

SPECTRUM

A COMMUNITY OF LEARNERS COMMITTED TO EXCELLENCE



National *Blue Ribbon* School

WELCOMING WONDERS

FOR STUDENTS K-5

FLIPPING FOR FLIPGRID

AT WAMPUS ELEMENTARY SCHOOL

THE TECH TREK

AT HCC MIDDLE SCHOOL

THE GROWTH

OF INTERDISCIPLINARY COURSES

MUSIC DEPARTMENT

PROCESS AND PERFORMANCE

THE EMOTIONAL SUPPORT

OF BYRAM HILLS PSYCHOLOGISTS

REGENERON SCIENCE

TALENT SEARCH WINNERS



analyzes the text and works carefully on the vocabulary words. Listening comprehension exercises are done through read-alouds from rich, authentic stories and informational selections from award-winning authors and illustrators.

Wonders includes the best of blended learning. Every print resource is available digitally so that it can be utilized from home or school. The program consists of thousands of books, hundreds of interactive games, videos, songs, research projects, and a myriad of optional resources to extend or create lessons and respond to students' interests and needs. "There are many critical thinking questions and a lot of going back to the text to support the answers and to find evidence," said Ms. Pui Cheung. "This is new for our students and a skill that you would see in higher grades." The program is different from what students have had in the past, but they are adjusting well.

"During instruction, I log on to Wonders, pull up the lesson of the day on the big screen so the class can see, and model the thinking," said Ms. Cheung. "I can show them how to pull out a detail and write it underneath the paragraph, and then they do the same." The program provides all of the necessary resources and includes activities focused on word work, spelling, and phonics. "A nice attribute that Wonders incorporates is social studies and science," Ms. Cheung shared. "In realistic fiction, we talk about cultures around the world, and that is great for students. It is truly integrated learning."

There is also an assessment component to this program that monitors comprehension progress to evaluate student growth every few weeks and identify difficulties. The most vital part of the Wonders program is the online component. "On any given day, a child may have to stay home, but they will not miss out on the instruction because they have online access," said Ms. Cheung. "That gives us all such a sense of peace and is the strength of this program."

To provide the ability to pivot from in-school to remote learning at any time, and to offer students a strong educational experience in English Language Arts, an online learning program was imperative. Wonders provides Byram Hills K-5 learners the tools they will need for academic success.

"Lessons place an emphasis on listening, speaking, reading, and writing skills."

The program Wonders was adopted by Byram Hills to foster a love of reading in grades K-5 by providing a comprehensive set of connected resources. Wonders offers instruction specifically designed to create experiences that increase student engagement, build language skills, and inspire confidence. The lessons place an emphasis on listening, speaking, reading, and writing skills. These skills improve academic and social language and accelerate student progress.

Every student has a reading/writing companion and a literature anthology book that is colorful and appealing to children. It is broken down by genre, each opening with an essential question that students think about as they study. Genres always begin with a shared read. It takes several days to get through an article because the class closely

FLIPPING FOR FLIPGRID AT WAMPUS

The Wampus third grade students are doing flips over the extremely hands-on technology that brings classes and cohorts together as a community. Flipgrid is a website that allows teachers to create grids to facilitate video discussions. Each grid is similar to a message board where teachers can pose questions and students can post video responses. The Flipgrid website helps amplify students' voices and allows learners to engage and share through the power of video.

"In third grade, we value the classroom community, and we empower everyone to have a voice," said Ms. Suzanne Milano. "The pandemic somewhat hindered our opportunities to connect, so we looked for ways to help acclimate students - Flipgrid seemed like the perfect solution."

In August 2020, the teachers produced a video of themselves so students and parents could meet them virtually and introduce the technology. In the next video, students participated in "Behind the Mask" where they had a chance to see each other without face covers, as the videos are created at home. "I like Flipgrid because you can see your friends, and it is fun to watch their videos," said third grader, Jenna Kaplan.

