

The Public Schools of Brookline

GRADE SEVEN CURRICULUM OVERVIEW

Dear Parents and Guardians,

High achievement for all has been a core value in the Public Schools of Brookline for nearly two decades. There are many variables that contribute to a student's academic achievement, one of the most important being a strong connection between the home and school. When families support their child's learning at home, express interest in their studies, and hold high expectations for achievement, a partnership between home and school is created. We hope that this Curriculum Overview will be a useful tool for you as you support and encourage your child's academic success.

Curriculum Coordinators created this overview to highlight the concepts, skills, and knowledge central to each subject area in every grade level, K-8. This document is not intended to represent the entire curriculum for this grade; rather it provides you with the key elements taught to children across the eight K-8 Brookline schools in this grade. If you are interested in learning more about the curriculum as outlined in our Learning Expectations, visit the Public Schools of Brookline website (www.brookline.k12.ma.us).

Each year brings new learning challenges and a world of possibilities. Your involvement and knowledge about your child's school experience will help to nurture his or her learning far beyond the four walls of the classroom. As your child begins a new year in the Public Schools of Brookline, please know that we welcome your involvement and value your support.

Respectfully,

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Deputy Superintendent for Teaching and Learning

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Goals of the Public Schools of Brookline

Goal 1: Every Student Achieving

Ensure that every student meets or exceeds Brookline's high standards and eliminate persistent gaps in student achievement by establishing educational equity across all classrooms, schools, and programs.

Goal 2: Every Student Invested in Learning

Increase every student's ownership of his/her learning and achievement by using rigor, relevance, and relationships to foster a spirit of inquiry and the joy of learning.

Goal 3: Every Student Prepared for Change and Challenge

Instill in every student the habits of mind and life strategies critical for success in meeting the intellectual, civic, and social demands of life in a diverse, ever-changing, global environment.

Goal 4: Every Educator Growing Professionally

Foster dynamic professional learning communities that inspire inquiry, reflection, collaboration, and innovation, and use data to improve teaching, advance student learning, and refine the programs and practices of the Public Schools of Brookline.

SOCIAL EMOTIONAL LEARNING & BULLYING PREVENTION/INTERVENTION

The Public Schools of Brookline has created a comprehensive social emotional learning and bullying prevention and intervention program to nurture school culture and provide the knowledge, skills, procedures, and processes required to foster positive student behavior in support of learning. With the effective implementation of the comprehensive program, we envision all Brookline schools reflecting a safe, welcoming, respectful, and nurturing school culture that supports the development of all children through their preK-12 experiences.

The PSB Comprehensive Social Emotional Learning and Bullying Prevention and Intervention Program is characterized by the following program elements in the specified grade(s):

Social Emotional Learning

Social Thinking (K-12)

Responsive Classroom (K-5)

Developmental Designs (6-8)

Facing History and Ourselves (8)

Brookline High School Advisory (9-12)

Bullying Prevention and Intervention

Olweus (K-12)

Understanding Disabilities (4)

Second Step (7-8)

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EDUCATIONAL TECHNOLOGY AND LIBRARIES

The Public Schools of Brookline encourages a culture of inquiry that regularly investigates and experiments with promising new practices that engage students as 21st century learners and prepares them for the evolving global society. The Educational Technology and Library staff works in collaboration with the entire school community to help students become:

- Enthusiastic, independent readers for information and pleasure
- Independent, skillful information users who know how to access, analyze and produce information in a variety of formats using a variety of tools
- Responsible digital-age citizens
- Skillful learners and innovators who use digital tools to develop the “Four Cs”:
 - critical thinking
 - communication
 - collaboration
 - creativity

The integration of these skills is typically addressed through classroom projects within the major curriculum units of study in the core subjects. School libraries are complex hubs of student learning and engagement, with the ability to enhance all curriculum areas. Emerging technologies and near ubiquitous access creates new opportunities to deepen and extend learning, often connecting with people, resources, and perspectives beyond the walls of our classrooms.

Students in grade seven use the library to support research across the curriculum, furthering the development of their skills in abstract thinking and information literacy. Students work with both pre-selected sites and various internet search strategies. They hone their ability to find, gather, and assess new information from a variety of electronic and print sources. In addition to understanding about the ethical use of information, students are taught to evaluate their own research process and final products.

In grade seven, technology skills are exercised on a daily basis and special projects continue to provide students with opportunities to develop more advanced skills with hardware and software applications. Students regularly use technology to collaborate, provide feedback to each other, and share their work with a larger audience. Students continue to use a variety of technology resources for problem solving, communication, and presentation of thoughts, ideas, and stories.

