

The Public Schools of Brookline GRADE TWO 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. This document is not intended to represent the entire curriculum for this grade; rather it provides you with the key elements taught to all children across the 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) and look in the *Latest News and Quick Links* section on the main page.

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,

Jennifer Fischer-Mueller, Ed.D.
Deputy Superintendent for Teaching and Learning

K-8 Curriculum and Program Coordinators and Directors

Educational Technology and Libraries – *Scott Moore*
English Language Arts - *Joanna Lieberman*
English Language Learner (ELL) Program – *Mindy Paulo*
Enrichment and Challenge Support (ECS) – *Mies Boet*
Mathematics - *Karen Wolfson*
METCO – *Suzie Talukdar*
Performing Arts - *Kenny Kozol*
Physical Education - *Teddi Jacobs*
Science & Health - *Janet MacNeil*
Social Studies - *Geoff Tegnell*
Special Education – *Emily Frank and Mark Nacht*
Visual Arts - *Alicia Mitchell*
World Language - *Dawn Carney*

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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.

In second grade, students are beginning to find resources independently in a library, including the ability to identify books and online resources that are appropriate to both their reading level and age.

Information literacy skills include learning to ask relevant questions; defining information needs; sorting information in meaningful ways; and communicating new information that they have learned. Simple research strategies (i.e. Plan, Do, Review) are introduced and self-reflection becomes a part of evaluating their own information processes as well as their final products.

Technology skills are often modeled and developed through daily tasks and special projects that provide students with opportunities to develop basic skills with hardware and software. Applications often include introduction to the keyboard for writing and basic multimedia production with assistance.

ENGLISH LANGUAGE ARTS

Brookline’s Learning Expectations in ELA 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 description of the successful second grade reader and writer below comes primarily from the *Continuum*.

Reading

By the end of second grade, students know the characteristics of a range of genres (realistic fiction, simple fantasy, informational texts, traditional literature, and biography). Some of the fiction texts they read are chapter books, and readers have become interested in special forms, such as longer series books and mysteries. Fiction narratives are straightforward but have elaborate plots and multiple characters that develop and change

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over time. Students in second grade read shorter nonfiction texts, mostly on single topics, and are able to identify and use underlying structures (description, comparison and contrast, temporal sequence, problem and solution, cause and effect). They can process sentences that are complex, contain prepositional phrases, introductory clauses, and lists of nouns, verbs, or adjectives. The second grade student's word solving is smooth and automatic in both silent and oral reading; the student can read and understand descriptive words, some complex content-specific words, and some technical words. The second grade student reads silently and independently. In oral reading, students at the end of second grade demonstrate all aspects of smooth, fluent processing. (*Continuum PreK-8*, pp. 300)

Writing

Students in second grade have a strong foundation for expressing their thoughts fluently in writing. They are able to spell many high frequency words correctly, use phonics patterns to spell unfamiliar words, and write in complete sentences. In second grade they gain stamina and fluency as they write both narrative text across several pages and several cohesive sentences on one informational topic.

Second graders continue to explore a variety of written genres. They write personal narrative, short fiction and biography. They also compose informational texts about themselves, the world around them, and grade-level science and social studies topics. They learn to incorporate informational text features such as graphics, captions for pictures, and a table of contents. Poetry writing includes forms such as haiku and free verse. Second graders will write more complex written responses to their reading.

Students continue to use the writing process with an emphasis on brainstorming ideas, planning, drafting, revising and publishing.

Second graders work on polishing their handwriting. They also continue to learn more high frequency words and complex spelling patterns. Second graders begin to spell longer, more challenging words by using the sounds they hear in those words.

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 which 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. Second grade mathematicians are involved in solving problems and discussing their process. Students explain to themselves the meaning of a problem and look for ways to approach it. They may use concrete objects or pictures to help them conceptualize and solve problems. They check their thinking by asking themselves, "Does this make sense?" They think about possible solutions and refine their approach, if necessary.

