Kindergarten at Muddy Brook Elementary School

Our kindergarten program focuses on the whole child. Students play, spend significant time outdoors and are contributing members of a vibrant community of learners in conversation with each other. Many units of study are interdisciplinary and include art, physical education, library and music. What follows is a brief description of primary focus areas within each core subject.

English Language Arts

In Kindergarten, a balanced literacy program includes a reading workshop, reading aloud, shared reading, phonics (word study), interactive writing and writing workshop. Kindergarten students learn language arts through the *Lucy Calkins* Reading and Writing Workshops, *Fountas & Pinnell* Phonics, *Words Their Way* Phonics and *Fountas & Pinnell* Guided Reading.

Essential Questions in ELA:

- **How do readers determine characters, problems, and events in a story?**
- **How do readers use text structure to understand meaning?**
- **How do writers explore topics and convey ideas?**
- **How do writers create effective pieces of writing?**
- **How do students demonstrate an understanding of sounds, syllables and spoken words?**
- **How do students apply phonics to read and write words?**

Reader's Workshop and Guided Reading:
Students engage in nine units focusing on reading themes such as realistic fiction & studying fictional authors, non-fiction & reading for information, and reading across genres.

Students focus on:

- Asking and answering questions about key details in a text.
- Identifying characters, settings, and major events in a story.
- Recognizing common types of texts (e.g., storybooks, poems).
- Comparing and contrasting the adventures and experiences of characters in familiar stories.
- Actively engaging in group reading activities with purpose and understanding.

Writer's Workshop:
Students engage in five units of study including personal narrative, informational writing, persuasive writing, and poetry & song.

Students focus on:

- Using a combination of drawing, dictating, and writing to compose opinion pieces in which they tell a reader the topic and state an opinion or preference about the topic.
- Using a combination of drawing, dictating, and writing to compose informative/explanatory texts in which they name what they are writing about and supply some information about the topic.
- Using a combination of drawing, dictating, and writing to narrate a single event or several loosely linked events, tell about the events in the order in which they occurred.
- Responding to questions and suggestions from peers and add details to strengthen writing as needed.
- Exploring a variety of digital tools to produce and publish writing, including in collaboration with peers.

Word Study:

Students receive explicit instruction in phonics to expand and refine reading and writing skills. Letters, sounds, and words are the keys to help children grasp and use language as a tool.

Students focus on:

- Demonstrating understanding of the organization and basic features of print.
- Demonstrating understanding of spoken words, syllables, and sounds (phonemes).
- Knowing and applying grade-level phonics and word analysis skills in decoding words.
- Decoding regularly spelled one-syllable words.
- Recognizing and reading grade-appropriate irregularly spelled words.

Mathematics

Investigations in Number, Data, and Space 3 is the K-5 mathematics curriculum used at Muddy Brook to engage students in making sense of mathematical ideas.

Essential Questions in Mathematics:

- **How do numbers help us count and compare?**
- **How do we make sense of and solve story problems?**
- **When you are counting objects, what does the last number tell you about the total quantity?**
- **What are the attributes and names of different shapes?**

Students focus on:

- Recognizing numerals to represent quantity (Counts to 100, sequences & identifies numbers 0-20).
- Writing numerals to represent quantity (numbers 0-20).

- Solving problems using a variety of strategies showing understanding of the process of addition (demonstrates basic addition skills, adding up to 10) (Writes basic number sentences, e.g. 2+3=5).
- Recognizing and sorting 2 and 3 dimensional shapes (circle, triangle, rectangle, square, cube, sphere, cone, cylinder, rectangular prism).
- Solving problems using a variety of strategies showing understanding of the process of subtraction (demonstrates basic subtraction skills, subtracting from 10) (Writes basic number sentences, e.g. 5-3=2).
- Constructing and interpreting graphs.
- Understanding concepts of measurement (standard and non-standard).

Science

The science curriculum at Muddy Brook is driven by the Next Generation Science Standards and utilizes the resources of the Full Option Science System program: FOSS. Kindergarten plans and carries out Investigations in Physical Science, Earth Science and Life Science. Kindergarten uses two main FOSS kits: *Trees* and *Animals and Two by Two*.
Kindergarten students are expected to demonstrate grade appropriate proficiency in asking questions, developing & using models, planning & carrying out investigations, analyzing & interpreting data, designing solutions, engaging in argument from evidence, and obtaining, evaluating, and communicating information.

