Connecticut's Common Core of Learning

State of Connecticut
State Board of Education 1998
State of Connecticut

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State Board of Education

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Foreword

The 1998 edition of Connecticut’s Common Core of Learning is an updated version of the Common Core adopted by the State Board of Education in January 1987. This document represents Connecticut’s statement of the standard of an educated citizen and the skills, knowledge and character that are expected of Connecticut’s public secondary school graduates. As such, this document represents an educational IOU from the state’s schools to its citizens and articulates what an effective young citizen needs to know and be able to do.

The first goal of the State Board of Education’s Nurturing the Genius of Connecticut’s Students: Connecticut’s Comprehensive Plan for Education 1996-2000 is “to set and meet high expectations for academic achievement for all students, in order to prepare them for productive adult life, continuing education and responsible citizenship.” This Common Core of Learning, in conjunction with The Connecticut Framework: K-12 Curricular Goals and Standards and the various Guides to K-12 Program Development, represents an important first step in achieving the Comprehensive Plan’s goals.

We expect that educators, parents and other citizens will use Connecticut’s Common Core of Learning as a primary reference for redesigning instructional programs and to bring about continued improvement in student achievement.

Theodore S. Sergi
Commissioner of Education
Introduction

Connecticut’s Common Core of Learning has been created as a set of high expectations we hold for all of Connecticut’s students. While it is understood that students enter school at different levels of readiness, with different interests and with varying aspirations, these differences do not justify the development of a different Common Core for each student. To the contrary, the goal of each student developing to his or her fullest potential argues for the creation of one Common Core that sets no limits on anyone and allows each to attain his or her dreams.

Accordingly, the Common Core establishes a vision of what Connecticut’s high school graduates should know and be able to do as a result of participating in the entire K-12 school experience. The Common Core articulates Connecticut’s expectations for all its schools and all its youth by describing abilities that are necessary not just for employment and further education, but also for becoming a productive member of society. The Common Core is not meant to define a minimum set of competencies; rather, it is designed to set and define the high standards required for students to become fully educated citizens.

This revision of Connecticut’s Common Core of Learning is organized under the three major headings that follow, with subheadings that reflect significant groups of skills, knowledge and aspects of character:

**Foundational Skills and Competencies**

- Reading
- Writing
- Speaking, Listening and Viewing
- Quantifying
- Problem Solving, Reasoning and Creative Thinking
- Learning Resources and Information Technology
- Working Independently and Collaboratively

**Understandings and Applications:**

**Discipline-Based and Interdisciplinary Skills**

- Language Arts
- Mathematics
- Science
- Social Studies
- World Languages
- The Arts
- Health and Safety Education
- Physical Education
- Technology Education
Applied Education
  • School-To-Career Transition
  • Preparing for Adult Life and Lifelong Learning

Aspects of Character

  Responsibility and Integrity
  Effort and Persistence
  Intellectual Curiosity
  Respect
  Citizenship and Sense of Community

The order of the three major headings does not represent their relative importance, nor does it imply a sequence of instruction. Rather, the order reflects a belief that discipline-based content must be interconnected. This represents a larger view of curriculum in which instruction across the disciplines includes the development of the necessary aspects of character and foundational skills.

Students learn best when they are appropriately motivated and self-confident. Although these are by-products of effective instruction, the attitudes and aspects of character delineated in the Common Core are also preconditions for mastering specific skills. While generally taught directly or included in a written curriculum, these aspects of character, along with many of the skills and competencies, must continually be developed during instruction in the traditional curriculum described in the understandings and applications area and through guidance formally provided in the schools.

Further, the Common Core of Learning should not be misconstrued as a set of isolated skills and understandings. To the contrary, it should be viewed as an integrated and interdependent set of expectations. Users of the Common Core should continually look for cross-disciplinary and interdisciplinary approaches and for the transfer of skills and knowledge from one subject area to another. In fact, many items listed under a particular subheading could easily have been included under others.

The Common Core is not a curriculum. Each school district’s curriculum will be more comprehensive and significantly more specific, including a wide range of learning experiences and instructional strategies. To assist districts in setting forth their own curriculum standards, the State Department of Education is publishing a companion document to Connecticut’s Common Core of Learning titled The Connecticut Framework: K-12 Curricular Goals and Standards.

Finally, the Common Core of Learning has been developed neither as a state mandate nor as a condition for graduation. It has been developed to generate discussion and stimulate change in school programs, student objectives, resource allocations and teaching. It is offered as a catalyst for curricular change and school improvement by providing a statement of the high expectations needed in order that all Connecticut students become fully educated.
Connecticut’s Common Core of Learning reflects a commitment to excellence in public elementary and secondary education. The implementation of the Common Core will help develop young people who can think and act independently and work with others, and will assist Connecticut’s schools in leading its students into the 21st century with confidence and clear direction.
Foundational Skills and Competencies

All educated citizens must possess a core of basic, enabling skills and competencies that provide a foundation for broader acquisition of knowledge. These foundational, cross-disciplinary skills and competencies, applied in diverse ways, form the heart of an academic experience as each contributes to the development of understanding within and among the disciplines. Moreover, these skills and competencies are necessary for productive participation in society, and for life-long learning.