Students have the opportunity to bring their home into the school setting. Viewers get a glimpse of siblings, their home, and even family pets. "I like that they take time to plan, record, edit, and then present their video," said Ms. Milano. "It is so nice for classmates to discover new things about each other in this way."

October's theme was Halloween, which allowed students to share their costumes, decorations, favorite candy, and activities. "I liked the October Flipgrid best because I told everyone about my Halloween witch that lights up," said third grader, Joseph Lentz.

"Flipgrid brought everything alive in the classroom," said third grade teacher, Ms. Paula Arietta. "Students love to exchange information at this age and they grasp the technology so quickly." The theme for December was the holidays. Students shared decorations, gifts, family customs, and various holiday plans and received enthusiastic responses from their



classmates. "My December Flipgrid was my favorite so far," said third grader, Colette Weiss. "I showed my Elf on a shelf, and I loved seeing the comments people made about my video." Other students showed Christmas trees, menorahs, holiday lights, and even homemade cookies.

"For my class, which is two classrooms, it brings the cohorts together," explained Ms. Arietta. "It ignited a spark between the two rooms and generated great discussions. Flipgrid is a definite keeper after Covid." Through Flipgrid videos, students are confident, relaxed, and can be themselves.

This type of communicative technology is a window into students' lives that might not be seen otherwise. "When you give children a voice, it boosts their self-esteem," said Ms. Milano. "They feel more valued because they are part of a classroom community where they feel comfortable enough to take risks academically and socially."

Scenes from Grade 3 Flipgrid videos.

"We value the classroom community and empower everyone to have a voice. This boosts self-esteem."

THE TECH TREK AT HCC MIDDLE SCHOOL

The essential question at H.C. Crittenden Middle School focuses on active learning, risk-taking, rigor, and wellness. “Technology has allowed us to support the areas we think are so important,” said Ms. Kim Lapple, HCC Principal. “By incorporating technology into our curriculum, we have provided a program for all students that keeps them engaged in their learning.”

“When we first transitioned to online instruction in the spring of 2020, I had to change my approach to teaching mathematics overnight,” said HCC math teacher, Ms. Tori Barthel. “We found that the Google extension Kami met our needs. Kami is an educational PDF and document annotation application. This technology is used as a digital pen and paper to improve productivity and collaboration by using interactive tools. Students are able to edit math documents and hands-on worksheets quickly and efficiently. As students became comfortable with the extension, we watched the quality of work improve and witnessed the simple joys of playing with color and font,” said Ms. Barthel. “During hybrid instruction, we have re-embraced paper and pencil for some assignments, but integrating Kami and giving students the freedom of choice continues to be a great motivator.”

Nearpod is another innovative technology that HCC students and teachers are successfully utilizing to make lessons interactive. “I am using Nearpod to engage students remotely and in-class,” said sixth grade teacher, Ms. Mary Staudt. “They can watch preselected videos, play games that reinforce content, and complete assignments.” Teachers create lessons that contain quizzes, videos, and collaborative projects accessible through a code. The teacher moves the class through the work, allowing student interaction as they proceed. Teachers can also opt for the Student-Paced mode, which controls the lesson’s flow or the Teacher-Paced mode for full classroom activities. Ms. Staudt said, “Students respond to questions on a message board or privately and look forward to assignments taught through Nearpod.” Students participate in activities together, as a class, which has been a positive learning experience and community builder.

In Grade 7, social studies teachers pivoted the Revolutionary War Monologues unit to reflect pandemic restrictions. Students used various forms of technology to create smart, educational, and entertaining presentations. “As in the past, students choose an individual from the Revolutionary War time period to study,” said social studies teacher, Ms. Stacey Iskovitz. “Their person’s defining moment was organized through Research Padlets, a web application on a digital wall.” These were color-coded notes with areas for facts, questions, and teacher comments. Students used a Peer Editing Padlet, another useful technology tool, to provide feedback on their monologues.

