topics: climate change, drinking water, the energy challenge facing humankind and deforestation. In addition to this compulsory program, the optional *Environmental Science and Technology* course (4 credits) is offered in the second year. It is aimed at developing the same competencies, but the compulsory concepts address other environmental issues: residual materials and food production.

Generally speaking, technological problems are addressed in the *Applied Science and Technology* program (6 credits for each of the two years). Over the two years of this program, the compulsory concepts studied pertain to applications (objects, systems, products and processes) related to seven technological fields. In addition to this compulsory program, the *Science and the Environment* course (2 credits) offered in the second year addresses two environmental issues: energy and residual materials.

Although they are part of different educational paths, the *Science and Technology* and the *Applied Science and Technology* programs have the same competencies (apart from one key feature), and more than 60 per cent of their respective program content is identical. This makes it easy for students to switch from one educational path to the other at the end of the first year of the cycle. In addition, both programs lead to the same Secondary School Diploma. The optional *Environmental Science and Technology* course and the Science and the Environment course make it possible to enroll in Secondary V science and technology courses.

The *Chemistry* and *Physics* programs are designed for students who wish to expand their knowledge of science or enter a science program or a program with a significant science component at the college level. Students continue to develop the competencies they began acquiring in previous programs. The content of the *Chemistry* and *Physics* programs is subject-related, with an approach based on contextualized learning that makes it possible to integrate prior scientific, technological and mathematical knowledge. As in the Secondary IV optional programs, more emphasis is placed on quantitative work and mathematical formalism.

DIVERSIFIED PROGRAMS IN MATHEMATICS, SCIENCE AND TECHNOLOGY

<table>
<tr><td>Cycle Two</td><td colspan="3">MATHEMATICS</td><td colspan="2">SCIENCE AND TECHNOLOGY</td></tr>
<tr><td></td><td colspan="3">General Education Path
or
Applied General Education Path</td><td>General Education Path</td><td>Applied General Education Path</td></tr>
<tr><td>First Year</td><td colspan="3">Common Basic Mathematical Education
6 credits</td><td>Science and Technology
6 credits</td><td>Applied Science and Technology
6 credits</td></tr>
<tr><td rowspan="3">Second Year</td><td colspan="3">Options</td><td>Science and Technology
4 credits</td><td>Applied Science and Technology
6 credits</td></tr>
<tr><td>Cultural, Social and Technical
4 credits</td><td>Technical and Scientific
6 credits</td><td>Science
6 credits</td><td colspan="2">Options</td></tr>
<tr><td colspan="3"></td><td>Environmental Science and Technology
4 credits</td><td>Science and the Environment
2 credits</td></tr>
<tr><td rowspan="2">Third Year</td><td>Cultural, Social and Technical
4 credits</td><td>Technical and Scientific
6 credits</td><td>Science
6 credits</td><td colspan="2">Options</td></tr>
<tr><td colspan="3"></td><td>Chemistry
4 credits</td><td>Physics
4 credits</td></tr>
</table>

Social Sciences[1]

Programs in the subject area:

General Education Path
Applied General Education Path

- History and Citizenship Education
- Contemporary Economic Environment

Work-Oriented Training Path

- Geography, History and Citizenship Education

The social sciences are concerned with all phenomena associated with human societies and human representations of them. The complexity of the social world is increasing because of constantly accelerating change in societies and because of the current world situation marked by high population mobility, increased contact among different cultures, rapid circulation of information and accelerating globalization of the economy. As a subject area, the Social Sciences consider social phenomena and their complexity in terms of space and time, which are the perspectives adopted in Geography and in History and Citizenship Education respectively. Each of these subjects approaches the social world from a specific viewpoint. Geography provides a spatial perspective, which enables students to see that societies occupy territories with many differences, including differences of scale, and that they relate to these territories in a great variety of ways, while History and Citizenship Education provides a temporal perspective, which enables students to become aware of and understand the roots of the present and processes related to social change.

Contribution of the Social Sciences Subject Area to Students' General Education

This subject area contributes to the achievement of the educational aims of the Québec Education Program by enabling students to develop an understanding of social issues. Both programs in the subject area contribute to the construction of identity by providing reference points that allow students to perceive their membership in a community based on shared values, particularly the values associated with democracy. These programs help students to construct their world-view by giving them opportunities to grasp the complexity of phenomena pertaining to human societies. They enable students to take into account their own opinions and values, to question them and to put them in perspective. The programs in Social Sciences foster the development of students' ability to reason, enrich their culture and prepare them to play an active role in a democratic society. These subjects primarily promote intellectual development, giving students methodological and conceptual tools. The acquisition of these tools, which students can use in a multitude of situations, should help them to understand the present-day world and empower them in dealing with new situations in their lives

In addition, the very nature of their object of study makes the subjects in this area a particularly rich vehicle for cultural learning. They promote students' social literacy, helping them to acquire society's shared knowledge, without which citizens would be like foreigners in their own society. They also introduce students to the cultural heritage of communities that nourish the cultural diversity of their society.

Finally, with regard to social integration, the subjects in Social Sciences should help students to develop their own values and attitudes in relation to the values and principles on which Québec society is based. They prepare students to exercise their role as citizens in their immediate surroundings—the school—and within the broader community.