ENGLISH LANGUAGE ARTS

Brookline’s Learning Expectations in English Language Arts meet or exceed the standards outlined in the Massachusetts Frameworks. To reach these demanding standards, Brookline educators use the *Continuum of Literacy Learning PreK-8* (Heinemann, 2011) as their day-to-day guide when teaching specific behaviors in reading and writing. The descriptions of seventh grade readers and writers below come primarily from the *Continuum*.

Reading

Students at the end of seventh grade will be able to process and understand a wide range of texts across genres in both print and online texts. Many texts will be long and have complex sentences and

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multisyllabic words. These texts will range widely as readers are expected to understand and respond to mature themes. Complex fantasy, myths, and legends will offer added challenge and require readers to identify moral issues and classical motifs such as “the quest.” Biographies feature a range of individuals who may not be previously known to readers and may not always be admirable, requiring critical thinking on the part of readers. In addition, readers will encounter abstract forms of literature such as satire and literary language to convey irony. Additional challenge may include parody, allegory or monologue. Themes and characters will be multidimensional, may be understood on several levels, and will be developed in complex ways. Most reading will be silent; fluency and phrasing in oral reading will be established. Readers will be challenged by a heavy load of content-specific and technical words that require using embedded definitions, background knowledge, and readers’ tools such as glossaries. Texts may include archaic language or regional dialect. Readers will search for and use information in an integrated way, for example using complex graphics. Readers will continue to develop knowledge of content, including scientific and historical information, and will apply prior understandings in a critical way when reading fiction, nonfiction and poetic texts. (*Continuum of Literacy Learning PreK-8*, pp. 344-345)

Writing

Seventh grade writers will develop a deeper understanding of writing for many purposes and audiences. They will select mentor texts and construct hybrid texts and multimedia presentations with authority and skill. Seventh grade writers will become more consistent in their use of conventions. They will self-evaluate and take more risks as writers. Seventh grade writers will employ a variety of fiction, nonfiction and poetic genres to tell stories; to explain to, persuade or inform readers; to express feelings; and to perform practical tasks. They will deepen their experience with the writing processes of developing and organizing ideas, drafting and revising, and sharing their work. Seventh grade writers will increase their facility with technology for both writing processes and publishing. (*Continuum of Literacy Learning PreK-8*, pp. 176-185)

MATHEMATICS

Brookline’s Mathematics Learning Expectations, built on the 2011 MA Curriculum Frameworks for Mathematics, are comprised of two main components: the Standards for Mathematical Practice and Standards for Mathematical Content. To achieve mathematical understanding, students are engaged in mathematical experiences that balance mathematical procedures and conceptual understanding.

Mathematical Practices

Two of the mathematical practices that we will be highlighting this year involve making sense of problems and constructing mathematical arguments. Seventh grade mathematicians solve problems involving ratios and rates, and discuss their strategies. Students also solve real world problems through the application of algebraic and geometric concepts. Students seek the meaning of a problem and look for efficient ways to represent and solve it, by asking themselves, “What is the most efficient way to solve the problem?”, “Does this make sense?”, and “Can I solve the problem in a different way?”

In grade seven, students construct arguments using verbal or written explanations accompanied by a variety of mathematical models, including expressions, equations, inequalities, models, and graphs, tables, and other data displays. They further refine their mathematical communication skills through mathematical discussions in which they critically evaluate their own thinking and the thinking of other

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students. They pose questions like: “How did you get that?” “Why is that true?” “Does that always work?”

Mathematical Content

Building on a foundation of operations with whole numbers, negative numbers, fractions and decimals, we focus on these four critical areas:

Ratios and Proportions: Developing understanding of and applying proportional relationships.

Rational Numbers and Equations: Developing understanding of operations with rational numbers and working with expressions and linear equations.

Geometry: Solving problems involving scale drawings and informal geometric constructions, and working with two- and three-dimensional shapes to solve problems involving area, surface area, and volume.

Statistics: Drawing inferences about populations based on samples.

PERFORMING ARTS

Seventh grade students have music (Conservatory) twice per week during which they develop the following skills:

Performing: Students will develop skills in singing, reading music, playing instruments, movement, and dramatization of music.

Reading and Notating: Students will learn to interpret and apply visual representations for the sounds they hear (musical notation).

Listening and Appreciation: Students will learn to critically respond with understanding when they describe, analyze and interpret music. Students will study music from different periods and locations.