Reading

✔ Students develop the proficiency, confidence and fluency in reading needed to meet the literacy demands of the 21st century.

As a result of education in Grades K-12, students will:

- read a variety of literary, informational and persuasive texts with understanding and meaningfully analyze, interpret, evaluate and enjoy them;
- read to understand, including identifying main and subordinate ideas, details and facts; to interpret; and to respond to a variety of written materials;
- read to analyze, including making comparisons, drawing inferences and contrasts, and identifying sequences;
- read to evaluate, including separating fact from opinion; recognizing propaganda, stereotypes and statements of bias; recognizing inconsistency; and judging the validity of evidence and sufficiency of support;
- use the features and structure of books and other reference materials, such as table of contents, preface, introduction, titles and subtitles, index, glossary, appendix and bibliography; and
- improve comprehension by using a variety of strategies, including self-correcting, questioning, predicting, reviewing and reading ahead.

Writing

✔ Students develop the proficiency, confidence and fluency in writing needed to meet the literacy demands of the 21st century.

As a result of education in Grades K-12, students will:

- produce written materials which develop thoughts, share information, influence and persuade, and create and entertain;
- use the conventions of standard English to communicate clearly;
• demonstrate the use of elements of effective writing, including setting, purpose, presenting in a logical organization, and elaborating by selecting and using detailed examples, illustrations and evidence;
• select forms of expression for different audiences, including using appropriate style and voice;
• improve their own writing, including redrafting, restructuring, revising, correcting errors and editing; and
• gather information from primary and secondary sources to write reports using that information and the quotes, paraphrases and summaries accurately.

Speaking, Listening and Viewing

✔ Students develop the proficiency, confidence and fluency in speaking, listening and viewing needed to meet the literacy demands of the 21st century.

As a result of education in Grades K-12, students will:

• comprehend verbal and nonverbal presentations at the literal, inferential and evaluative levels;
• listen and view in order to analyze, clarify and establish context;
• understand spoken instructions, give spoken instructions to others, ask meaningful questions, and answer questions correctly and concisely;
• speak using appropriate conventions (usage and word choice), forms of expression (style and voice), and tools (technology and media); and
• deliver oral and visual presentations using a coherent sequence of thought, clarity of presentation, suitable vocabulary and length, and nonverbal communication appropriate for the purpose and audience.

Quantifying

✔ Students develop the basic computational skills and mathematical techniques essential to understanding the numerical world and solving quantitative problems.

As a result of education in Grades K-12, students will:

• demonstrate number sense by using numbers for counting, measuring, comparing, ordering, scaling, locating and labeling;
• add, subtract, multiply and divide with whole numbers, fractions, decimals and integers;
• make estimates and approximations, and judge the reasonableness of results;
• understand and use ratios, proportions and percents;
• make and use measurements in both customary and metric units to approximate, measure and compute lengths, areas, volumes, mass, temperatures and time;
• organize data into tables, charts and graphs, and read, interpret and draw conclusions from the data; and
• understand and apply basic algebraic and geometric concepts.

Problem Solving, Reasoning and Creative Thinking

✔ Students explore information and arguments from various points of view to think critically and creatively and to solve problems.

As a result of education in Grades K-12, students will:

• apply prior knowledge, abstract thinking, curiosity, imagination and creativity to solve problems;
• use inductive reasoning to make, defend and evaluate conjectures and arguments, and deductive reasoning to justify assertions and verify tentative conclusions;
• use problem-solving skills to formulate problems, identify patterns and trends, and make and justify decisions and predictions;
• examine, define and redefine ideas and problems from a variety of perspectives;
• create, imagine and explore new ideas to generate alternative strategies, consider advantages and disadvantages, and select among alternative possibilities;
• assess the results of selected actions and respond constructively to unanticipated events or outcomes; and
• apply defensible criteria to make aesthetic and other qualitative judgments.

LEARNING RESOURCES AND INFORMATION TECHNOLOGY

✔ By the end of Grade 12, students will be independent, competent and confident users of information and technology and able to apply related strategies for acquiring basic skills and content knowledge, communicating ideas, solving problems and pursuing personal interests.

Program Goals

As a result of education in Grades K-12, each student will:

• identify and apply a wide range of educational technologies to conduct research, communicate information and ideas, create original works, organize data and solve problems;
• use effective and efficient strategies to explore and use an information- and technology-rich environment to gain knowledge, deepen understanding and solve complex problems;
• use technology to enhance essential skills and facilitate learning in the content areas; and
• apply the skills necessary to locate, evaluate, interpret and synthesize information from print, nonprint and electronic sources.
K-12 Content Standards

1. Defining Information Needs
   Students will define their information needs and identify effective courses of action to conduct research, solve complex problems and pursue personal interests.