Students videotaped their presentations at home using props, scenery, and costumes. The teachers created screencast guidelines and were given instructions via Zoom for virtual backgrounds and a teleprompter application. “Students’ monologues were recorded on different devices, but everyone’s final performance was uploaded to Flipgrid, a video sharing interactive technology tool. Seventh-graders and teachers had a pajama party in class to binge-watch the presentations,” said Ms. Iskovitz. “Although we were dealing with restrictions this year, the addition of technology helped make for a rich and memorable experience.”

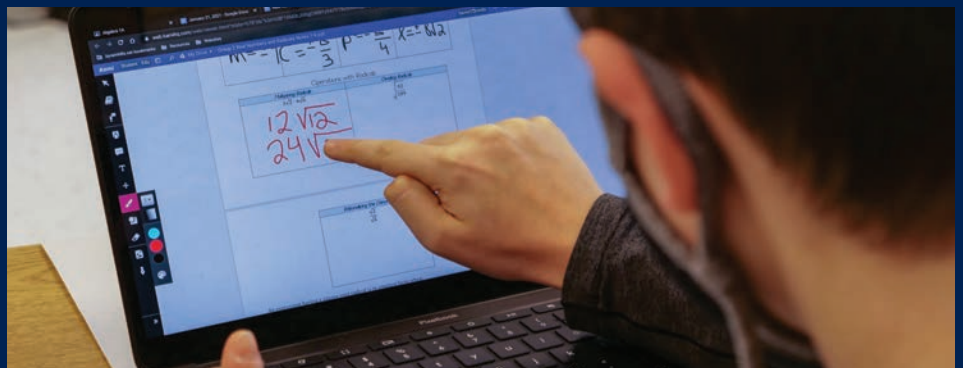
Teaching chorus requires creativity and reimagination during a time when singing is not permitted in schools. HCC chorus teacher, Ms. Kate Smith, said “My goal has been to preserve the sense of community and camaraderie critical to social and emotional growth and, at the same time, teaching the performance and literacy skills necessary as a member of an

ensemble.” The technology tool that most supports the choral program at HCC is Flipgrid. “I have used it to post assignments to the class board where students submit a clip of themselves singing,” said Ms. Smith. “They create filters and emojis into their screenshots and videos, providing a fun, non-threatening way to sing.”


Another program, Music Prodigy, allows students to practice and receive immediate feedback. “It aligns with our music literacy curriculum, assigning short musical examples for students to practice and submit,” said Ms. Smith. The program gives students feedback that is critical, but limited in the current learning environment.

Teachers at HCC are using the program GoGuardian to monitor student progress and communicate with students privately during classes. GoGuardian Teacher is the chat feature that allows teachers to send messages to specific students or the entire class. “Screen monitoring is another handy feature,” said HCC technology teacher, Ms. Dawn Selnes. “It is difficult for teachers to see what students are doing behind their screens, and GoGuardian Teacher allows a window into their devices and can determine whether they are off-task or need help.” Students’ screens are seen in real-time enabling teachers to redirect the student, if necessary. Teachers can close and push out tabs for students when they see they are struggling to stay focused or while searching a topic online. “Many teachers have reported GoGuardian Teacher as a ‘game-changer’ for hybrid and remote learning,” said Ms. Selnes.

The essential question is alive and well in HCC and being addressed throughout the building. “Although this has been a big learning curve, our staff has embraced technology brilliantly,” said Ms. Lapple. “We are confident in the education we offer because of the strong partnership between students and teachers.”



Kami in action at HCC.



THE GROWTH OF INTERDISCIPLINARY COURSES

The Byram Hills community is always asking, “What will it take for its students to be productive and responsible citizens of the 21st Century?” It has recently become more apparent that the world is more interconnected and interdependent. To continue to prepare students, the high school faculty has started to create new courses focused on interdisciplinary learning.

Teachers have collaborated to combine elements from traditional courses, such as English, Art+Design, and Social Studies. This holistic approach weaves together topics from different content areas in a way that has tangible, real-world applications.