Creating: Students will improvise and compose original works of music.

Connecting: Students will develop understanding of artistic heritage through investigation of the historical and cultural contexts of music.

Seventh graders have the option of taking one of the following Conservatory classes:

Chorus: In 6th–8th Grade Chorus, students develop their ability to sing with healthy vocal technique, read rhythms, pitches and musical markings, sing multiple part harmony, and to express themselves through singing. Students develop their abilities as individual singers and as a group. There are two evening concerts per year.

Band: 6th–8th Grade Band offers students who play wind and percussion instruments the chance to further develop their instrumental and musical skills both individually and in a larger ensemble with more sophisticated and longer works. Students prepare music in a wide variety of styles to be performed for winter and spring concerts.

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Orchestra: String students develop more advanced orchestral repertoire, focusing on the techniques and skills required to play together as an ensemble in several parts with longer and more sophisticated works. There are two evening concerts per year.

Music Production: Music production is a course designed to help students better understand musical forms, genres, literacy, and composition through the use of the computer program *Garage Band*.

General Music: Students engage in music making through a variety of approaches including rhythm activities, singing, composition and improvisation, listening and appreciation, the study of popular music history, listening analysis.

Guitar/Ukulele: Guitar/Ukulele class covers the fundamentals of guitar and ukulele for students with little or no experience, or those with some experience who want to learn more about the basics of the instrument and how to play both solo and in an ensemble.

The **Performing Arts Learning Expectations** meet the **National Standards for Arts Education** music learning outcomes that are integral to the comprehensive K-12 education of every student. Music class meets twice a week throughout the school year.

PHYSICAL EDUCATION

Seventh grade students will begin to apply tactics and strategies to modified game play; demonstrate fundamental movement skills in a variety of contexts; understand how to design and implement a health-enhancing fitness program; participate in self-selected physical activity; cooperate with and encourage classmates; accept individual differences and demonstrate inclusive behaviors; and engage in physical activity for enjoyment and self-expression.

All of the skills students learn are lifetime skills. Using "fun" as a catalyst, we try to develop, in each child, the desire to maintain a healthy and active lifestyle.

The Grades 6-8 Physical Education Curriculum was developed with the National Standards in mind; these standards describe the physically literate individual.

(<http://www.shapeamerica.org/standards/pe/index.cfm>)

In the 6-8 grade span, students work on the skill progressions within each of the following areas:

Motor Skills and Movement Patterns: Develop skills in dance and rhythms, games and sports, outdoor pursuits, and individual performance activities. The Sport Education Model is employed as students learn the many facets of sport (e.g. player, coach, official, journalist, commentator, photographer/videographer).

Physical Activity and Fitness: Demonstrate the knowledge and skills to achieve and maintain a health-enhancing level of physical activity and fitness. Students increase knowledge about physical activity, engage in physical activity, and learn to program plan. They engage in a physical fitness assessment.

Personal and Social Behavior: Demonstrate respect of self and others, including personal responsibility, accepting feedback, working with others, learning rules and etiquette, and maintaining safety.

Value of Physical Activity and Social Interactions: Recognize the value of physical activity for health, enjoyment, challenge, self-expression and social interaction.

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SCIENCE

In seventh grade science, students explore two main themes that are woven together: The History of Earth and Life on Earth. Science and engineering practices are woven throughout all of the science content, as well as the use of science notebooks and integration with the other curriculum areas.

Life on Earth: As part of the Life on Earth theme, seventh graders learn about the structure and function of living things (cells, characteristics of life, and classification), Earth's systems (cycling of matter and energy, interdependence of life), genetics, biodiversity, and evolution/adaptations. In an integrated Science/Engineering study, students create sustainable growing systems and study the concepts that have been the focus of their work.

The History of Earth: As they explore Life on Earth, students also learn about the history of Earth and its impact on life. They investigate Earth's structure, plate tectonics, and the components of the Earth system, how they have changed over time (affecting Life on Earth), and how they have been affected by human activities. The integrated Science/Engineering project for this theme involves designing and constructing earthquake resistant structures.

SOCIAL STUDIES

Students in the seventh grade social studies course of study, Ancient Mediterranean Civilizations, will begin by exploring prehistoric human life and culture. They will then investigate early civilizations to examine the origins of systems and institutions that have shaped world history. Included in this study is the exploration of systems of belief, governments, economy, art, and philosophies of the civilizations in Mesopotamia and Egypt. Students will study ancient Israel, focusing on the development of monotheism. Appraisal of the history of the ancient Greeks will enable students to deepen their understanding of democratic citizenship and logical, empirical reasoning. Finally, by surveying Roman history, students will both review efforts to disseminate the rule of law, as well as draw conclusions about the resilience of republican institutions.