2. Information Systems
   Students will apply principles of organized information systems to learning endeavors.

3. Information Strategies
   Students will demonstrate a command of information skills and strategies to locate and use effectively print, nonprint and/or electronic resources to solve problems, conduct research and pursue personal interests.

4. Information Processing
   Students will apply evaluative criteria to the selection, interpretation, analysis, reorganization and synthesis of information from a variety of sources and formats.

5. Application
   Students will use appropriate technologies to create written, visual, oral and multimedia products to communicate ideas, information or conclusions to others.

6. Evaluation
   Students will evaluate the effectiveness and efficiency of their own choices and use of information and technology for problem solving and communication.

7. Responsible Information Use
   Students will demonstrate the responsible and legal use of information resources, computers and other technologies, recognizing the attendant social, economic and ethical issues.
Working Independently and Collaboratively

✔ Students work and learn independently (effectively allocating time, energy and resources) and collaboratively as part of a team (contributing to group efforts and understandings).

As a result of education in Grades K-12, students will:

- set rigorous, challenging and reasonable learning goals;
- set priorities, allocate time and follow schedules to meet objectives;
- assess progress and make necessary adjustments to meet goals;
- demonstrate friendliness, adaptability, empathy and politeness in group settings;
- develop productive and satisfying relationships with others based on mutual respect;
- employ a variety of strategies for constructively resolving conflicts and participate actively in reaching group decisions and meeting group goals;
- communicate ideas to justify positions, persuade others, and responsibly challenge existing procedures, policies and opinions;
- work toward agreements by resolving divergent interests and opinions;
- work effectively with women and men from all backgrounds; and
- understand the concepts of prejudice and bias, and the effect each has on interpersonal relations.

In addition to regular classroom instruction, students will receive “developmental guidance” throughout their K-12 experience that will promote good character and citizenship. The section highlighting aspects of character (page 26) further describes student competencies that are critical parts of the developmental guidance curriculum.
Understandings and Applications: 
Discipline-Based and Interdisciplinary Skills

Skills and competencies cannot be ends in themselves. Rather, they are necessary enablers of the development of core discipline-based and interdisciplinary understandings and applications. These understandings and applications provide students with the knowledge and intellectual tools to be lifelong learners, as they constitute the major content of the curriculum. While these understandings and applications have been grouped by traditional disciplines, it is important to recognize the interrelationships among the disciplines and to promote students’ abilities to transfer knowledge across subject areas.

LANGUAGE ARTS

✔ By the end of Grade 12, students will develop proficiency, confidence and fluency in reading, writing, listening, speaking and viewing to meet the literacy demands of the 21st century.

Program Goals

As a result of education in Grades K-12, students will:

- read, write, speak, listen and view to construct meaning of written, visual and oral texts;
- read with understanding and respond thoughtfully to a variety of texts;
- write and speak English proficiently to communicate ideas clearly;
- create works using the language arts in visual, oral and written texts;
- choose and apply strategies that enhance the fluent and proficient use of language arts;
- understand and appreciate texts from many historical periods and cultures; and
- employ the language arts for lifelong learning, work and enjoyment.

K-12 Content Standards

1. Reading And Responding

Students will read and respond in individual, literal, critical and evaluative ways to literary, informational and persuasive texts.

2. Producing Texts

Students will produce written, oral and visual texts to express, develop and substantiate ideas and experiences.

3. Applying English Language Conventions

Students will apply the conventions of standard English in oral and written communication.
4. Exploring And Responding To Texts

Students will use the language arts to explore and respond to classical and contemporary texts from many cultures and historical periods.

MATHEMATICS

✔ By the end of Grade 12, students will apply proficiently a range of numerical, algebraic, geometric and statistical concepts and skills to formulate, analyze and solve real-world problems; to facilitate inquiry and the exploration of real-world phenomena; and to support continued development and appreciation of mathematics as a discipline.

Program Goals

As a result of education in Grades K-12, students will:

- communicate numerical, geometric, algebraic and statistical ideas orally and in written form with models, pictures, graphs and mathematical symbols, using paper and pencil, a variety of calculator displays, spreadsheets, graphing packages, word processing and other related computer software;
- use inductive and deductive reasoning to make, defend and evaluate conjectures and arguments, to justify assertions and verify tentative conclusions, and to solve mathematical problems;
- use mathematical skills and concepts to make and justify decisions and predictions, to identify patterns and trends, to pose questions from data and situations, and to formulate and solve problems;
- identify and use connections within mathematics to identify interrelationships and equivalent representations, to construct mathematical models, and to investigate and appreciate mathematical structure;
- use mathematical skills and concepts to describe and analyze data and measurements from other disciplines;
- select and use appropriate approaches and tools for solving computational, geometric and algebraic problems, including estimation, mental computation, guess and test, paper and pencil, calculators and computers with software for tabulating, charting, graphing, drawing and transforming data and images; and
- use mathematical skills and concepts with proficiency and confidence, and appreciate the power and utility of mathematics as a discipline and as a tool for solving problems.
K-12 Content Standards

1. **Number Sense**
   Students will use numbers to count, measure, compare, order, scale, locate and label, and use a variety of numerical representations to present, interpret, communicate and connect various kinds of numerical information.