Essential Questions in Science:

- **How do objects move?**
- **What is weather and how does it change?**
- **What do plants and animals need to survive?**
- **What are the characteristics of the four seasons?**
- **What is matter and how does it change?**

Students focus on:

Physical Science

Motion & Stability
- Comparing the effects of different strengths or different directions of pushes and pulls on the motion of an object.
- Designing a solution intended to change the speed or direction of an object with a push or pull.

Energy
- Determining the effects of sunlight on the Earth's surface.

- Designing and building a structure that will reduce the warming effect of sunlight on an area.

Life Science

From Molecules to Organisms

- Describing patterns of what plants and animals (including humans) need to survive.

Earth Science

Earth Systems

- Sharing observations of local weather conditions to describe patterns over time
- Determining how plants and animals (including humans) can change the environment to meet their needs.

Earth & Human Activity

- Representing the relationship between the needs of different plants and animals (including humans) and the places they live.
- Obtaining information about the purpose of weather forecasting to prepare for, and respond to weather changes.
- Communicating solutions that will reduce the impact of humans on the land, water, air, and/or other living things in the local environment

Social Studies

At the preschool and kindergarten level, learning in history and social science is built on children's experiences in their families, school, community, state, and country. Children listen to stories about the people and events we celebrate in our national holidays and learn why we celebrate them. They also become familiar with our national symbols. The purpose of the PreK-K curriculum is to begin the development of their civic identity.

Essential questions in Social Studies:

- **How are our lives similar and different from those who lived in the past?**
- **How and why do we use maps and globes?**
- **How do people become leaders and why do we have rules?**
- **What kinds of jobs do people have and what tools do they need?**

Students focus on:

History and Geography

- Identifying sequential actions, such as *first, next, last*, in stories and use them to describe personal experiences.
- Correctly using words and phrases related to chronology and time *(now, long ago, before, after; morning, afternoon, night; today, tomorrow, yesterday; last or next week, month, year; and present, past, and future tenses of verbs)*.
- Correctly using the word *because* in the context of stories or personal experiences.
- Correctly using words and phrases that indicate location and direction, such as *up, down, near, far, left, right, straight, back, behind,* and *in front of.*
- Telling or showing what a map is and what a globe is.
- Identifying and describing the events or people celebrated during United States national holidays and why we celebrate them.

Civics and Government

- Giving examples that show the meaning of the following concepts: *authority*, *fairness*, *justice*, *responsibility,* and *rules*.

Economics

- Using words relating to work, such as *jobs, money, buying,* and *selling*.
- Giving examples of how family members, friends, or acquaintances use money directly or indirectly (e.g., credit card or check) to buy things they want.

Social Skills

Kindergarten students and teachers use the Responsive Classroom model for social skills development. Responsive Classroom promotes community building, connectedness and a safe & respectful school climate.

Essential Questions in Social Skills:

- **How do listening and following directions help everyone learn?**
- **What are feelings, empathy, and compassion?**
- **How can we effectively manage our feelings?**
- **What are solutions for solving problems?**

Students focus on:

Skills for Learning:
We develop students' self-regulation and self awareness skills through games to promote self-awareness, class meetings, active problem solving with students, and regular exercise.

We work to develop empathy and problems solving skills.

Empathy:

- Being able to feel or understand what another person is feeling prepares students to manage their own emotions.
- Students learn skills for identifying emotions in themselves and others.

Problem Solving:

- Students who can solve interpersonal conflicts with peers are less likely to engage in impulsive or aggressive behaviors.
- Students learn problem solving steps.
- Students are steered toward selecting prosocial solutions to problems.
- Adults support student's success!

Kindergarten through Grade 4 specials

LIBRARY

Librarian: Patty Melville

Mission:

The mission of the MBE library is to raise self-sufficient, knowledgeable, joyful readers. We want students to:

- ask questions and be able to access the information that will help them solve problems
- independently satisfy their quest for fiction to enjoy
- begin to understand concepts of organization

Growing this mission requires knowing and understanding the reading needs of each student. I work to assist each student in finding 'just right fit' books s/he WANTS to read. The MBE library program also sets the groundwork for teaching k-12, library skills of the 21st century.

Essential Question:

How can reading inspire us and also help us make sense of our complex world?