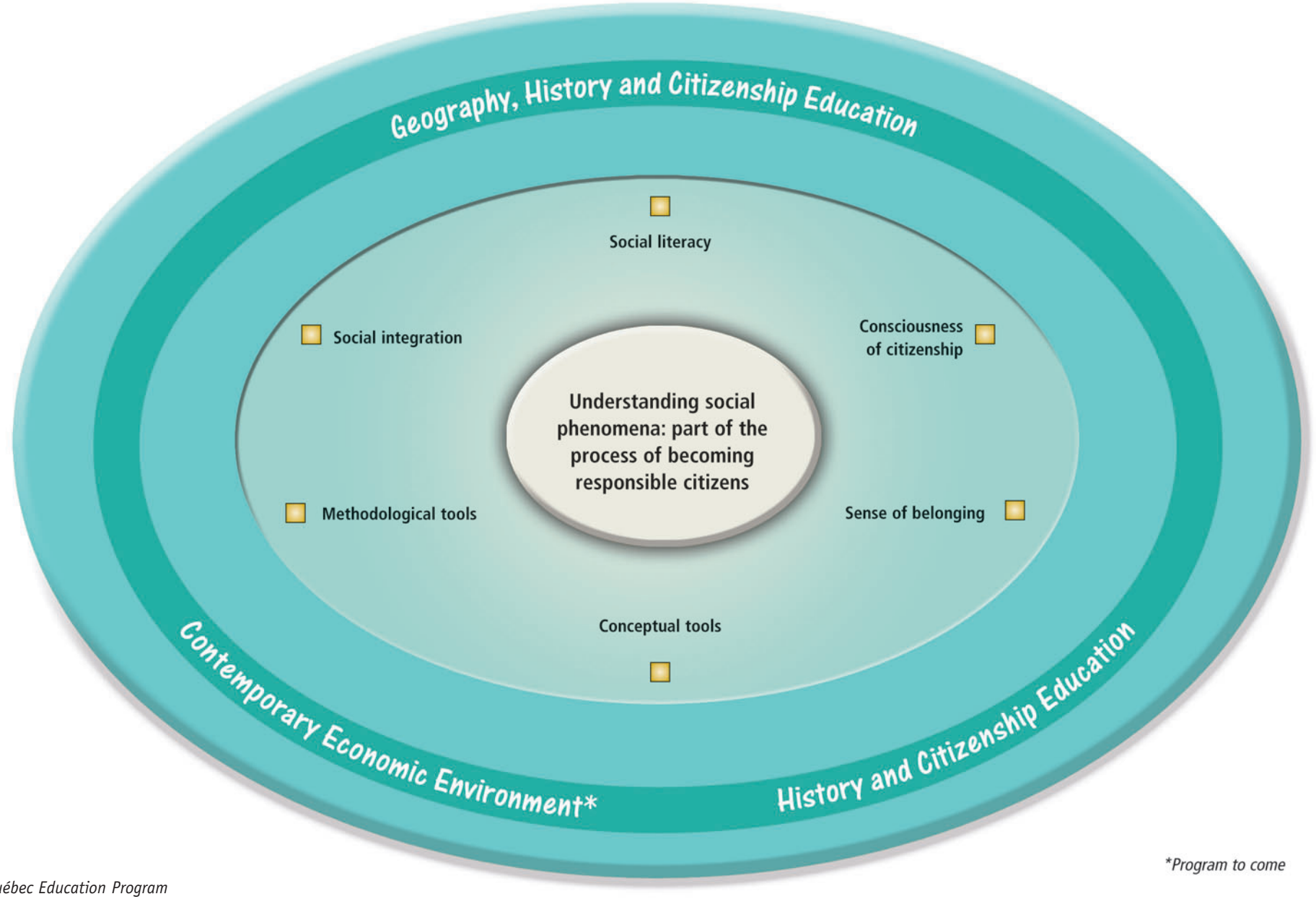
1. This text, which has been adapted from the Québec Education Program for Secondary Cycle One, is provided only as a guide. It will be finalized once the Secondary V programs in this subject area have been developed. However, it is a useful reference with regard to the History and Citizenship Education program in the General Education Path and the Applied General Education Path, and with regard to the Geography, History and Citizenship Education program in the Work-Oriented Training Path.

Elements Common to the Subjects in the Social Sciences Subject Area

Both Geography and History and Citizenship Education foster openness to the world. Their complementary perspectives on social phenomena reinforce students' knowledge and understanding of these phenomena and of human action. By encouraging students to observe phenomena from here and elsewhere, past and present, they attune them to the change and diversity that characterize the present-day world.

In order to participate in a society that is increasingly complex and constantly changing, students need reference points and interpretive keys to grasp the processes by which a society is organized in space and time, as well as the nature and importance of the relationships that form within a society, among societies, or between societies and their territories. The subjects in Social Sciences use concepts based on space and time together to decode social phenomena.

Thus, students who are learning to understand the organization of a territory or interpret a territorial issue take into account past human actions and the imprints they have left on the organization of space. Similarly, when students learn to examine and interpret social phenomena, they take into consideration the territorial organization of the societies concerned. Students construct their consciousness of citizenship by learning to decode the real world in terms of space and time, by understanding the importance of human action and by recognizing that all decisions should be based on a critical foundation. The synergy between the two subjects is based on learning that is common to both of them.



*Program to come

Arts Education

Programs in the subject area:

General Education Path
Applied General Education Path[2]

- Drama
- Visual Arts
- Dance
- Music

Work-Oriented Training Path

Activities related to the arts may be based on the programs in the General Education Path and the Applied General Education Path.

The arts call on different forms of intelligence and enable us to confront, understand and interpret reality and transpose it into symbolic language. The practice of an art form offers access to the world of the imagination and draws on creativity. It provides a new way of seeing people, things and events and of communicating this new vision through art. Works of art are part of the history of societies and reflect their aesthetic and cultural values. They also contribute to social and human development, because they play an important role in expressing and preserving the values of societies and the identity of peoples.