2. **Operations**
   Students will add, subtract, multiply and divide with whole numbers, fractions, decimals and integers, and develop strategies for selecting the appropriate computational and operational methods for solving problems.

3. **Estimation and Approximation**
   Students will make estimates and approximations, and judge the reasonableness of results.

4. **Ratios, Proportions and Percents**
   Students will use ratios, proportions and percents to represent relationships between quantities and measures and solve problems involving ratios, proportions and percents.

5. **Measurement**
   Students will make and use measurements in both customary and metric units to approximate, measure and compute length, area, volume, mass, temperature, angle and time.

6. **Spatial Relationships and Geometry**
   Students will analyze and use spatial relationships and basic concepts of geometry to construct, draw, describe and compare geometric models and their transformations, and use geometric relationships and patterns to solve problems.

7. **Probability and Statistics**
   Students will use basic concepts of probability and statistics to collect, organize, display and analyze data, simulate events and test hypotheses.

8. **Patterns**
   Students will discover, analyze, describe, extend and create patterns, and use patterns to describe mathematical and other real-world phenomena.

9. **Algebra and Functions**
   Students will use algebraic skills and concepts, including functions, to describe real-world phenomena symbolically and graphically, and to model quantitative change.

10. **Discrete Mathematics**
    Students will use the concepts and processes of discrete mathematics to analyze and model a variety of real-world situations that involve recurring relationships, sequences, networks, combinations and permutations.
SCIENCE

✔ By the end of Grade 12, students will know the basic concepts of, and the interrelationships among, biology, chemistry, physics, and earth (including ecology) and space sciences, and will be able to apply scientific skills, processes and methods of inquiry to real-world settings.

Program Goals

As a result of education in Grades K-12, students will:

- understand and apply basic concepts, principles and theories of biology, chemistry, physics, and earth (including ecology) and space sciences and their interrelationships;
- recognize and participate in scientific endeavors which are evidence based and use inquiry skills that lead to a greater understanding of the world;
- identify and solve problems through scientific exploration, including the formulation of hypotheses, design of experiments, use of technology, analysis of data and drawing of conclusions;
- select and properly use appropriate laboratory technology, equipment and materials, including measuring and sensing devices;
- understand and use, when appropriate, existing and emerging technologies which have an effect on society and our quality of life, including personal, academic and work environments;
- analyze the possibilities and limits of science and technology in order to make and defend decisions about societal issues; and
- understand that the way in which scientific knowledge is formulated is crucial to the validity of that knowledge.

K-12 Content Standards

1. The Nature Of Science

   Students will experience an inquiry-based learning environment in which they are free to ask questions, seek information and validate explanations in thoughtful and creative ways. Students also will understand that the processes, ways of knowing and conceptual foundations of science are interdependent and inextricably bound.

2. History Of Science

   Students will learn the evolution of scientific thought, how science has influenced culture and society, and how groups from many countries have contributed to the history of science.
3. Living Things And Their Environments
Students will understand that all organisms in the biosphere are linked to each other and to their physical environments by the transfer and transformation of matter and energy.

4. Units Of Structure And Function
Students will understand that living things share common materials and structures which perform basic life functions.

5. Relationships Of Structure And Function
Students will understand the classification and physiology of the great diversity of organisms and identify relationships of structure and function.

6. Cycles Of Life
Students will recognize patterns and products of genetics and evolution.

7. The Earth
Students will understand the processes and forces that shape the structure and composition of the Earth.

8. Water
Students will understand the water cycle, including energy transfers, the distribution and characteristics of water, and its influences on human activity.

9. The Earth’s Atmosphere
Students will understand the composition and structure of the atmosphere, including energy transfers, the nature of weather and climate, and the effect of the atmosphere on human activity.

10. The Universe
Students will understand that the Earth is a unique, dynamic member of the solar system, located in a galaxy within a changing universe.

11. Structure Of Matter
Students will know the characteristic properties of matter and the relationship of these properties to structure and composition.

12. Energy
Students will know that energy is conserved, transferred, transformed and appears in different forms.

13. Interaction Of Matter And Energy
Students will know that interactions between matter and energy can produce changes in a system, although the total quantities of matter and energy are unchanged.

