

# TEACHING & LEARNING NEWSLETTER

Welcome parents and community members to the first issue of the *Teaching and Learning Newsletter*. This quarterly publication showcases important information about curriculum, professional learning, and student learning projects happening in Newark schools. Since March 2020, the T&L team, along with teachers, coaches, and department chairpeople have authored more than 200 new curriculum documents. This work has been essential in that it has created a sturdy foundation upon which innovation, deep learning, and academic progress can be made.

The Office of Teaching and Learning is comprised of 13 offices:

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14. Office of Alternative Education (under development)



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Of great importance this year are four shifts introduced to all school leaders in August. These shifts represent important changes that school leaders need to make in order to create positive academic changes across the district. These shifts are:



**KEY SHIFT #1:** FROM SUPPORTING LEARNERS THROUGH INTERVENTIONS TO FOCUSING ON STRENGTHENING THE INSTRUCTIONAL CORE THROUGH CURRICULUM.



**KEY SHIFT #2:** FROM USING DATA ON THE EDGES OF OUR EFFORTS TO PLACING DATA AT THE CORE OF THE IMPROVEMENT EFFORT.



**KEY SHIFT #3:** FROM HAVING INDIVIDUAL TEACHERS DESIGN AND DELIVER INSTRUCTION TO USING A SHARED CURRICULUM TO SUPPORT DAILY TEACHING AND LEARNING.



**KEY SHIFT #4:** CONTINUE THE SHIFT FROM USING ONE-SIZE-FITS-ALL PROFESSIONAL DEVELOPMENT MODELS TO CREATING CONTEXTS FOR 21ST CENTURY ADULT LEARNING.

These shifts represent a roadmap for realizing the ambitious academic goals in the district's strategic plan by first ensuring all students are provided with excellent and cohesive curriculum. Next, changes to that curriculum (creation of shared curricula) are made through teacher collaboration and analysis of student learning. Staff is supported through job-embedded professional learning. These shifts are most crucial. We have no doubt that all of our learners can achieve well when curriculum, analysis, collective teacher efficacy, and professional learning are present. These shifts will help us elevate student achievement dramatically by ensuring knowledge-building is happening every day in every classroom and teachers are supported in this important work.

In this issue of the T and L Newsletter, you will learn about some of the curriculum and professional learning projects being undertaken across the different offices. We welcome your feedback, curiosity, and of course questions.



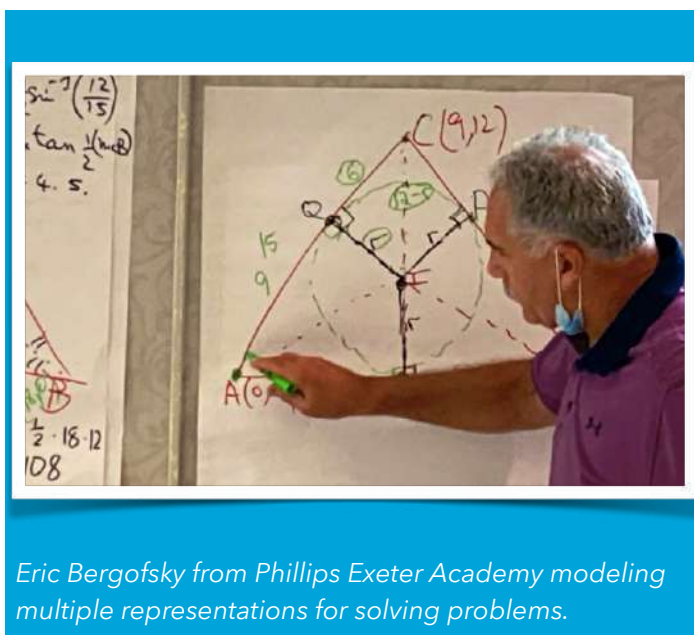
Please feel free to contact the Assistant Superintendent of Teaching & Learning at [m1reilly@nps.k12.nj.us](mailto:m1reilly@nps.k12.nj.us) with any inquiries.

# Developing Conception in Math

by Darleen Gearhart, Office of Mathematics

The Newark vision for mathematics instruction represents a shift from learning without conceptual understanding to representational competence. Using a conceptual model plays a critical role in deepening student learning and provides students with multiple entry points in the learning. Teaching representational competency is at the center of classroom practice in mathematics and is an ongoing focus for teacher development.