Contribution of the Arts Education Subject Area to Students' General Education

The practice of an art form enables adolescents to develop their creativity through the combined application of sensitivity and rationality. They draw on all aspects of the self in order to convey their ideas, values and dreams in symbolic language that opens up new perspectives on themselves, others and their environment. Arts Education thus contributes to students' construction of identity, the enrichment of their world-view and their empowerment. It can also help them discover connections between their learning in school and the world of work and pave their way to studies leading to many occupations and trades in the arts and culture.

Arts Education in Secondary Cycle Two carries on from that in Cycle One. Students enrolled in one of the General Education Paths can continue their training through a compulsory course every year of the cycle. Although the arts are not a formal part of the curriculum in the Work-Oriented Training Path, teachers in this path can take advantage of these programs to enrich the learning situations provided for students.[3] In the General Education Path and the Applied General Education Path, optional courses may be added that allow students to pursue further learning in an Arts Education subject or to explore the use of multimedia in relation to an art form.

Students are offered a range of artistic experiences that speak to them personally and encourage them to explore social and global issues. They develop their critical and aesthetic faculties and broaden their cultural horizons through exposure to works of different periods and origins, visits to cultural sites, meetings with artists and active participation in the artistic life of the school and the community.

Elements Common to the Subjects in the Arts Education Subject Area

Beyond their specific characteristics, the Arts Education subjects share a common vision, contribute to the development of similar attitudes, are based on the same creative dynamic and include activities of creation, interpretation[4] and appreciation of the same nature.

2. For the Arts Education subjects, there are three types of programs: compulsory, optional and multimedia programs.
3. See section 1.8 in Chapter 1.
4. Interpretation is involved in drama, dance and music.

The connecting thread among all these subjects is that they allow students to use symbolic language to convey their representations of reality and their world-view in various situations involving creation, interpretation and appreciation.

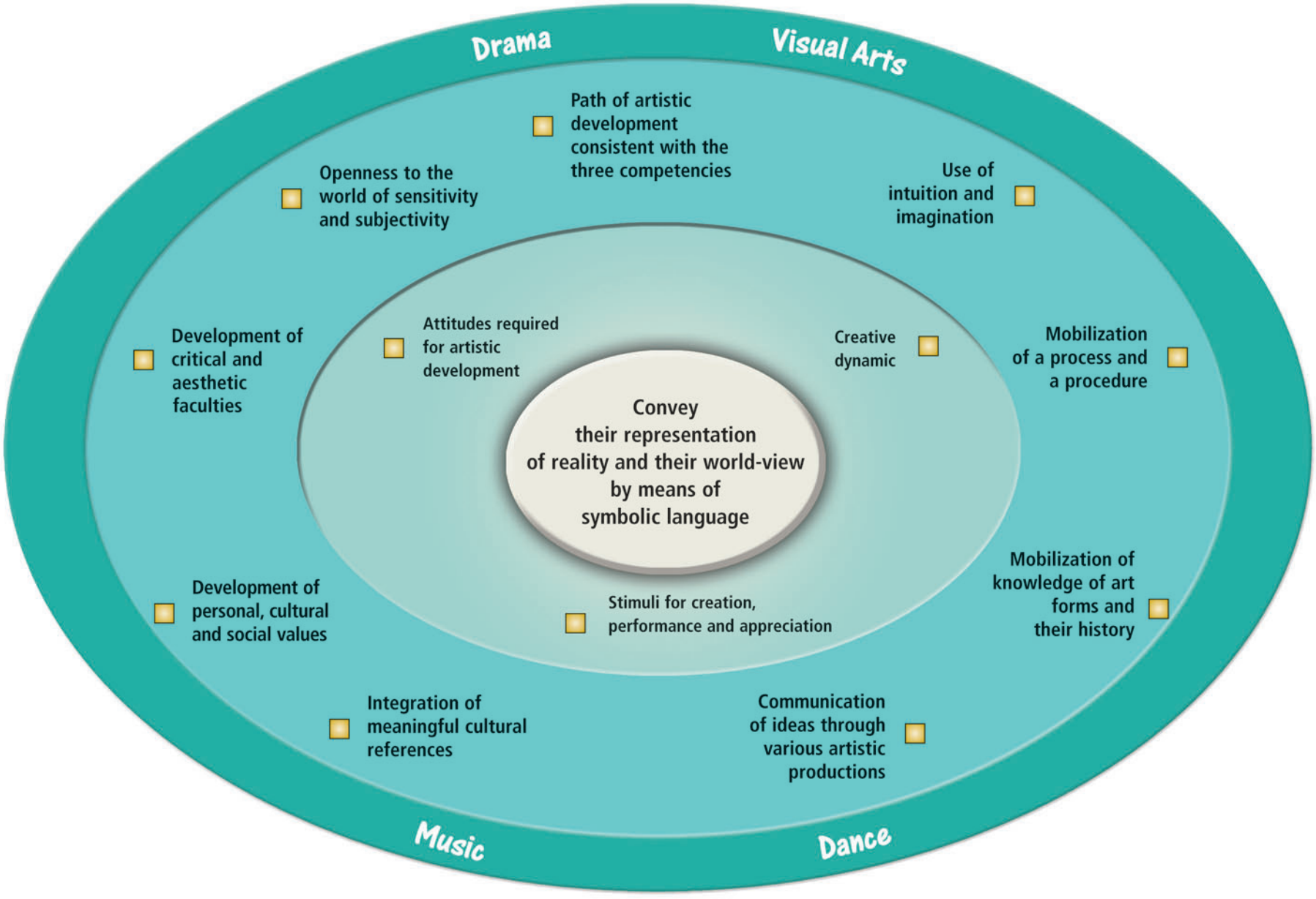
Learning in the arts makes students aware of the importance of being receptive to their sensations, impressions and emotions. It teaches them to show openness to activities involving creation, interpretation and appreciation. The practice of an art form encourages them to adopt a constructive attitude to their experiences, to cooperative work and to criticism. As they progress, they have more and more opportunities to demonstrate autonomy by expressing their personal, social and cultural values in making decisions.