14. Science And Technology
Students will understand the relationships among mathematics, science and technology, and the way they affect and are affected by society.
SOCIAL STUDIES

✔ By the end of Grade 12, students will gain a knowledge of history, civics and government, geography and economics; understand the interaction between and among history, the social sciences and humanities; and apply that knowledge and understanding as responsible citizens.

Program Goals

As a result of education in Grades K-12, students will:

- demonstrate knowledge of the structure of United States and world history to understand life and events in the past and how they relate to one’s own life experience;
- analyze the historical roots and the current complexity of relations among nations in an increasingly interdependent world;
- demonstrate an understanding of the concept of culture and how different perspectives emerge from different cultures;
- apply geographic knowledge, skills and concepts to understand human behavior in relation to the physical and cultural environment;
- describe the relationships among the individual, the groups and the institutions which exist in any society and culture;
- demonstrate knowledge of how people create rules and laws to regulate the dynamic relationships of individual rights and societal needs;
- apply concepts from the study of history, culture, economics and government to the understanding of the relationships among science, technology and society;
- describe how people organize systems for the production, distribution and consumption of goods and services;
- demonstrate an understanding of how ideals, principles and practices of citizenship have emerged over time and across cultures; and
- describe how the study of individual development and identity contributes to the understanding of human behavior.

K-12 Content Standards

History

Through the study of United States and world history:

1. Historical Thinking

Students will develop historical thinking skills, including chronological thinking and recognizing change over time; contextualizing, comprehending and analyzing historical literature; researching historical sources; understanding the concept of historical causation; understanding competing narratives and interpretation; and constructing narratives and interpretation.
2. **Local, United States and World History**

Students will use historical thinking skills to develop an understanding of the major historical periods, issues and trends in United States history, world history, and Connecticut and local history.

3. **Historical Themes**

Students will apply their understanding of historical periods, issues and trends to examine such historical themes as ideals, beliefs and institutions; conflict and conflict resolution; human movement and interaction; and science and technology in order to understand how the world came to be the way it is.

4. **Applying History**

Students will recognize the *continuing* importance of historical thinking and historical knowledge in their own lives and in the world in which they live.

**Civics and Government**

Through the study of civics and government:

5. **United States Constitution and Government**

Students will apply knowledge of the U. S. Constitution, how the U. S. system of government works and how the rule of law and the value of liberty and equality have an impact on individual, local, state and national decisions.

6. **Rights and Responsibilities of Citizens**

Students will demonstrate knowledge of the rights and responsibilities of citizens to participate and shape public policy, and contribute to the maintenance of our democratic way of life.

7. **Political Systems**

Students will explain that political systems emanate from the need of humans for order, leading to compromise and the establishment of authority.

8. **International Relations**

Students will demonstrate an understanding of how the major elements of international relations and world affairs affect their lives and the security and well-being of their community, state and nation.
Geography

9. Places and Regions
Students will use spatial perspective to identify and analyze the significance of physical and cultural characteristics of places and world regions.

10. Physical Systems
Students will use spatial perspective to explain the physical processes that shape the Earth’s surface and its ecosystems.

11. Human Systems
Students will interpret spatial patterns of human migration, economic activities and political units in Connecticut, the nation and the world.

12. Human and Environmental Interaction
Students will use geographic tools and technology to explain the interactions of humans and the larger environment, and the evolving consequences of those interactions.

Economics

13. Limited Resources
Students will demonstrate that because human, natural and capital resources are limited, individuals, households, businesses and governments must make choices.

14. Economic Systems
Students will demonstrate that various economic systems coexist, and that economic decisions are made by individuals and/or governments, influenced by markets, cultural traditions, individuals and governments in the allocation of goods and services.

15. Economic Interdependence
Students will demonstrate how the exchange of goods and services by individuals, groups and nations creates economic interdependence and change.
WORLD LANGUAGES

✔ By the end of Grade 12, students will listen, speak, read and write proficiently in at least one language other than English, and will understand the culture(s) of that language.

Program Goals

As a result of education in Grades K-12, students will:

- communicate in at least one language other than English;
- gain knowledge and understanding of other cultures;
- make connections with other areas of study and acquire information;
- understand the nature of language and cultures through comparisons; and
- participate in multilingual communities within a variety of contexts.

K-12 Content Standards

In at least one language other than English:

1. Communication
   Students will engage in conversation, provide and obtain information, express feelings and exchange opinions.

2. Communication
   Students will understand and interpret spoken and written language on a variety of topics.

3. Communication
   Students will present information, concepts and ideas to listeners or readers on a variety of topics.

4. Cultures
   Students will demonstrate an understanding of the traditions, products and perspectives of the cultures studied.

5. Connections
   Students will reinforce and expand their knowledge of other areas of study through the world language.

6. Connections
   Students will acquire and use information from a variety of sources only available in the world language, using technology, print, audiovisual, media, data and human resources.