The librarian also:

- collaborates with teachers and administration in order to develop classroom and school wide interdisciplinary projects.
- makes community connections with the public library, and other community services.
- makes budget choices to provide the best quality literature and nonfiction available for our student body and faculty needs. She assesses, repairs books, and strengthens areas of the library on a continuing basis.
- organizes and holds special sales for the benefit of the library and the community.

- occasionally requires homework assignments that engage students in the topics we're learning.
- writes grants and hosts special events for the school, such as author and guest visits.
- is co-leader of the PTA and serves as the Team leader for the specialists at MBE.
- works with teams on special school events such as Veteran's Day.
- provides monthly communication for the school newsletter to keep our families informed about the library program.
- develops curriculum for Project connection.
- works developing and coordinating a team of volunteers to help with clerical work in the library.
- keeps abreast of the latest library theory, trends and themes through library literature and the internet.

PHYSICAL EDUCATION

Physical Education Teachers: Jessica Pleu and Tina Soule

Schedule:

PE offers 30 classes/week servicing students from PK-4th grade. Students have PE twice a week. Two Project Connection classes are taught during the week through an extended day/flexed schedule.

Mission:

The purpose of physical education is to teach the whole student, not just their body and movement. Physical education provides the opportunity to teach students about movement, strategies, teamwork, problem solving and health related fitness. Each of these areas is addressed in the National Association for Sport and Physical Education's (NASPE) standards and is important to teaching the whole student.

Exposing students to various physical activities, sports, and methods of fitness can better provide enjoyment of physical activity, as well as build social, psychomotor, and cognitive skills. We strive to safely provide the means for students to enjoy physical activity, become more confident with their abilities, increase their knowledge of health related fitness, connect with nature, and help them find ways to be physically active.

Additional programs provided:

Winterfest
Snowshoeing
Archery
Family Hikes
Halloween Hikes/Turkey Treks

Family Dance Nights
Field Day
Special Olympics
Collaborate with classroom teachers/specialists
Integrate math, science, ELA into curriculum
Project Connection (Fit math, Crazy 8's Bedtime Math)

ART

Art Teacher : Alexandra Benton

Artists at Muddy Brook have art once per week for 45 minutes. Pre-K and Early-K have studio art twice per week. Ms. Benton meets with 26 classes per week, plus one, hour and a half Project Connection group through our extended day flexed schedule.

Mission and Curriculum:

Our art studio is a student- centered choice based learning environment. That means children are treated as artists. Their ideas and questions are respected, supported, nurtured and celebrated. Learning is the goal of the child's art experience- the artwork itself is a wonderful by-product and at the same time the driving force of problem solving, perseverance, satisfaction and joy.

Students enjoy a structured routine with freedom to work with their own ideas. Artists come into the studio and meet with Ms. Benton as a group to learn about concepts and techniques and experience a short demonstration. The mini lessons are less than ten minutes and structured in units. Often a quality storybook, informative video clip or work of art is shared to connect learning objectives and visual literacy with cross curricular learning. Then learners are off to work at various centers around the room with teacher support, questions and encouragement.

Studio centers act as 3D lesson plans that the students access for materials, information and inspiration. One group may work on newly presented material, while others continue with works in progress. Some students work in small groups with Ms. Benton, a volunteer, or a classmate with successes to share. Sometimes the teacher assigns a "have to" project to target specific learning goals and build artistic experience and skills. As this work is happening, artists are creating artwork

that builds expertise, solves problems, and stretches abilities to think, create, reflect and share. Close to the end of class children clean up and if time allows share and celebrate their ideas, frustrations and discoveries.

Muddy Brook's art curriculum supports state and national learning standards and is based on Teaching for Artistic Behavior (TAB) a choice-based art education approach which enables students to experience the work of the artist through authentic learning opportunities and responsive teaching (http://teachingforartisticbehavior.org). Our learning goals are based on the Artist Habits of the Mind, developed by the president and fellows of Harvard College.

Students focus on:

- Skills and techniques to build their knowledge of art methods and materials.
- Art history, styles and artists which connect to their classroom studies and personal artwork.
- Learning to experiment, problem solve, think, build, reflect and share.
- Connecting art to other learning building understandings outside of art making.
- Seeing that there are multiple ways to learn, be successful and show understanding.
- The idea that everyone can be an artist. Everyone can learn.