The creative dynamic,[5] which is common to all the Arts Education programs, is a tool that can help students become aware of their creativity and develop their autonomy through creation. The relevance and the value of the concept of the creative dynamic is that it sees creation as a systemic phenomenon combining an approach and a process and involving an ongoing dialogue between theory and practice, action and reflection, experience and cultural enrichment.

In each of these programs, activities of creation, interpretation and appreciation serve as catalyst, thread or framework for the creative dynamic.

5. We are referring here to the work of researcher Pierre Gosselin, who has used this term to describe the creative process.

ARTS EDUCATION
ELEMENTS COMMON TO ALL SUBJECTS IN THE SUBJECT AREA



Personal Development

Programs in the subject area:

General Education Path
Applied General Education Path

- Ethics and Religious Culture
- Physical Education and Health

Work-Oriented Training Path

- Autonomy and Social Participation
- Physical Education and Health

The subjects in the Personal Development subject area enable students to reflect and work on themselves, to understand themselves, to recognize their true value, to take responsibility for themselves and to relate to others in a constructive way.

Contribution of the Personal Development Subject Area to Students' General Education

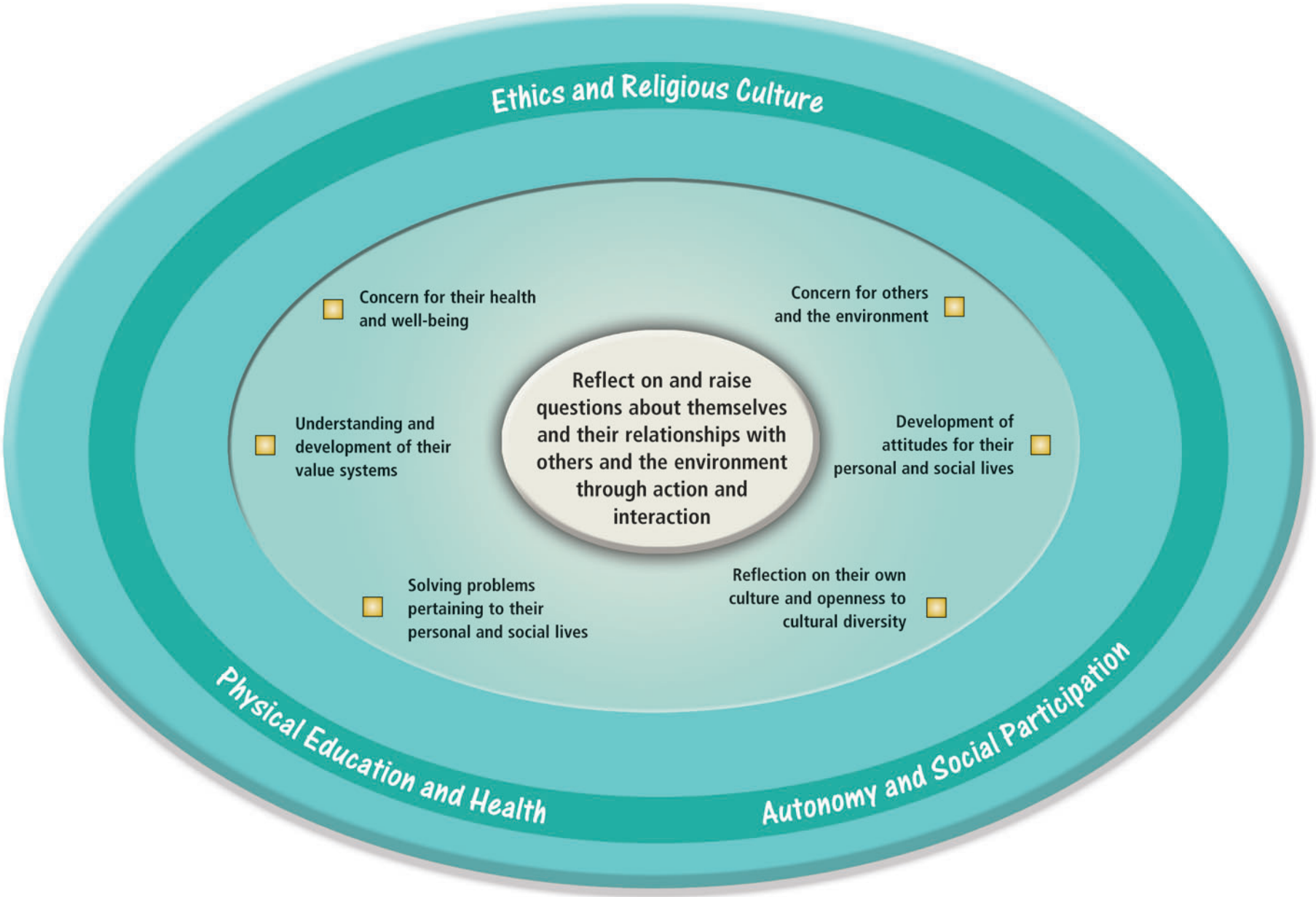
Each of the programs in this subject area contributes in its own way to students' general education. They take into account the physical, intellectual, affective, social and moral dimensions of students' development and how these dimensions are related, as well as making students aware of their importance for harmonious development. They play a particularly important role in the students' construction of identity and the development of their world-view. They empower students in various contexts and make them more aware of the unique role they have to play in building a healthy, just and democratic society.