Multimedia Journalism focuses on writing skills, editing, web and print design, podcasting, storytelling, ethics, and privacy. “We wanted to give more choices in the English curriculum in addition to grade-level and advanced placement courses,” said Duane Smith, Byram Hills English Chairperson. “This course was cemented by the idea of an authentic experience for students.” The most significant responsibilities are producing the yearbook (The Arch) and providing newspaper content (The Oracle). The advisors were already in place, making it the perfect fit. Teachers, Catherine Eshoo, English/Oracle Advisor, and Amy Menasche, Art/Arch Advisor, knew their skill sets would complement each other and spent the summer collaborating and developing the class.

“I like that this class allows me to express my creative side and that there are no strict rubrics to follow,” said Matthew Quintiere, Byram Hills senior. Unlike most traditional writing or English courses, Multimedia Journalism allows students a unique opportunity to write creatively for different audiences. “Students choose their topic and

article style from club profiles to sports stories and conduct interviews in person, through email, or by phone,” said Ms. Eshoo. “They are fully entrenched in the writing process and learning the value of revisions.”

Breaking away from the conventional educational style, and exposing students to real-world skills and challenges is among the top priorities of these courses. “Students will always need to be good communicators, well-organized, and have the courage to approach people, which will transfer to any future job,” said Ms. Menasche.

Another new interdisciplinary class, Race, Class, and Culture, aims to combine English and social studies components to deepen the understanding and perspective toward other cultures. Co-taught by social studies teacher, Mr. Ruben Torres, and English teacher, Ms. Jessica Shaw, the class studies literature and history and models a college freshman humanities seminar. “We had the opportunity to visit other schools that were offering similar classes,” said Ms. Shaw. “Then we spent a year creating the class to offer students an exceptional educational experience.” There is so much content to draw from, past and present, making the class very timely. “We cover things more

expansively than in Regents History, and I think the students appreciate that,” said Mr. Torres. “We are not on a quest to rush through content.” The discussion-based class begins with teaching students what respectful discourse looks like. They work on ways to approach emotional and passionate topics, generate productive conversations and handle opposing views. “I am thankful for how this class opened my mind and taught me that it is okay to respectfully have a different opinion than my classmates, without either of us being wrong,” said Byram Hills senior, Drew Siskin.

Teachers set aside time for “hot topics” where students propose current events and vote on what to discuss for critical takeaways. Students choose an issue that compels them, and then writes an argumentative paper reflecting their perspective. “The teachers made this class fascinating by using current events and pop culture to spice up their lessons and keep us engaged,” said Drew Siskin.

Offering unique and relevant classes that students are excited and motivated about fosters a love of learning. Byram Hills has successfully introduced two interdisciplinary courses this year that teachers will tweak and expand upon in the coming years.



Race, Class, & Culture hybrid discussion.



THE MUSIC DEPARTMENT PROCESS AND PERFORMANCE

Byram Hills has been working diligently across the four schools to keep music and the arts alive and robust throughout the pandemic.

"This has been an opportunity for us to reflect upon the process of music," said Pete Pauliks, Director of Fine Arts. "We must remind ourselves what gave us goosebumps the first time we heard a performance or performed ourselves. It's that glimmer in a student's eye and the magic of music that we want to recreate for students."

Young musicians are ungaurded, uninhibited, and free from the pressure of having to do things right or perfect. They can explore, experiment, laugh, be silly, and use their imagination without boundaries. The pressure of performance has an impact on that joyful process, as students mature and the musicianship and interpretation often diminish. Byram Hills is evaluating the musical experience, as they want to deliver authentic, hands-on participation. "We can press pause with music education and reimagine what this could look like. Teachers are reinventing and giving students a voice to play a bigger role," said Mr. Pauliks.