Second graders may construct arguments concretely, for example by using objects, pictures, drawings, and actions. They practice their mathematical communication skills as they participate in mathematical discussions involving questions like: "How did you get that?" "Can you explain your thinking?" and "Why is that true?"

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Students not only explain their own thinking, but listen to the explanations of their classmates. They decide if the explanations make sense and ask clarifying and probing questions to help refine their thinking.

Mathematical Content

Building on a foundation of place value/grouping understanding and strategies for addition and subtraction, we focus on these four critical areas:

Place Value: Extending understanding of base-ten notation.

Whole Number Operations: Building fluency with addition and subtraction.

Measurement: Understanding and using standard units of measure.

Geometry: Describing and analyzing 2-dimensional shapes.

PERFORMING ARTS

Second grade students have music class twice a week in which they joyfully create music while developing 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.

In second grade, students continue to develop the skills learned in prior years and advance their skills in the following areas:

- Ability to accompany melody using classroom instruments
- Ability to identify instruments and instrument families
- Proper singing posture and ability to match pitch in an expanded range
- Expanded singing repertoire to include rounds and partner songs
- Ability to compose simple rhythms, tonal passages and melodies for voices or instruments
- Ability to improvise short musical passages, vocally or instrumentally
- Ability to create movement in response to musical sound.
- Ability to play more advanced parts on Orff and other instruments, and read simple music notation on instruments
- Ability to use musical terms in analyzing performances and compositions

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.

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PHYSICAL EDUCATION

The importance and value of regular physical activity is recognized for its long-term benefits as never before. Accompanying this recognition is the awareness that childhood is the time to begin the development of active and healthy lifestyles. Children need to be taught the skills, knowledge, attitudes, and behaviors that lead to regular and enjoyable participation in physical activity.

Quality physical education is both developmentally and instructionally suitable for the specific children being served. Although the grade levels are clustered in this document, our students will experience skill acquisition, physical fitness development, and social-emotional skill growth at their developmental levels. The K-2 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 K-2 grade span, students work on the skill progressions as follows:

Motor Skills and Movement Patterns: Develop static and dynamic balance, spatial awareness, travel, kicking, catching, throwing, and rhythms. Students experience the Skill Themes Approach, learning movement language and skills (such as pathways, levels, force) that continue throughout the grades.

Physical Activity & Fitness: Actively participating in a variety of activities, incorporating all components of physical fitness.

Personal and Social Behavior: Learn to follow directions and work cooperatively in a variety of Physical Education settings.

Value of Physical Activity and Social Interactions: Exposure to new skills, experiencing feelings of success and a sense of enjoyment through physical activity.

SCIENCE

In second grade science, students explore motion with balls and ramps, and then investigate where soil comes from in two connected units that focus on the role of living things in forming soil and the role of nonliving things in forming soil. 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.

How and Why Do Things Move?: In this unit, students explore how and why things move via hands-on inquiry investigations. The unit is divided into three parts: 1) pushes and pulls (introduction to what makes things move, friction and gravity), 2) the properties of balls that affect movement, and 3) explorations with balls and ramps. This unit is a basic introduction to these concepts and is the foundation for future learning in 5th grade (Sun, Earth & Moon) and 8th grade (Force & Motion).

Where Does Soil Come From? Part I: Life in a Rotting Log and Worms: As they begin to explore where soil comes from, students gather evidence from multiple sources (a rotting log outside, a rotting log habitat model in the classroom, and a worm compost bin) to observe the role of living things in creating the organic part of soil. They observe changes, making claims based on the evidence they collect. In addition, students explore the following big ideas: the needs of living things, how features of living things help them survive (introduction to the concept of adaptations), and connections between living things (introduction to the concept of systems).

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Where Does Soil Come From? Part 2: Changes in the Earth: Building on their experiences, students review their evidence from Part 1, showing that living things break down other living things to form the organic ingredient of soil (humus). Then, they explore where the other ingredients of soil come from, studying the role that water and wind have on breaking down/moving rocks to form soil. Using this evidence and the evidence they gathered in Part 1, they will make claims to answer the question: “Where does soil come from?” The unit ends with students gathering information to answer the question “Why is soil important?” and “What can we do to save soil?” (engineering connection).