Elements Common to the Subjetcs in the Personal Development Subject Area

Beyond their differences, these programs share a common aim, which is to develop in students a concern for their physical and mental health and community life. They encourage students to be active, to ask questions about themselves and their relationships with others and with their environment, to value actions that promote the common good and to become aware of their responsibilities. They aim to broaden students' understanding of realities that affect them directly, such as health, interpersonal relationships, consumption and the environment, and help them acquire tools for making informed choices now and in the future.

The learning targeted in these programs involves values such as commitment, self-affirmation, solidarity, equality and respect, as well as qualities such as self-confidence, trust in others, courage, a work ethic, autonomy and a sense of responsibility. It should make them aware of human dignity and the need to respect oneself and others and the common good, and should encourage them to be open-minded and to project themselves into the future as responsible citizens.

PERSONAL DEVELOPMENT
ELEMENTS COMMON TO ALL SUBJECTS IN THE SUBJECT AREA



Career Development

Programs in the subject area:

General Education Path
Applied General Education Path

- Exploration of Vocational Training
- Personal Orientation Project
- Entrepreneurship

Work-Oriented Training Path

- Work Skills
- Preparation for a Semiskilled Trade
- Preparation for the Job Market
- Introduction to the World of Work

The inclusion of the Career Development subject area results from the obligation to prepare Secondary Cycle Two students for the job market. The aim of the programs in this subject area is to help students look at the options available to them and envisage what their lives as workers and citizens will be like in the short or medium term, depending on the path in which they are enrolled.

Contribution of the Career Development Subject Area to Students' General Education

At this stage of their education, students are confronted with choices regarding their learning path, electives, educational institution, etc. They have a need to fulfill their potential and they seek opportunities for self-knowledge and self-affirmation. This is shown in the involvement of many of them in summer jobs, volunteer work or community projects.

The programs in this subject area focus on career choices and even qualifications, and they give students opportunities to develop their personal and occupational identity. Exploration and experimentation activities of various kinds enable them to define their interests, discover their talents and experience being workers or entrepreneurs capable of enriching their community.

The programs in this subject area also enable students to construct a representation of the world of work and adjust it gradually through observation, reflection and experience. The different types of activities offered—practicum in a business, simulations of work functions, setting up a micro-business, talk by a professional, discussion with a worker, visit to a training facility, etc.—enable students to better understand the world of work, the regional or provincial context, and the globalization of trade.

The programs in this subject area also allow students in the Work-Oriented Training Path to prepare concretely for employment. The practical training, which takes the form of a practicum, allows them to develop the competencies needed to carry out tasks in the workplace, for example in a semiskilled trade.

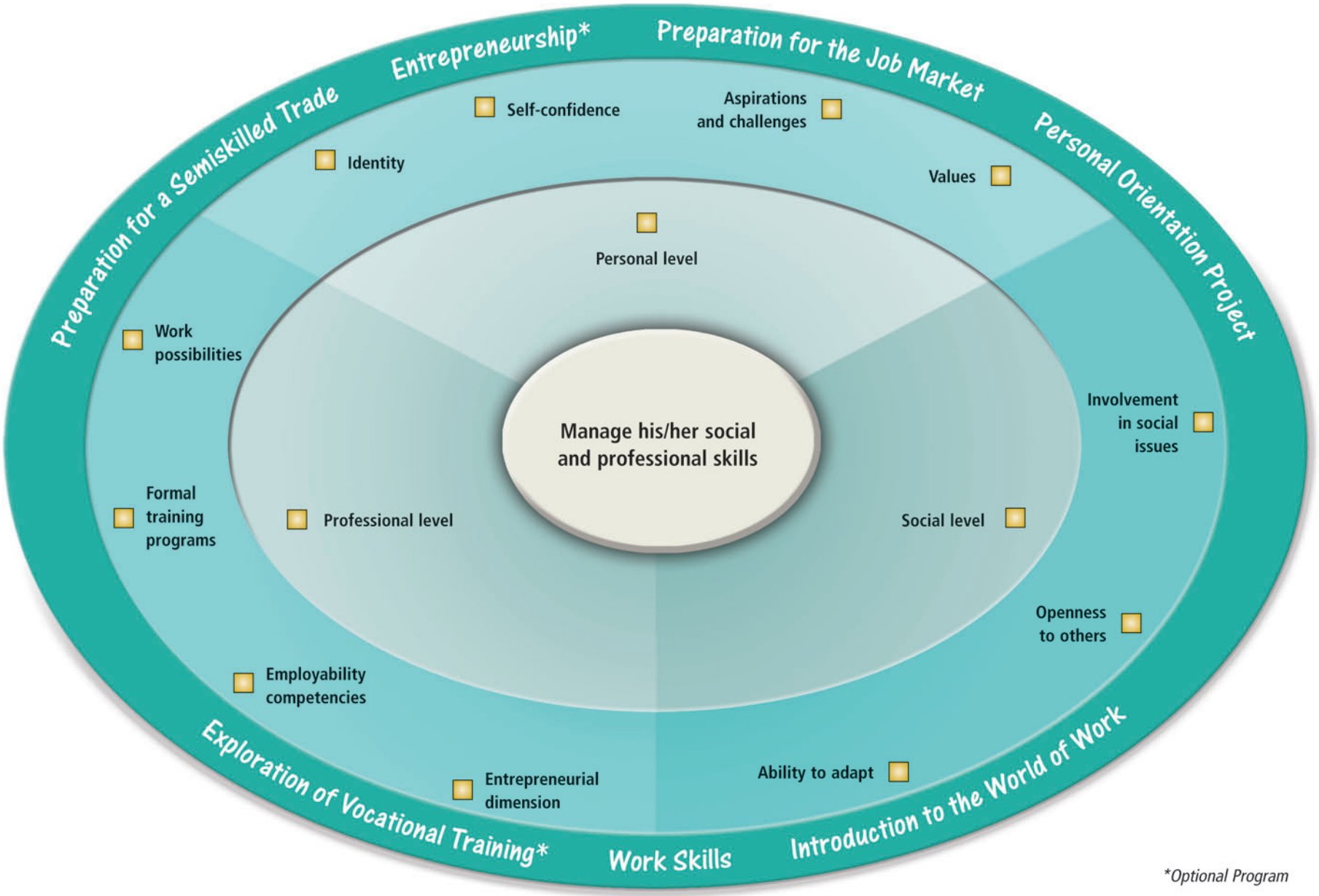
Elements Common to the Subjects in the Career Development Subject Area