COVID-19 has allowed for contemplation of the musical process and has removed some of the pressure associated with performances. Teachers have more time to focus on beginning skills such as finger, hand, and arm positioning, posture, and why these skills are important. The silver lining is that lessons have been reconstructed to teach the importance of reading, understanding, and interpreting musical notes. "We want to excel and stay competitive, but we don't want to lose the excitement of experiencing music from the inside out, the way we do at the primary level," said Mr. Pauliks. "How can we reignite that fire that we once saw in students when they were first learning? Music is about the joy, figuring it out, the lightbulb moment, the feeling of community, trying and succeeding, and crossing the finish line, but in a different way."



Teaching incorporates exploring, discovering, and tapping into something. Music classes include collaborating and building critical, transferable skills. "We develop this through a process - the why and how. We can take our time and dig deeper into the nuances of music," said Mr. Pauliks. Teachers at every grade level have been spending more time on basic musical concepts such as beat, rhythm, and harmony.

Byram Hills talented and resourceful music teachers have created student opportunities to perform virtually. Students and teachers are doing incredible work coordinating solo performances from home, and then editing them into ensemble pieces.

Each of the school's music teachers have discovered new technologies to engage learners effectively. The SmartMusic Accompaniment platform enables students to play along with a song that incorporates all band sections and allows students to mute their instruments to hear the band and accompany the track. Listening to the tempo of the track changes makes performing solo less isolating. This virtual music experience mirrors an authentic experience.

Quaver Music is a new interactive music program for grades K-5. Teachers can choose activities, tasks, and lessons through Google Classroom. It also offers tools on basic musical knowledge and includes features such as Class Play, which allows students to practice songs. These resources supplement the music program and will continue beyond the pandemic as they allow for differentiation, skills reinforcement, and an enhanced learning environment.

The Music Department's fundamental elements are centered around teamwork and group experiences and provide students with a well-rounded education that builds self-esteem and prepares them for a bright future. The Byram Hills Music Department continues to strike the right chords.

THE EMOTIONAL SUPPORT OF BYRAM HILLS PSYCHOLOGISTS



[From left to right] School Psychologists Jaime Karp (CH), Yvette Thompson (WA), and Deena Horvath (HCC).

School psychologists are uniquely trained and qualified to socially, emotionally, and academically support students. They also consult with teachers on the best way to help with student success in the classroom. Byram Hills is fortunate to have five outstanding psychologists who, through compassion and guidance, ensure that their students' emotional and academic issues are appropriately addressed.

At Coman Hill, Ms. Jaime Karp has been working with both students and parents for 12 years. "Many parents need assistance in the area of occupying and educating their young children while keeping everyone safe," she shared. "I love that every day is different and that I have the potential to impact students and their families positively." Ms. Karp is continually called upon to help students with anxiety, behavioral, or mental health concerns.

Dr. Yvette Thompson has been the school psychologist at Wampus for 17 years. Ms. Thompson said, "I help teachers, parents, and students understand their strengths and weaknesses. Academically, we paint a picture of what a prescription for learning might be." Dr. Thompson addresses COVID-19 and how it creates feelings of anxiety and discomfort among many families. Dr. Thompson said, "Wampus is doing an extraordinary

job of building community and making sure that students are connected in their pods."

At H.C. Crittenden, Ms. Deena Horvath, like her colleagues, wears many hats. "You need to rotate what is at the top of your priority list every day," she said. "Being a voice for the students is important because some do not know how to share their feelings or advocate for themselves." It is clear how much Ms. Horvath enjoys witnessing the growth and progress of her students from grade six to grade eight. "Hearing that your past students are independent and successful and knowing you played a role in their development is why I do this," she shared.

Dr. Carolyn Lanfredi has been with Byram Hills for 12 years and helped establish the Flexible Support Program. She works with students needing counseling support. "If you are part of this program, the resource room is built into your schedule. My office is right there, so students can pop in any time," said Dr. Lanfredi. "A sense of a safe place is essential, and I offer that to my students. They know they can come to me, and there is no judgment."