7. Comparisons Among Languages
   Students will demonstrate an understanding of the nature of language through comparisons of that world language and their own.
8. **Comparisons Among Cultures**  
Students will demonstrate an understanding of the concept of culture through comparisons of the cultures studied and their own.

9. **Communities**  
Students will use the world language both within and beyond the school setting for personal enjoyment, enrichment and active participation.

**THE ARTS**

✔ By the end of Grade 12, students will create, perform and respond with understanding to all of the arts, including dance, music, theatre and the visual arts; develop in-depth skills in at least one art form; appreciate the importance of the arts in expressing human experience; and be prepared to apply their arts skills and understandings throughout their lifetime.

**Program Goals**

As a result of education in Grades K-12, students will:

- create (imagine, experiment, plan, make, evaluate, refine and present/exhibit) art works that express concepts, ideas and feelings in each art form;
- perform (select, analyze, interpret, rehearse, evaluate, refine and present) diverse art works in each art form;
- respond (select, experience, describe, analyze, interpret and evaluate) with understanding to diverse art works and performances in each art form;
- understand and use the materials, techniques, forms (structures, styles, genres), language, notation (written symbol system) and literature/repertoire of each art form;
- understand the importance of the arts in expressing and illuminating human experiences, beliefs and values;
- identify representative works and recognize the characteristics of art, music, theatre and dance from different historical periods and cultures;
- develop sufficient mastery of at least one art form to continue lifelong involvement in that art form not only as responders (audience members), but also as creators or performers;
- develop sufficient mastery of at least one art form to be able to pursue further study, if they choose, in preparation for a career;
- seek arts experiences and participate in the artistic life of the school and community; and
- understand the connections among the arts, other disciplines and daily life.
K-12 Content Standards

Dance

1. Elements and Skills
   Students will identify and perform movement elements and dance skills.

2. Choreography
   Students will understand choreographic principles, processes and structures.

3. Meaning
   Students will understand how dance creates and communicates meaning.

4. Thinking Skills
   Students will apply analytical and evaluative thinking skills in dance.

5. History And Cultures
   Students will demonstrate an understanding of dance in various cultures and historical periods.

6. Healthful Living
   Students will make connections between dance and healthful living.

7. Connections
   Students will make connections between dance, other disciplines and daily life.

Music

1. Vocal
   Students will sing, alone and with others, a varied repertoire of songs.

2. Instrumental
   Students will play, alone and with others, a varied repertoire of instrumental music.

3. Improvisation
   Students will improvise melodies, variations and accompaniments.

4. Composition
   Students will compose and arrange music.

5. Notation
   Students will read and notate music.

6. Analysis
   Students will listen to, describe and analyze music.
7. **Evaluation**  
Students will evaluate music and music performances.

8. **Connections**  
Students will make connections between music, other disciplines and daily life.

9. **History And Cultures**  
Students will understand music in relation to history and culture.

**Theatre**

[“Theatre” includes live improvised and scripted work as well as film, television and other electronic media.]

1. **Creating**  
Students will create theatre through improvising, writing and refining scripts.

2. **Acting**  
Students will act by developing, communicating and sustaining characters.

3. **Technical Production**  
Students will design and produce the technical elements of theatre through artistic interpretation and execution.

4. **Directing**  
Students will direct by planning or interpreting works of theatre and by organizing and conducting rehearsals.

5. **Researching And Interpreting**  
Students will research, evaluate and apply cultural and historical information to make artistic choices.

6. **Connections**  
Students will make connections between theatre, other disciplines and daily life.

7. **Analysis, Criticism And Meaning**  
Students will analyze, critique and construct meanings from works of theatre.

8. **History And Cultures**  
Students will demonstrate an understanding of context by analyzing and comparing theatre in various cultures and historical periods.

**Visual Arts**

1. **Media**  
Students will understand, select and apply media, techniques and processes.
2. **Elements And Principles**  
Students will understand and apply elements and organizational principles of art.

3. **Content**  
Students will consider, select and apply a range of subject matter, symbols and ideas.

4. **History And Cultures**  
Students will understand the visual arts in relation to history and cultures.

5. **Analysis, Interpretation And Evaluation**  
Students will reflect upon, describe, analyze, interpret and evaluate their own and others’ work.

6. **Connections**  
Students will make connections between the visual arts, other disciplines and daily life.

**HEALTH AND SAFETY EDUCATION**

✔ *By the end of Grade 12, students will have developed and maintained behaviors that promote lifelong health.*

**Program Goals**

As a result of education in Grades K-12, students will:

- recognize and practice health-enhancing lifestyles;

- use core information to analyze and evaluate health and safety issues, information and resources in order to become healthy, responsible citizens;

- strengthen communication skills and promote peaceful resolution of conflicts by appreciating and respecting others; and

- make decisions, set goals and learn to say “no,” when appropriate, in order to implement and sustain a healthy life.