Some of the seven programs in the Career Development subject area are intended for students in the General Education Path or the Applied General Education Path, while others are for those in the Work-Oriented Training Path.

These programs all aim to develop students' confidence in their capacity to carry out their undertakings and successfully integrate into society and the job market. The programs prepare them to go on to other levels of the education system, other training facilities or the job market. They are distinctive in that they provide periods of reflection and action in a very active, and often experiential, pedagogical context. They allow students to explore their future employment and to envisage how they will prepare for it.

These programs provide support for students' personal and career planning and its implementation and may thus play an important role in their empowerment. They encourage students to think about what they can and want to become and to approach life with responsibility and solidarity. This is a significant source of motivation and should help make them aware of the importance of lifelong learning.

CAREER DEVELOPMENT
ELEMENTS COMMON TO ALL SUBJECTS IN THE SUBJECT AREA



*Optional Program

4.3 Subjects That Vary in the Different Learning Paths

The three paths presented in Chapter 1—General Education Path, Applied General Education Path and Work-Oriented Training Path—provide the structure for a varied set of subject-specific programs that enable Secondary Cycle Two students to increase their knowledge, better define their areas of interest and make choices that meet their needs. The programs offered in this cycle are therefore quite diverse:

- compulsory programs that are differentiated to adapt the basic learning to students' needs and interests, as in Languages and Mathematics
- optional programs that allow students to acquire more learning in certain subjects, such as those in Arts Education and Science and Technology
- programs whose purpose is to enable students to personally integrate their learning, such as Autonomy and Social Participation
- programs focusing on the development of skills related to the world of work, such as Work Skills, Preparation for a Semiskilled Trade, Personal Orientation Project and Entrepreneurship

Each path includes a range of subjects, combining the basic education all students need with more specialized training corresponding to their individual interests, aptitudes and talents.

Flexibility characterizes these learning paths, particularly the General Education Path and the Applied General Education Path. Thus a student could begin Secondary Cycle Two in the Applied General Education Path and, for personal or academic reasons, switch to the General Education Path, or vice versa, after the first year. The choice of the Work-Oriented Training Path, which is for students who for various reasons have more difficulty in school, is not irreversible either. Despite the problems they are having or have had in the past, some students enrolled in this path may, with a defined work plan, go on to one of the general education paths or a more demanding vocational training program.

Whatever path they choose, all students will, at the successful completion of their studies, receive ministerial recognition in the form of a diploma or certificate attesting to their studies and the level of their competency development.

Note: The table on the following two pages describes the learning paths.

LEARNING PATHS IN SECONDARY CYCLE TWO

PURPOSE	Preparation for **work**	Preparation for a **semiskilled trade**	Preparation for **further studies**
STUDENTS	Students at least 15 years of age whose individualized education plan or competency report shows that this learning path is most likely to meet their interests, needs and abilities.		Students who have attained the objectives of the elementary-level programs of study or students whose overall situation shows that this learning path is most likely to meet their interests, needs and abilities. Students choose one of the two learning paths.
ADMISSION REQUIREMENTS	Students have not attained the objectives of the elementary-level programs of study in the language of instruction and mathematics.	Students have attained the objectives of the elementary-level programs of study in the language of instruction and mathematics, but have not earned credits in these subjects in Secondary Cycle One. Students meet the specific admission requirements for the trade chosen.	Students satisfy the rules of the school and the school board with regard to students' academic progress.
SUBJECTS	COMPULSORY SUBJECTS *General education* – Language of instruction – Second language – Mathematics – Technological and Scientific Experimention – Geography, History and Citizenship Education – Physical Education and Health – Autonomy and Social Participation	COMPULSORY SUBJECTS *General education* – Language of instruction – Second language – Mathematics	COMPULSORY SUBJECTS IN BOTH PATHS – Language of instruction – Second language – Mathematics – History and Citizenship Education – Contemporary Economic Environment – Drama or Visual Arts or Dance or Music – Ethics and Religious Culture – Physical Education and Health – Integrative Project