MUSIC

Teachers: Kim Chirichella, Juraye Moran and Sunhwa Reiner

Schedule:

All Muddy Brook students have one general music class and one performance music class per week. The orchestra program is offered to 3rd and 4th grade students and the band program is offered to 4th grade band students. The chorus program is offered to 3rd and 4th grade students. Instrument lessons are also available within the school day for 3rd and 4th graders.

Mission:

The mission of the MBE music program is to advance music education by encouraging the study and making of music by all.
This mission statement will be put into practice by:

1) Ensuring that all children will be enrolled in a music class from Pre-K to 4th grade.
2) Ensuring that all children will participate in a performing ensemble from 3rd grade and 4th grade
3) Ensuring equity in access to music.
4) Maintaining our reputation as the magnet music department in the county.

Essential Question:

How and why do people create music?

The Music Teacher(s) also:

- Develops curriculum highlights standards of performance, listening and evaluation.
- Makes budget decisions to provide the best materials and literature for the students
- Repairs instruments.
- Organizes the Instrument Rental Program for the band and orchestra
- Presents seven concerts throughout the year highlighting the performance abilities and curricular learning of all students.
- Provides a monthly newsletter to keep families updated on the music curriculum and music events
- Represents the district at various music education professional opportunities, such as state and/or national performances, professional development, etc.

Students focus on:

The music standards focused on in these early years are creating, performing and responding, with the goal for all students to achieve a level of understandings and skills in music which will prepare them for lifelong involvement as an audience member and/or performer. These music standards also reinforce good character education lessons, such as being a team member, taking turns, sharing, listening and much more.

Through listening lessons, play, exploration, games, singing, and playing instruments, students are introduced to basic music concepts and encouraged to enjoy music free of critique. The concepts of keeping/feeling beat, playing different rhythms, singing in tune/matching pitch, early music notating and reading, singing songs and learning how to listen to a variety of music from different cultures/recorded music and how it relates to our daily lives, are the primary areas of lessons.

The 2nd grade music curriculum begins the year by focusing on singing and rhythm literacy. The students also learn about the families of instruments with the "Instrument of the Day" unit. Later in the in year the students learn the basics of note reading by playing the boomwhackers and recorders. The 2nd grade perform two concerts.

The 3rd and 4th grade music curriculum begins the year by intense focus on composition. The students learn the basics of notation and compose short pieces that they perform for their class. Later in the year they continue their creative exploration with the use of iPad apps to mix and record short pieces. The 3rd and 4th graders study Classical and Jazz music history, focusing their

analytic listening skills as they learn about different eras of music. The students perform two concerts. The Winter Concert involves a musical, acted and sung by the entire 3rd and 4th grade

The 3rd and 4th grade Select Chorus is a group of about 40 students who focus on learning advanced choral technique and literature. They perform at the annual Berkshire Hills Choral Festival with the middle school and high school choruses as well as at the Spring Concert.

Muddy Brook has a vibrant instrumental music program! The Muddy Brook Band (4th graders) and Orchestra (3rd and 4th graders) learn the basics of playing an instrument and perform at both concerts as well as the Spring Strings on Tour performance. Most students rent instruments from Gerry's Music Shop, though some bring instruments from home or use school loaners. Band and String students have one lesson per week (usually before the school day) and fill out home practice charts. This program provides the foundation for the outstanding instrumental music programs throughout the district.

TECHNOLOGY (starts in Grade 1)

Teacher: Erin Candee

Schedule:

Technology instruction at Muddy Brook begins in 1st grade and continues through 4th grade.

Curriculum:

During technology class students explore the following topics/activities: digital citizenship, application of digital tools and technology basics, word processing, age appropriate keyboarding, presentation software, introduction to coding/computer programing, and online learning sites. In addition to that, K-4 students have the opportunity to come to "open lab" times to working on reading and math programs and special projects with their teacher throughout the year.

Students focus on:

Digital Citizenship:

Our comprehensive curriculum is designed to empower students to think critically, behave safely, and participate responsibly in our digital world. Units focus on internet safety, privacy and security, information literacy, and relationships & communication. Each designed to be developmentally appropriate for each grade, building on each other as students' progress from 1st -4th grade. Units consist of formal lesson plans, videos, student interactives, and assessments. As well as family outreach materials. A primary resource for this work is Common Sense Media.