Early Humans: In this unit students will trace human evolution from primates to Homo sapiens during the Neolithic revolution. Students are introduced to the science of archeology, the human family tree, and the migration of Hominids out of Africa. They will then explore human adaptation, the characteristics of human society, and the invention of agriculture and domestication of animals in settled communities.

Mesopotamia: In this unit students explore the factors that led to the development of cities and civilizations, and why this development first happened in Mesopotamia. Students learn about the characteristics of civilization, the impact of the emergence of cities, and the achievements of Mesopotamian culture. They conclude with an analysis of Hammurabi's code.

Egypt, The Centralized State: Students begin this unit by mapping the Nile basin and considering the role of the Nile in unifying Egypt. Students will then investigate such aspects of Egyptian civilization as the social structure, laws, religious beliefs, art, and architecture. They will wrap-up the unit with research into the conquest of Egypt by a succession of regional powers.

Ancient Israel: In this unit students begin by examining the geography of Israel and what we currently know about the Israel origin stories. Students then delve into the concept of monotheism and its

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relationship to the founding of the kingdom of Israel. They end the unit with an appraisal of the origins of Christianity and its central features.

Ancient Greece: When undertaking this unit, students survey the geography of the eastern Mediterranean and survey the myths and stories of classical Greece. Next, they trace the development of early Grecian cultures, culminating in comparing and contrasting Athens and Sparta. At the end of the unit students assess the accomplishments of Ancient Greece.

Ancient Rome: In this unit students begin by learning about the mythical foundations and geography of Rome. After exploring the founding of the Roman Republic, they review the struggle of the orders and the transition to the Augustan Age. Students will then assess accomplishments of various Roman emperors and evaluate the causes of the fall of Rome.

VISUAL ARTS

In seventh grade, students' visual expressions become more individualistic and imaginative. Students understand that artwork can be powerful. They are curious to know who they are, what they know and what they can do. The art curriculum combines craftsmanship and the chance to create highly personal representations. Through analysis and evaluation of visual art works and self-reflection on the creative process, students identify personal strengths and preferences, and recognize that the preferences of others may differ from their own. They gain a deeper appreciation of their own values, of the values of other people, and the connection of the visual arts to universal human needs, values, and beliefs.

Art lessons are developed to engage students in rich tasks that develop their critical and creative thinking skills, and allow them to develop artistry through deliberate practice. Students develop their artistic skills in the following areas:

Drawing: Creating compositions through mark making, lines and forms that communicate the artists' intention with multiple drawing tools

Painting: Creating a composition using paint that tells a story, expresses an emotion, suggests a feeling, develops a pattern or illustrates the relationship of colors.

Collage: Creating a cohesive composition that communicates the artists' intention by gluing multiple pieces of paper/found materials together in one image.

Printmaking: Creating a composition that transfers images using printmaking tools, stamps, stencils, and plates to other surfaces multiple times.

3D Construction: Building a form that has multiple sides, has structural integrity, and embodies the artists' vision.

Lessons have an array of beginning points: interdisciplinary work connected to grade specific themes in other curriculum studies, art history, contemporary art, and student generated curiosities. The work focuses on developing strong artistic habits of mind that develop skill and craftsmanship. The Visual Arts classes meet once a week throughout the year.

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WORLD LANGUAGE

Students in grade seven may be continuing with the elementary program language of Spanish/Chinese or starting a new language, including French, depending on the school. The middle grades world language program continues the focus on what students can *do* with the language, while also emphasizing grammatical accuracy. Near exclusive use of the target language (90%+) by both teachers *and* students is the goal, with a longer start-up period for students starting a new language. This builds on the strong comprehension strategies developed in grades K-6 and requires students to apply a variety of communication strategies to make themselves understood.

Students develop their language proficiency through multi-modal instruction with vocabulary and grammar presented in context. Students encounter language as it is used *by* and *for* native speakers through culturally authentic documents and videos. Students in grades seven and eight can handle basic, uncomplicated communication needed for daily survival; use sentences and strings of sentences to create with the language; participate in conversations, asking and answering questions about the topics they are learning. Classes meet four or five times a week for forty-five to sixty minutes, depending on the school schedule.