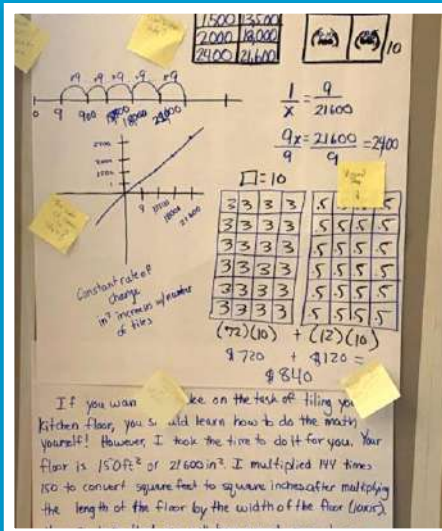
During this year's summer mathematics institutes, ninety-five teachers worked alongside the Office of Mathematics and the Phillips Exeter Academy to understand and be able to teach mathematics at the conceptual level. An initial cohort of secondary teachers had first-hand experience working with Exeter professors, Eric Bergofsky and Rachel Labes. Exeter has partnered with the Office of Mathematics and will continue to offer summer institutes in July/August 2022. Problem sets are available at <https://www.exeter.edu/programs-educators/exeter-math-institute/exeter-math-institute-materials>.



Eric Bergofsky from Phillips Exeter Academy modeling multiple representations for solving problems.



Rachel Labes from Phillips Exeter Academy using a conference format for mathematics instruction.



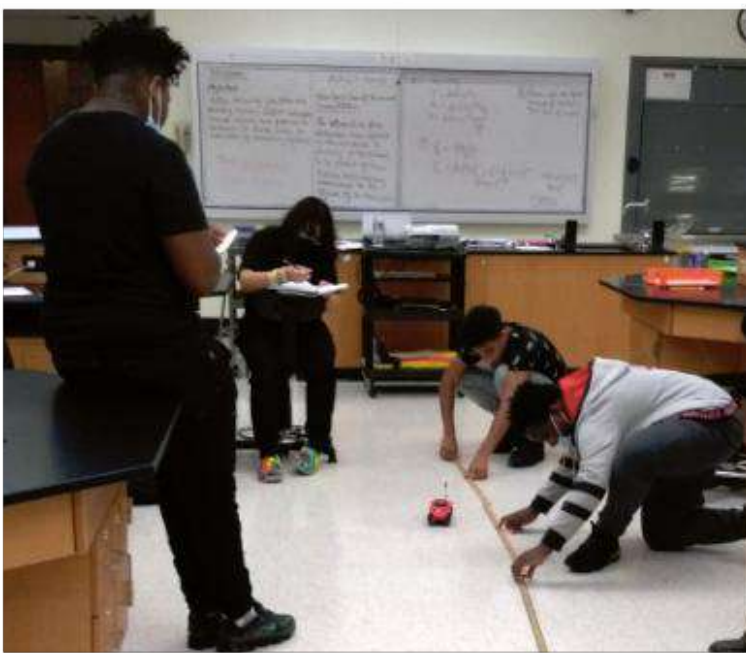
Math teachers refining their thinking in the conceptual understanding process.