	Practical training – Preparation for the Job Market – Introduction to the World of Work – Work Skills	*Practical training* – Preparation for the Job Market – Preparation for a Semiskilled Trade	COMPULSORY SUBJECTS IN EACH PATH – Science and Technology – Personal Orientation Project – Applied Science and Technology OPTIONAL SUBJECTS IN BOTH PATHS – Spanish as a Third Language – Environmental Science and Technology – Science and the Environment – Two Secondary V programs in Science and Technology (titles to come) – Drama or Visual Arts or Dance or Music – Drama and Multimedia or Visual Arts and Multimedia or Dance and Multimedia or Music and Multimedia – Exploration of Vocational Training* – Personal Orientation Project – Entrepreneurship* – *Local programs* * available in schools offering the Applied General Education Path
DURATION	3 years (2700 hours)	1 year (900 hours)	3 years (2700 hours)
MINISTERIAL CERTIFICATION	Prework training certificate (PWTC)	Prework training certificate (PWTC)	Secondary School Diploma (SSD)
GOAL	**Fulfillment as individuals, citizens and workers**		

•••••► Indicates possible transitions if certain conditions are met

4.4 Table of Subject-Specific Competencies in Secondary Cycle Two

The following table shows all subject-specific competencies to be developed in the three paths in Secondary Cycle Two.

Subject Area	Program	Competencies	GEP and AGEP	WOTP	
				PT	TST
Languages	Français, langue d'enseignement	– Lire et apprécier des textes variés – Écrire des textes variés – Communiquer oralement selon des modalités variées	✓	✓	✓
	Intégration linguistique, scolaire et sociale	– Communiquer oralement en français dans des situations variées – Lire et écrire des textes variés en français – S'intégrer au milieu scolaire et à la société québécoise	✓		
	Secondary English Language Arts	– Uses language/talk to communicate and to learn – Reads and listens to written, spoken and media texts – Produces texts for personal and social purposes	✓		✓
	English Language Arts	– Uses language/talk to communicate and to learn – Reads and listens to written, spoken and media texts – Produces spoken, written and media texts		✓	
	Français, langue seconde (Programme de base)	– Interagir en français – Lire des textes variés en français – Produire des textes variés en français	✓	✓	✓
	Français, langue seconde (Programme enrichi)	– Interagir en français – Lire des textes courants, spécialisés et littéraires en français – Produire des textes variés en français	✓		

Legend
GEP: General Education Path
AGEP: Applied General Education Path
WOTP: Work-Oriented Training Path
PT: Prework training
TST: Training for a semiskilled trade

* Program specific to the General Education Path
** Program specific to the Applied General Education Path
*** Program specific to the Applied General Education Path but also open to students in the General Education Path

Subject Area	Program	Competencies	GEP and AGEP	WOTP	
				PT	TST
Languages (cont.)	English as a Second Language (Core Program) English as a Second Language (Enriched Program)	– Interacts orally in English – Reinvests understanding of texts – Writes and produces texts	✓ ✓		✓
	English as a Second Language	– Interacts orally in English – Reads and listens to various texts – Writes texts in English		✓	
	Spanish as a Third Language	– Interacts in Spanish – Understands a variety of texts in Spanish – Produces a variety of texts in Spanish	✓		
Mathematics, Science and Technology	Mathematics	– Solves a situational problem – Uses mathematical reasoning – Communicates by using mathematical language	✓		✓
	Mathematics	– Solves a situational problem – Uses mathematical reasoning – Communicates by using mathematical language		✓	
	Science and Technology* Applied Science and Technology** Technological and Scientific Experimentation	– Seeks answers or solutions to scientific or technological problems – Makes the most of his/her knowledge of science and technology – Communicates in the languages used in science and technology	✓ ✓	 ✓	

Legend
GEP: General Education Path
AGEP: Applied General Education Path
WOTP: Work-Oriented Training Path
PT: Prework training
TST: Training for a semiskilled trade

* Program specific to the General Education Path
** Program specific to the Applied General Education Path
*** Program specific to the Applied General Education Path but also open to students in the General Education Path

Subject Area	Program	Competencies	GEP and AGEP	WOTP	
				PT	TST
Social Sciences	History and Citizenship Education	– Examines social phenomena from a historical perspective – Interprets social phenomena using the historical method – Strengthens his/her exercise of citizenship through the study of history	✓		
	Geography, History and Citizenship Education	– Builds a sense of belonging to his/her home territory – Builds a sense of belonging to Québec society		✓	
	Contemporary Economic Environment	To come	✓		
Arts Education	Drama	– Creates dramatic works – Performs dramatic works – Appreciates dramatic works	✓		
	Visual Arts	– Creates personal images – Creates media images – Appreciates images	✓		
	Dance	– Creates dances – Performs dances – Appreciates dances	✓		
	Music	– Creates musical works – Performs musical works – Appreciates musical works	✓		

Legend
GEP: General Education Path
AGEP: Applied General Education Path
WOTP: Work-Oriented Training Path
PT: Prework training
TST: Training for a semiskilled trade

* Program specific to the General Education Path
** Program specific to the Applied General Education Path
*** Program specific to the Applied General Education Path but also open to students in the General Education Path

Subject Area	Program	Competencies	GEP and AGEP	WOTP	
				PT	TST
Personal Development	Ethics and Religious Culture	To come	✓		
	Physical Education and Health	– Performs movement skills in different physical activity settings – Interacts with others in different physical activity settings – Adopts a healthy, active lifestyle	✓	✓	
	Autonomy and Social Participation	– Demonstrates autonomy in everyday life situations – Takes an informed position on issues related to everyday life – Experiments with community service		✓	

Legend
GEP: General Education Path
AGEP: Applied General Education Path
WOTP: Work-Oriented Training Path
PT: Prework training
TST: Training for a semiskilled trade