**K-12 Content Standards**

1. **Healthy And Active Life**  
Students will establish and maintain healthy eating patterns and a physically active life.
2. **Injury And Disease Prevention**

   Students will avoid risk-taking activities that cause intentional and unintentional injuries or diseases. Students will demonstrate basic first aid and safety techniques.

3. **Human Growth And Development**

   Students will learn accurate information about their physical development, including human sexuality and mental and emotional health. Students will avoid behaviors that result in pregnancy and sexually transmitted diseases.

   It is the responsibility of the local school district to allow parents and guardians to exercise their right to exempt their children from instruction in human sexuality. Local school districts are responsible to develop curriculum that is presented in an age-appropriate manner.

4. **Substance Abuse Prevention**

   Students will establish and maintain lifestyles that are free of tobacco, alcohol and other nonmedicinal drugs.

**PHYSICAL EDUCATION**

✔ *By the end of Grade 12, students will recognize the importance of and choose to participate regularly in physical activities designed to maintain and enhance healthy lifestyles.*

**Program Goals**

As a result of education in Grades K-12, students will:

- demonstrate the skills and knowledge necessary to participate in a variety of physical activities;
- make decisions to establish and maintain a healthy lifestyle to promote individual wellness throughout his or her entire life;
- recognize and understand the different effects of physical activity on one’s mind and body; and
- develop interpersonal skills and exhibit positive character traits during physical activity.

**K-12 Content Standards**

1. **Physical Activity**

   Students will become competent in a variety of, and proficient in a few, physical activities.

2. **Human Movement**

   Students will understand and apply principles of human movement to the learning and development of motor skills.
3. Fitness
Students will use fitness concepts to achieve and maintain health-enhancing levels of physical fitness.

4. Responsible Behavior
Students will exhibit responsible personal and social behaviors in physical activity settings.

5. Respect For Differences
Students will exhibit an understanding of and respect for differences among people in physical activity settings.

6. Benefits of Physical Activity
Students will identify and understand how physical activity provides personal enjoyment, challenge, self-expression and social interaction.

TECHNOLOGY EDUCATION

✔ By the end of Grade 12, students will know about the nature, power, influence and effects of technology, and will be able to design and develop products, systems and environments to solve problems.

Program Goals

As a result of education in Grades K-12, students will:

• evaluate the effects of existing and emerging technologies on people and the environment over time;
• recognize the scope of technology and evaluate the impact and influence technology has on society, culture and the environment – past, present and future;
• develop and use strategies for adjusting to new technologies and changing interactions among science, technology and society;
• develop cognitive and psychomotor problem-solving skills through applied research, design, production, operation and analysis of technological systems (informational, physical and biological);
• safely and effectively use the resources, processes, concepts and tools of technology;
• create devices for solving problems, using creativity and concepts of design and technology; and
• understand the influences of technology on consumer and career choices.

K-12 Content Standards

1. Economics
Students will understand the link between technology and the economy, and recognize that link as the force behind societal emergence and evolution.
<table>
<thead>
<tr>
<th></th>
<th>Technical Impact</th>
<th>Description</th>
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<tbody>
<tr>
<td>2.</td>
<td>Technological Impacts</td>
<td>Students will understand the impact that technology has on the social, cultural and environmental aspects of their lives.</td>
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<td>3.</td>
<td>Career Awareness</td>
<td>Students will become aware of the world of work and its function in society, diversity, expectations, trends and requirements.</td>
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<td>4.</td>
<td>Problem Solving/Research and Development</td>
<td>Students will recognize technology as the result of a creative act, and will be able to apply disciplined problem-solving strategies to enhance invention and innovation.</td>
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<td>5.</td>
<td>Leadership</td>
<td>Students will identify and develop leadership attributes and apply them in team situations.</td>
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<td>6.</td>
<td>Materials and Processes</td>
<td>Students will know the origins, properties and processing techniques associated with the material building blocks of technology.</td>
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<td>7.</td>
<td>Communications Systems</td>
<td>Students will understand and be able to effectively apply physical, graphic and electronic communications techniques in processing, transmitting, receiving and organizing information.</td>
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<td>8.</td>
<td>Production Systems</td>
<td>Students will understand and be able to demonstrate the methods involved in turning raw materials into usable products.</td>
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<td>9.</td>
<td>Transportation Systems</td>
<td>Students will understand transportation systems and the environments used to move goods and people, and the subsystems common to each.</td>
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<td>10.</td>
<td>Enterprise</td>
<td>Students will demonstrate the techniques of enterprise and how they relate to product and service production, economics, human and material resources, and technology.</td>
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<tr>
<td>11.</td>
<td>Engineering Design</td>
<td>Students will be able to apply the engineering design process to achieve desired outcomes across all technology content areas.</td>
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</table>
APPLIED EDUCATION

✔ By the end of Grade 12, students will have learned how to apply the academic, critical, practical, technical, technological and employability skills needed for success in higher education and the workplace, and to manage their personal lives.