# Deepening Science Knowledge

by Kathleen Tierney, Office of Science

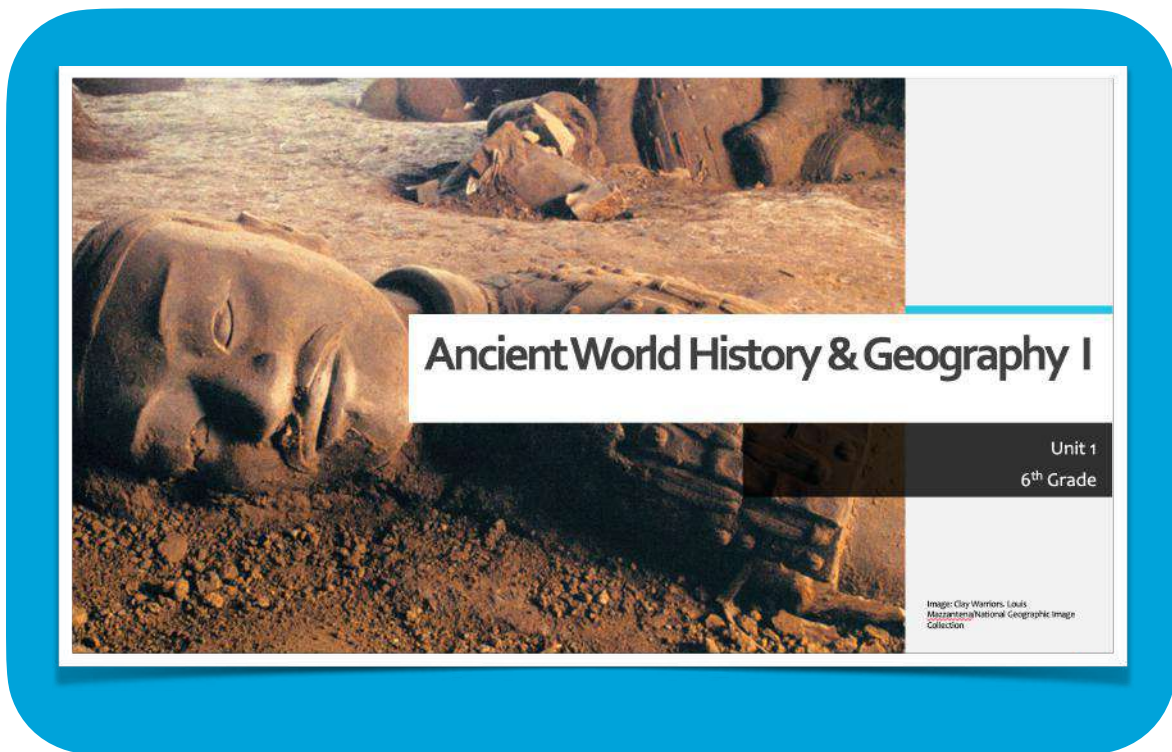
The Office of Science and K-12 teachers engaged in the development of curriculum and professional learning this summer. By September 2021, all K-12 science courses were rewritten. This significant revision of curriculum ensures all students learn standard-aligned, and relevant science content everyday. All science curricula are structured with daily, explicit learning intentions, along with teaching methods to ensure reaching the desired goals.

In addition to curriculum writing, teachers participated in professional learning. A cohort of middle school science teachers attended two weeks of intensive professional development in July, presented by the Science Education Institute at Raritan Valley Community College. There they networked with other middle school science teachers across the state and shared ideas on how to engage students in meaningful tasks.



*Students actively engaged in science and engineering practices.*





## Collaborative Work Towards Inclusive and Robust History

by Carynne Conover, Office of Social Studies

After a year of expanding and deepening historical and instructional knowledge, NPS embarked on a massive curriculum writing project for the core social studies classes in grades 6 through 11, and revised Intro to Social Justice, a high school course originally designed when Mayor Ras Baraka was principal of Central High School.

This summer, thirty teachers and twelve administrators from all wards engaged in a process of learning that enabled them to write new social studies units of study for grades 6 through 11. We determined that the 2020 NJ Social Studies Standards have ample space to be deliberately inclusive and expansive in the history we ask students to learn. Second, we determined that a common textbook provided a foundation for all learners; a necessary step to ensure equity across the district.

Third, we let our work be guided by an inquiry model to learning. In this model, students are guided through examination of multiple sources to answer compelling questions. Compelling questions are provocative and enduring; require interpretation of resources and application to current lived experiences. Alongside compelling questions are supporting questions. These questions keep the learning focused by digging into the particulars that can help students grapple with compelling questions.