* Program specific to the General Education Path
** Program specific to the Applied General Education Path
*** Program specific to the Applied General Education Path but also open to students in the General Education Path

Subject Area	Program	Competencies	GEP and AGEP	WOTP	
				PT	TST
Career Development	Personal Orientation Project***	– Carries out a process of career exploration – Contemplates his/her learning and work possibilities	✓		
	Exploration of Vocational Training***	To come	✓		
	Preparation for the Job Market	– Establishes his/her personal and occupational profile – Gains an understanding of the job market – Implements a sociovocational integration plan		✓	✓
	Preparation for a Semiskilled Trade	To come			✓
	Introduction to the World of Work	– Understands the requirements specific to different work situations – Performs tasks associated with different work situations – Adopts attitudes and behaviours appropriate to different work situations		✓	
	Work Skills	To come		✓	
	Entrepreneurship***	To come	✓		
No subject area	Integrative Project	To come			

Legend
GEP: General Education Path
AGEP: Applied General Education Path
WOTP: Work-Oriented Training Path
PT: Prework training
TST: Training for a semiskilled trade

* Program specific to the General Education Path
** Program specific to the Applied General Education Path
*** Program specific to the Applied General Education Path but also open to students in the General Education Path

4.5 Components of the Subject-Specific Programs

Each subject-specific program is based on a limited number of complementary competencies that contribute to fulfilling the educational aims of the program. The competencies are indissociable from the acquisition of knowledge, which is needed for both the development and the exercise of these competencies. This knowledge, which is of various kinds, corresponds to the elements of the program content in each program.

The programs are organized in five main sections:

- Introduction
- Making connections: The subject and the other dimensions of the Québec Education Program (programs in the General Education Path and the Applied General Education Path only)
- Pedagogical context
- Competencies
- Program content

Introduction to the Subject

This section covers the specific contribution of the subject to students' education, the conception of the subject and the spirit in which it should be taught. It presents the competencies to be developed, the connections among them and the elements of continuity with the Secondary Cycle One program.

Making Connections: The Subject and the Other Dimensions of the Québec Education Program

This section explains and illustrates the connections between the subject-specific competencies and the cross-curricular competencies, the broad areas of learning and the other subjects. Where appropriate, it brings out the particular relationship that may exist between the subject and certain broad areas of learning. It also highlights the role of language in the development and exercise of the subject-specific competencies.

Pedagogical Context

The pedagogical context provides details regarding the pedagogical considerations discussed in Chapter 1. It covers such topics as pedagogical approaches, teachers' and students' roles, the type of learning situations to be used to create a classroom climate conducive to competency development and the evaluation of learning. Suggestions may be provided regarding the human and material resources to be made available to students. In some programs, an example of a learning and evaluation situation is provided to show how the subject-specific competencies can be connected with each other and with the broad areas of learning, the cross-curricular competencies or other subjects.

Competencies

For each competency, the focus of the competency, the key features, the evaluation criteria, the end-of-cycle outcomes and the development of the competency during the cycle are explained.

Focus of the competency

The *focus of the competency* describes the role of the competency in subject-specific learning and its connections with the other competencies in the subject. The manifestations of the competency are described and information is provided on the place of the Secondary Cycle Two learning in a continuum that includes learning in Cycle One.

Key features of the competency

The *key features of the competency* describe the essential aspects of the competency. They provide a concrete conception of the main elements involved in the exercise of the competency. They are examined from the point of view of their dynamic interaction in order to bring out the fact that they are interdependent and are not simply a linear sequence. They generally cover the three aspects of the competency: mobilization in context, availability of resources and reflection.

Evaluation criteria

The *evaluation criteria* are essential in order to make a judgment on students' competencies; they are generic in nature and their formulation is sufficiently general to apply to both the students' process and their productions. They reflect the essential characteristics to be observed in situations calling for the competency. They do not involve an evaluation checklist, but rather a framework for the development of tools for evaluating the competency.

End-of-cycle outcomes and learning targets

The *end-of-cycle outcomes* in the General Education Path and the Applied General Education Path and the *learning targets* in the Work-Oriented Training Path provide an overall picture of the learning targeted in Secondary Cycle Two. They refer to all the evaluation criteria and take into account the learning that is specifically required and the types of situations in which it is used. The general nature of the picture provided is an invitation to look at the components of the competency all together rather than separately.

Secondary Cycle Two is a cycle of diversification that involves decisions at the end of each year (choice of options, transfer from one path to another, support measures, etc.), and the end-of-cycle outcomes and learning targets are indications that should make it possible to judge the progress of learning.

Development of the competency during the cycle

This section, which is part of the programs in the General Education Path and the Applied General Education Path, provides indications to help teachers plan activities for developing the competency during the year. These indications involve the parameters of the learning and evaluation situations that can be changed to modify their degree of complexity or difficulty.

Program Content

This section describes the learning essential for the development and exercise of the competency. It is not exhaustive, and thus does not exclude the possibility that students draw on other resources. It includes learning related to concepts, methods, strategies, processes, techniques and attitudes. The organization of the *program content* is appropriate for the subject and takes into account the logic of the subject. Cultural references are included in one form or another; these are resources in the social and cultural environment that support the development of the competency. It should be noted that while the inclusion of cultural references is compulsory, teachers are free to choose from among those suggested in this section.

Bibliography

This section includes the main works used in defining the aims and orientations in the subject. More general works, however, are provided at the end of this chapter.

4.6 General Bibliography for the Québec Education Program

Note: The bibliography will be available when the entire Québec Education Program for Secondary Cycle Two has been written.