School-To-Career Transition

As a result of education in Grades K-12, students will:

- embrace work and career as a part of their future;
- acquire employability skills, including academic and technical skills;
- demonstrate positive attitudes toward work, including acceptance of the necessity of making a living and an appreciation of the social value and dignity of work;
- demonstrate attitudes and habits that are valued in the workplace, including pride in good workmanship, dependability and regular attendance;
- explore a range of careers and acquire specific knowledge or experience for one of eight career clusters – arts and media; business and finance; construction technologies and design; environmental, natural resources and agriculture; government, education and human services; health and biosciences; retail, tourism, recreation and entrepreneurial; and technologies: manufacturing, communications and repair;
- explore career and postsecondary educational opportunities through performance-based learning experiences;
- manage data and use problem-solving and analytical skills to make reasoned decisions about employment, societal, political and economic issues; and
- expect multiple career changes over their lifetime.

Preparing for Adult Life and Lifelong Learning

As a result of education in Grades K-12, students will:

- understand the implications of living in a finite world and will learn to optimize available financial, human and environmental resources;
- understand the role of systems throughout our society, recognize that systems consist of interactive, interrelated and interdependent components, and will be equipped to work within these systems;
- understand the dynamic nature of society and the universality of change, and be flexible enough to work within this context;
- build positive family relationships; and
- understand and prepare for parenting, family and child-care responsibilities.
Aspects of Character

Aspects of character are both preconditions to, and consequences of, learning. Effort, perseverance and intellectual curiosity are determinants of effective goal-setting and achievement. Respect for oneself and others influences social behavior. To contribute to the vitality of modern society, students must understand the necessity of moral, ethical and legal conduct, and strive to balance individual rights with the common good. Responsibility and integrity, and citizenship and sense of community are the foundations for constructive and productive participation in a democratic society.

The family, as well as societal forces other than schools, plays major roles in fostering positive aspects of character that are critical to the successful development of lifelong learners, productive workers and effective citizens. At the school level the guidance department has a role in developing the character of students and ensuring that these aspects of character are reinforced in all disciplines. While it is inappropriate for schools to accept the sole or even primary responsibility for developing these aspects of character, it is also inappropriate to deny the critical importance of these factors as preconditions to learning, and as consequences of the teaching of all disciplines to all students.

Responsibility and Integrity

✔ Students demonstrate a sense of ethics and take responsibility for their commitments and actions.

As part of education in Grades K-12, students will:

- demonstrate honesty, dependability and self-control;
- assume responsibility for their behavior, think before they act, consider the possible consequences on all people affected by their actions, and assume responsibility for the consequences of those actions;
- develop criteria for making informed judgments and decisions, and uphold their beliefs in order to conduct themselves in a moral, ethical and legal manner; and
- assume primary responsibility for learning, including identifying their needs and setting reasonable goals.
Effort and Persistence

Students demonstrate the effort and persistence needed to be successful in school, work and life.

As part of education in Grades K-12, students will:

- develop initiative to accept challenges and responsibilities which will help them grow and to which they can make a contribution;
- persist on their own, without the need for close supervision;
- persist until new material is mastered or until a job is done, and experience the pride of accomplishment that results from hard work;
- act through a desire to succeed rather than a fear of failure, while recognizing that failure is a part of everyone’s experience;
- take the risks necessary for fulfilling their ambitions, and persevere in the face of challenge and obstacles; and
- respond constructively to criticism, being willing and able to incorporate suggestions from others into their efforts to grow.

Intellectual Curiosity

Students actively explore the world of ideas.

As part of education in Grades K-12, students will:

- demonstrate inquiring attitudes, open-mindedness and curiosity;
- create and explore new ideas and adapt existing ideas to generate alternative possibilities;
- demonstrate independence of thought necessary for leadership and creativity; and
- pursue lifelong learning.

Respect

Students demonstrate respect for themselves and others.

As part of education in Grades K-12, students will:

- appreciate their worth as unique and capable individuals and exhibit self-esteem;
- develop a sense of their effectiveness and a belief in their ability to shape their future;
- demonstrate a sensitivity to, and respect for, the perspectives, opinions, needs and customs of others; and
- judge others on their merits and be tolerant, appreciative and accepting of individual differences.
Citizenship and Sense of Community

✔ Students are active, constructive members of the larger community.

As part of education in Grades K-12, students will:

- develop a sense of belonging to a group larger than friends, family and co-workers;
- stay informed about and participate in decisions regarding school, community, state, country and world;
- develop an understanding of the importance of each individual to the improvement of the quality of life for all in the community; and
- understand and appreciate their historical and ethnic heritage as well as the heritage of others within the larger community.