Unit of Study	Sample of Compelling Questions	Sample of Supporting Questions
<i>Ancient India Unit</i> Ancient World History & Geography I, 6 <sup>th</sup> Grade	Is hierarchy unavoidable?	Who does a caste system benefit? Who does it harm?
Early African Civilizations Ancient World History & Geography II, 7 <sup>th</sup> Grade	Did Ancient Africa depend on Europeans to become civilized?	How did the Manden Charter ensure peace and fairness in business? (Manden Charter is one of the oldest constitutions on the world.)
<i>Revolutions Unit</i> Modern World History, 9 <sup>th</sup> Grade	How do new ideas create revolution?  How can literature serve as a vehicle for social change?	Are there significant similarities and differences in the development and outcomes of the American, French, Haitian, and Latin American Revolutions?  How were scientists and Enlightenment thinkers in the 16 <sup>th</sup> through the 18 <sup>th</sup> century revolutionary?
<i>Emerging Global Economy Unit</i> Modern World History, 9 <sup>th</sup> Grade	What happens when cultures collide?	How did Indigenous, Asian, and African populations resist European colonization?
<i>The Progressive Era Unit</i> United States History I, 10 <sup>th</sup> Grade	Should businesses run freely?	Is workplace safety and economic gain mutually exclusive?  How did labor unions impact industry and the lives of workers?
<i>The Progressive Era Unit</i> United States History I, 10 <sup>th</sup> Grade	One step forward, two steps back: What were the limitations of the Progressive Era?	How did governments deal with the rise of domestic terrorism against African Americans, Latino Americans, Native Americans, and immigrants?
<i>WWII Unit</i> United States History II, 11 <sup>th</sup> Grade	Does the end justify the means?	What were the economic reasons for United States involvement in WWII? Political reasons? Other reasons?
<i>Domestic Policies: Then &amp; Now Unit</i> United States History II, 11 <sup>th</sup> Grade	What is infrastructure?	What structural issues have been revealed by the Covid Pandemic?

The result of this extensive work is 68 new units of study across seven courses, inclusive of the core classes in grades 6 through 11 and a corps of teachers and administrators able to support colleagues in facilitating learning across the middle and high school grades. We will continue our work this school year by developing new electives: *African American History*, *Latin American History*, *Gender*

*Studies*, *Financial Literacy*, and independent social studies curricula for grades 4 and 5.

As proud as the department is of the great strides this work represents, the learning and work process of curriculum writing does not end with the product. Like the *U.S. Constitution*, curriculum is a *living* document. It needs space to change and expand. We will be revising as we review results from students

work, and the feedback from our colleagues using the curriculum to facilitate learning for our students. This initial phase of engaging with this living curriculum is a two-year process. In this way, the curriculum process is a two-year matter.

The work of the department is just the start! It is our sincere desire that parents, students, teachers, and community stakeholders recognize that we are moving in the right direction to provide our students inclusive and robust learning experiences as represented in the Amistad, Holocaust, LGBTQI+ and Disability legislation.







*Cast from “Annie” singing “It’s a Hard Knock Life” during the summer high school musical theatre.*

## NBOE Summer Arts Enrichment

by Margaret El, Office of Visual & Performing Arts

Creativity, the freest form of self-expression, is critical to the development of the whole child. The experiences children have during their early years of school can significantly enhance the development of their creativity as well as their literacy. The newly adopted Newark Public Schools pre-kindergarten through grade 2 dance, music, theatre and visual art curricula provide developmentally appropriate experiences to enrich critical thinking skills while expanding learners’ vocabulary and comprehension skills. Through guided support in music, students start with maintaining a steady beat through movement and performance and advance to performing and generating music using the pentatonic scale and simple duple and triple meters.

Students begin to recognize and use line, shape, and color in visual arts while understanding how pictures convey meaning as they progress to describe, compare, and categorize visual artworks based on subject matter and expressive qualities, while making art exploring expressive materials and ideas. Theatre students participate in group activities, including creative play, storytelling, pantomime and improvisation and progress to comparing and contrasting personal emotions with those of characters in guided drama experiences. In dance students begin to explore and identify moving body parts with variations in tempo, meter, and progress to synthesize skills to create, perform, and/or present works of dance based on their experience of the world around them. These early foundational curricula experiences in the arts will prepare students for the next phase in their artistic development and literacy.





*Music ensemble students learn new repertoire; Student pulling a print in art class; Student shows off original ceramic necklace used for Annie poster.*

## Foundations for Developing Artistic Literacy & Fluency

Students and teachers engaged collaboratively in creative play through participation in three unique summer arts initiatives under the guidance of the Office of Visual & Performing Arts and held at Arts High School this summer.

First, the Summer Visual & Performing Arts Academy provided middle school students experiences in dance, theater, vocal and instrumental music, and visual art based on student choice. Students in rising grades 6-8 were able to select a major art discipline where they built relationships and skills 135 minutes a day over the 5-week program. Additionally, all students participated in a second art form 45 minutes daily, as well as in SEL and team building activities, daily reflections, and a Play-Write-Perform virtual residency with NJPAC. The program culminated with a student art exhibit and performances on the final day of the program.