Dr. Ellen Medd worked at Wampus for 27 years before moving to Byram Hills High School two years ago. To reconnect

with students from Wampus and see their growth is a unique experience. "The pandemic has brought many stressors," Dr. Medd shared. "Testing is complicated, and conducting meetings through Zoom often misses interpersonal connections. Social isolation is challenging for high school students, as well." Dr. Medd is also the chairperson for the CSE & 504 Committees at the high school.

Dr. Medd collaborates with Social Worker Ms. Annie Kelly, Student Assistance Counselor Ms. Bernice Pagan, and Dr. Lanfredi in a group known as the Emotional Wellness Support Team. Their goal is to support students, families, and the larger school community and identify struggling students and ensure they receive appropriate attention and support. The team routinely collaborates with administrators, teachers, and parents to assess each situation.

The Byram Hills school psychologists work as a dedicated team that includes teachers, guidance counselors, and social workers. In addition to assisting children with special needs, they make certain that all students thrive in school and beyond. These five extraordinary and compassionate professionals are part of what makes Byram Hills a great place to learn.



[From top to bottom] BHHS School Psychologists Carolyn Lanfredi and Ellen Medd.



BYRAM HILLS SCHOOL DISTRICT
10 TRIPP LANE
ARMONK, NY 10504

Board of Education

Mr. Ira Schulman, President
Mrs. Mia DiPietro, Vice President
Mr. Jason Berland
Mrs. Lori Kanner
Mr. Scott Levy
Mr. Michael Sanders
Mrs. Lara Stangel

Superintendent of Schools

Dr. Jen Lamia

Deputy Superintendent

Dr. Timothy Kaltenecker

Assistant Superintendent for Business and Management Services; District Clerk

Mr. Kelly E. Seibert

Assistant Superintendent for Human Resources

Ms. Gina Cunningham

Our Mission

In an environment of mutual respect, the Byram Hills School District and its community will provide students with the means, the knowledge, and the opportunity to excel in order to become productive and responsible citizens of the twenty-first century.

"A great place to learn."

NON-PROFIT ORG
U.S. POSTAGE

PAID

WHITE PLAINS, NY
PERMIT NO. 4402

Byramhills.org | BobcatTV.org

Follow us  /byramhills  /byramhillscsd  /byramhillscsd
Published by the Byram Hills Media Center

REGENERON SCIENCE TALENT SEARCH WINNERS

Byram Hills is proud to announce that six members of the class of 2021 were recognized as semifinalists and one as a finalist in the 80th Regeneron Science Talent Search. This talent search is the most prestigious science and math competition in the nation. Olivia Canter, Mia Dittrich, Bailey Goldstein, Ali Hafez, Jared Ilan, and Raquel Kanner were chosen from a pool of 1,760 students and received \$2,000 for their school to support ongoing research.

On January 21, Jared Ilan became one of 40 finalists based on his projects' scientific rigor and potential to become a world-changing scientist and leader. Jared has been awarded \$25,000 and will participate in a week-long virtual event in March to compete for up to \$250,000 in college scholarships. The winners will be announced in a live virtual awards ceremony on March 17, 2021. "These students deserve all of the recognition they are receiving," said Christopher Walsh, Byram Hills High School Principal. "All of their projects had to be modified in some way due to the constraints of the pandemic. Their ability to overcome those challenges speaks to their grit, resilience, and hard work."

Student Projects

Olivia Canter: Birds of a feather age together: Telomere dynamics and social behavior predict lifespan in female Japanese quail.

Mia Dittrich: Epigenetic editing of Cdk5 leads to sexually dimorphic stress responses.

Bailey Goldstein: Investigating differences in the relaxation of non-photochemical quenching and its implications for crop photosynthetic efficiency.

Ali Hafez: Using artificial neural networks to accurately simulate carbon nanotube field-effect transistors.

Jared Ilan [Finalist] Modulus of elasticity of the ideal decellularized plant material scaffold for the production of cultured meat.

Raquel Kanner: How do others perceive me? An exploration of the influence of self-disclosure statements on viewer perceptions of emerging adults who stutter.