SOCIAL STUDIES

Students begin their second grade social studies course of study, Places and Cultures, by exploring the basic concepts of geography, including map, globe and atlas features. Students also identify their roles and responsibilities to the communities they belong to and understand and appreciate their interdependence with others. In addition, students will become familiar with the geographies and cultures of the Hopi, Japanese, and Ghanaian people. They will use this knowledge to make comparisons between American life and the lives of others. Through research into the lives of people of distinction, students will explore the impact of life-changing events on and historical significance of these men and women.

Civics: Throughout the year students undertake activities by, for example, creating a class constitution and problem-solving about class community issues. In addition, students deepen their understanding of core American symbols and traditions, such as the Pledge of Allegiance.

Continents: In this unit students begin by reviewing the basic geographic concepts, such as map, globe and atlas features. They then map the seven continents and locate the major bodies of water in the world. Next, students will explore different types of physical features and discuss how physical features influence plant and animal life as well as human culture. They complete the unit by demonstrating their learning about continents in a culminating project.

The Hopi: This unit calls upon students to employ maps to explore the landforms and political borders in the Southwest. Students learn about the flora and fauna of the Hopi’s desert environment and examine traditional and modern Hopi houses and investigate the roles and traditions of Hopi families through stories, photos and artifacts. Students delve into the growing of the “Three Sisters” - corn, squash, beans - and look into symbols and cultural beliefs associated with Hopi agriculture. In addition, students may engage in activities centered on Hopi crafts, for example weaving, jewelry-making, and pottery.

Ghana: Students commence this unit by mapping Ghana’s vegetation and climate regions. By means of such activities as reading folktales, examining Kente cloth, and Adinkra symbols, and playing games, students learn about Ghanaian culture. Moreover, students also explore the life of Ghanaian children compared to and contrasted with their own.

Japan: In this unit students begin by locating on a map the main Japanese islands, cities, significant landforms, and major bodies of water. Students engage in activities such as listening to Japanese folktales, drawing a Japanese flag, writing haiku, singing songs in Japanese, and doing math with Japanese numbers to make inferences about Japanese culture. They also use Japanese artifacts to explore everyday life in Japan.

Biography: In the Biography unit students identify elements of a non-fiction and biography text and apply their understanding to a variety of biographies. Next, they learn to identify significant learning experiences in life that can constitute turning points and ask “what if” questions about alternate possible life decisions. They then choose a biographical subject, reading and taking notes on several books and articles about him/her. They conclude by presenting both their research and their reflections on their learning in a written product.

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VISUAL ARTS

Students in second grade joyfully create artwork. They are curious as they begin their artistic journey in the classroom - exploring and discovering all the possibilities for art making that is at the heart of visual arts instruction. Students make sense of their world by creating artwork that expresses personal experiences, ideas, and feelings. Children want to communicate their ideas and tell their stories.

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, using multiple tools, through mark making, lines and forms that communicate the artists' intention.

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.

WORLD LANGUAGE

Students in grade two continue their journey as language learners, during which they discover new words and cultures. Our K-5 elementary world language program focuses on developing oral proficiency, with lessons conducted almost exclusively in either Spanish or Chinese. This provides students with many opportunities to hear words in context and make meaning out of them without direct translation. This repetition, coupled with visual supports, develops comprehension, followed by oral production.

Lessons incorporate songs, games, books, a calendar routine and other interactive activities that provide students with opportunities to practice the language. Students in grades two comprehend far more than they can produce in the target language. They use isolated words, lists of words, or memorized phrases to respond to simple questions related to the topics they are learning about. Students expand their vocabulary, building on the themes from first grade: school and community, family, and climate, with the cultural focus on the countries of the Andes. Lessons are twenty minutes, three times a week.