Two high school arts programs included High School Musical Theater and High School Visual Arts: Culture Creators. The musical theater program engaged students in song, dance, acting and production, as they rehearsed and prepared for a production of Annie and performed live to an audience of peers, family and school community. Original works of art were presented by the high school visual art students using a collective theme as inspiration for the exhibit they curated for display in the Eleta J. Caldwell Gallery at Arts High School. Student artists were available to discuss their artistic process and growth as an artist during the exhibit. The performance and exhibition showcased student talent, creativity, collaboration, and leadership skills.



## Newark Educational Technology Summer Camp (NETS Camp)

by Timothy Nellegar,  
Office of Educational Technology

This summer proved to be an exciting one for students in the Newark Educational Technology Summer Camp (NETS Camp). Students attended camp at Camden Street School, Rafael Hernandez School, and Louise A. Spencer School. They spent three weeks programming LEGO robots,

creating worlds in Minecraft for Education, exploring online music creation, and a number of other exciting technology based projects. Using problem solving and computational thinking skills, these learners explored areas that interested them and got an opportunity to collaborate with students from across the city. Students and educators enjoyed the program which we plan to expand for summer 2022.

FIRST Robotics Programs will be implemented in many schools across the district. Robotics teams will represent our district in regional and state competitions. Students will explore science, engineering and technology skills, while fostering their abilities to lead, innovate and collaborate with others.

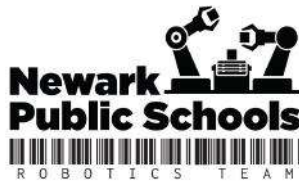
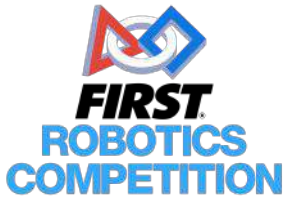
Girls Who Code programs will be offered again this year. These programs, geared for students in grades 6-12, allow participants to grow coding skills through the development of computer science impact projects. This work encourages students to name local or worldly problems and find solutions that directly impact them or their community.

We look forward to an exciting 2021-2022 school year as students across the district



*Students at Camden Street School exploring robotics as part of the NETS Camp.*

explore the exciting world of technology and learn to sharpen their computational and problem solving skills that will prepare them for our ever changing technological society.



# Integrated K-5 ELA and Social Studies Curriculum

by Elisa Lee, Office of Language Arts Literacy

During the Spring and early Summer, the Office of Language Arts Literacy partnered with Junius Williams, Newark's official historian and former SNCC advocate, and two college professors to ensure that the integrated ELA and Social Studies units were historically accurate and prepared students to learn contextual knowledge for deeper thought. This summer, NPS teachers and the ELA office staff worked diligently to incorporate Mr. Williams and his colleagues' feedback, which included updated resources, chronological arrangement, a check on the historical accuracy of not only the units but also the texts, and a few new activities. In addition, reading and writing strategies, anchor charts, questions to spark critical thinking, and tasks to consolidate learning have been embedded in the units.

Updates included but are not limited to:

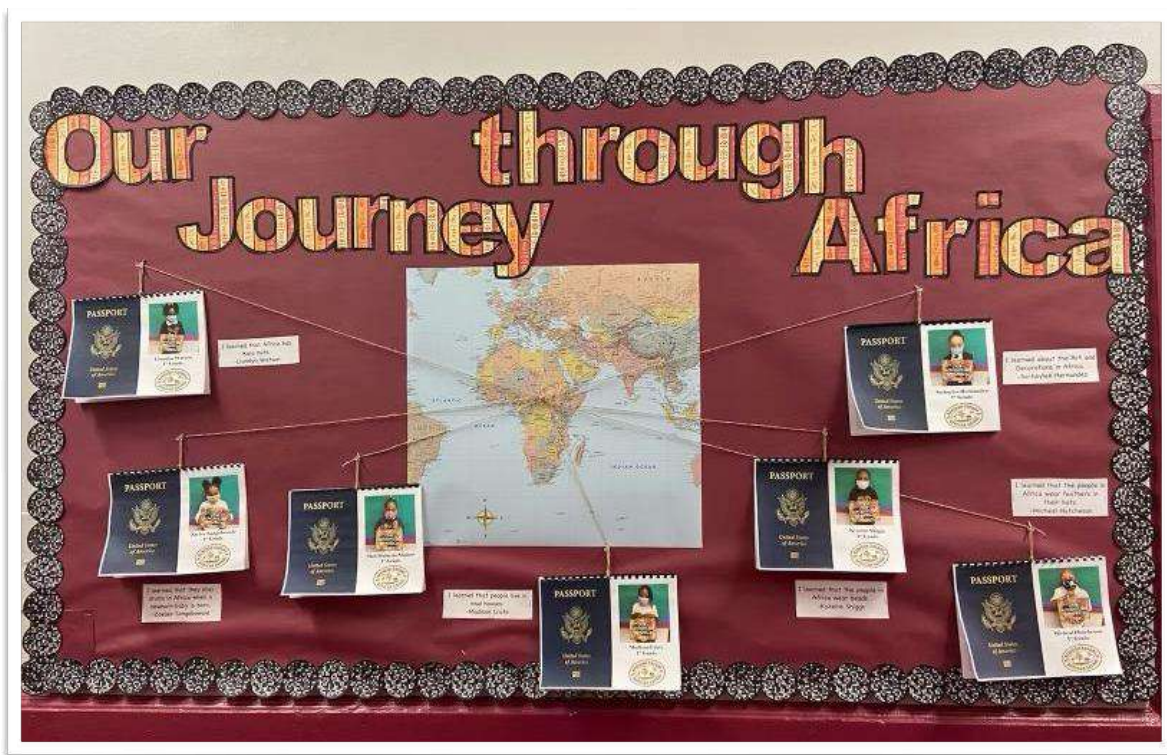
Integrated Unit of Study	Updates
Enslavement, Resistance and Freedom	<ul style="list-style-type: none"> <li>▸ Life in Africa before enslavement</li> <li>▸ Positive images of African Civilizations</li> <li>▸ Nat Turner Rebellion</li> <li>▸ Double entendre of Spirituals</li> <li>▸ History of Jazz and Blues</li> </ul>
Lenni Lenape	<ul style="list-style-type: none"> <li>▸ "Purchase" of Newark, NJ</li> <li>▸ Indigenous Displacement</li> <li>▸ Lenape influence in New Jersey</li> <li>▸ New text: <i>When the Shadbush Blooms</i></li> </ul>
Indigenous People	<ul style="list-style-type: none"> <li>▸ Meso-American Civilizations</li> <li>▸ European Colonization</li> <li>▸ The Olmecs</li> <li>▸ Haudenosaunee</li> </ul>



Integrated Unit of Study	Updates
Native American Assimilation	<ul style="list-style-type: none"> <li>• Christopher Columbus &amp; Taino relation</li> <li>• Impact of Propaganda</li> <li>• Stereotypes in Art</li> </ul>
The Constitution	<ul style="list-style-type: none"> <li>• Representation in Congress</li> <li>• The Dred Scott Case</li> <li>• Art of Storytelling (as trial lawyers do)</li> <li>• 13th, 14th, &amp; 15th Amendments</li> </ul>
Initiating Change	<ul style="list-style-type: none"> <li>• Emmett Till &amp; Claudette Colvin</li> <li>• Sit-in Movements</li> <li>• Student Non-Violent Coordinating Committee or SNCC</li> <li>• Cesar Chavez &amp; Immigration</li> </ul>

At an August in-service, a third-grade teacher shared that in June, she asked her students what was most memorable about the school year. She expected them to talk about wearing pajamas or the pandemic. Instead, her students said that learning about enslavement, resistance, and freedom was what was most memorable. Earlier, the teacher had stated how challenging all of the

new integrated ELA and social studies units were for the students. One lesson these new units help us to understand is that our students do not shy away from complex learning, especially when it is relevant and interesting. This teacher and her students' experiences speak to all students' deep interest in relevant, historical content as imagined by the *Amistad* bill.







## Office of Bilingual, ESL, and World Languages

by Marisol Diaz,  
Office of Bilingual, ESL and World Languages

The 2021 Summer English Plus Program provided emergent bilingual learners an opportunity to develop their social and academic skills in a safe and relaxed summer atmosphere. The teachers combined exciting topics, wonderful stories, and creative opportunities for learning.