Keyboarding:
We began a new keyboarding program this winter called, Keyboarding Without Tears. This is a multisensory curriculum that teaches pre-keyboarding, keyboarding, digital citizenship, and general computer readiness skills.

Keyboarding Without Tears has been awarded a Seal of Alignment for Readiness by the International Society for Technology in Education (ISTE).

Here are some of the highlights of this curriculum:

- Developmentally appropriate by grade levelhttps://www.hwtears.com/kwt/grade-levels
- Easy to learn, with fun, game-based engaging activities
- Developmental progression of skills
- Unique focus on pre-keyboarding motor skills
- Simplified approach to correct finger placement and two-handed typing
- Fun, integrated words per minute and accuracy Spot Check
- Web-based for classroom and school-to-home connections

Scratch Jr.:

Students in grade 1 & 2 work with this introductory programing language developed by MIT, through the use of their web based app on iPads. This program allows students to learn to think creatively, reason systematically, and work collaboratively. As students code, they learn how to create and express themselves with technology, not just interact with it. In the process students learn how to create their own interactive stories and games.

Lexia Reading:

Lexia is a comprehensive, technology-based reading program providing structured, sequential, scaffolded instruction covering six areas of reading: phonological awareness, phonics, structural analysis, automaticity/fluency, vocabulary, and comprehension. This program is introduced in kindergarten and supported throughout 4th grade during Technology throughout the year.

Design Squad Global:

This website is an online community that grew out of the DESIGN SQUAD television series that aired on PBS KIDS. Students in grades 3-4 were introduced to this site as part of an Engineering mini unit focused around Engineer's Week. The site targets kids ages 8 and older and features creative activities, engaging video, interactive games, and contests focused around engineering.

The goal of Design Squad is to give students a stronger understanding of the design process, and the connection between engineering and the things we all use in everyday life. Students have the opportunity to apply their digital citizenship lessons as they learn how to navigate this web based

community. In the process they develop a greater understanding of the power of engineering and what it looks like to be a creative problem solver, an innovative thinker and a team player.

New in 2016-2017

Lego WeDo and Lego Robotics!

Kindergarten Pacing Guide

	Reading: Fountas and Pinnell	**Writing: Lucy Calkins**	**Math: Investigations III**	**Science: Full Option Science System (FOSS)**	**Social Studies: (through literature)**	**Social Skills: Responsive Classroom**
September	Exploring the Exciting World of Books	Launching the Writer's Workshop	Developing Cardinality & Counting Objects	Making Obs. & Asking Questions Seasons	Building Classroom Community	Skills for Learning
October	Read, Think, and Talk about Emergent Story Books			Trees 5 Senses	Building School Community	PBIS (Positive Behavior Interventions and Support
		Writing for Readers (Narrative)	Counting and Comparing			
November	Use All our Powers to Read			Movement: Push and pull Trees: Observing seasonal changes	Family	Empathy
			Geometry			
December	Study Patterns in Books			Physical Science: Solid and liquids	Family Traditions	
January	Teach Yourself and Others to Use All You Know to Read	Poetry and Songs	Measurement	Weather: observing and describing local patterns Trees	People in American History	Emotional Management (Second Steps)
February	Reading for Information	How-to-Books (Informational)		Characteristics of Animals (Animals 2 by2 Foss)	American Symbols	
			Addition and Subtraction			
March				Animal Observations and the interdependent relationships in ecosystems	Community Helpers	Problem Solving
April	Encountering Hard Words and Tricky Parts in Books	Persuasive Writing of All Kinds		Observing Seasonal Changes (Trees)		
			Data			
May	Getting to Know characters by performing	Writing Celebrations Yearly Wrap-Up	Strengthening Understanding & Fluency	Animals, plants and the environment	Exploring Maps, Globes & Geography	Re-Teaching
June	Reading Across Genres			Engineering is Elementary	Putting Events in Sequential Order	

Kindergarten at Muddy Brook collaborates to create exciting field trips and special projects for our students.

Some partnerships have included:

Taft Farm

Flying Cloud Science Institute

IS 183 art studio

The Berkshire Museum

Dr. Cassandra Jones, dentist

Project Sprout

MMRSD greenhouse program

Mahaiwe Theater

Great Barrington Fire and Police Departments

Lenox Garden Club

Ward's Nursery