While forming new friendships, students had ample time to explore a new exciting online

program, "Lexia English" that provides students in Tiers 1 and 2 personal growth and exploration of English language through academic conversations. This culturally responsive program engaged students through the learning domains of speaking, listening, writing and reading.

Students participated in school-wide themes and activities that the summer program offered, exposing them to shared learning experiences. This included

## Office of Adult Education

by Andre Hollis, Office  
of Adult Learning

In concert with the district's strategic plan, the Office of Adult Education has been newly formed. The mission of the office is to support the education of adults in Newark. ESL Classes for Adults is a project underway.

creative art projects, active games, and other exciting activities. Students shared their learning experiences and cultural awareness through discussions, bulletin boards, and stories in their classrooms.

## Health and Physical Education

by Elizabeth Aranjo, Office of Health, Physical Education and Athletics

The Office of Health, Physical Education and Athletics has partnered with RWJBarnabas Health at Newark Beth Israel Hospital to provide professional development to all elementary Health and Physical Education teachers. This *KidsFit* all-inclusive wellness program will guide children and their families in how to live a healthier lifestyle. *KidsFit* will encourage families to make healthier food choices and incorporate activity into their lives. As a result, this will lead toward nutritional knowledge and physical activity behaviors.

The Office of Health, Physical Education and Athletics will provide parent education during school and community events and workshops.

Some of the topics include:

- Steps to balancing energy intake and output
- Healthy recipe making for the classroom and home
- Discovering how the media impacts food choices
- Navigating the fast food environment

The office looks forward to working collaboratively with our schools and community towards a healthier lifestyle.



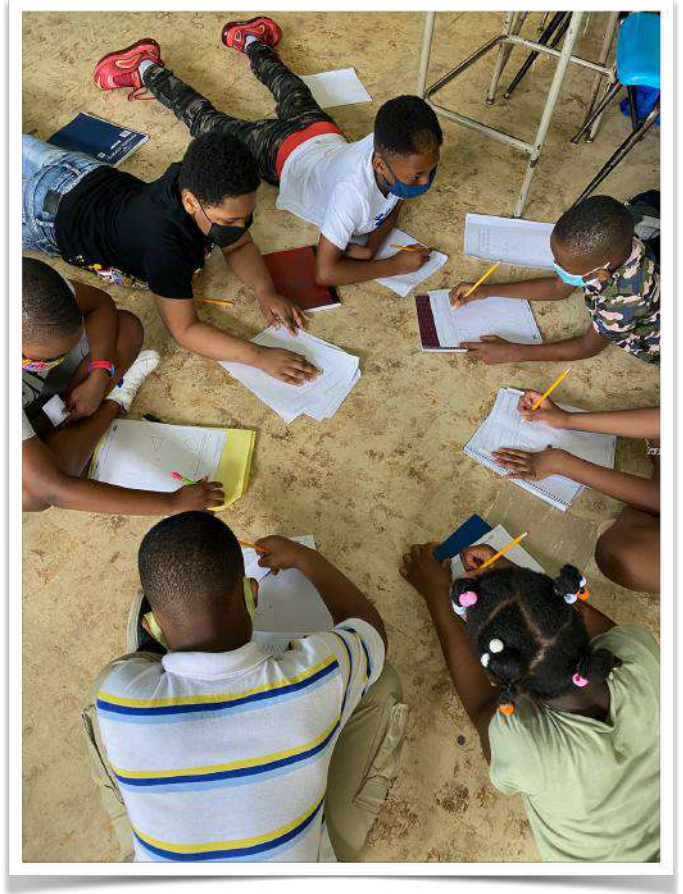


## Extended Learning Time (ELT)

by Julianne Bello, Office of Extended Learning Time

The Office of Extended Learning is excited to launch our after-school programming for the 2021-2022 school year! The office will continue to extend and expand the learning experiences of students beyond the school day by providing academically rigorous instruction that is engaging and culturally responsive.

Elementary EXCEL programs are available at 40 schools across the city, while high school students enjoy offerings hosted at the Dr. Marion A. Bolden Student Center, located at 230 Broadway.



We look forward to the first day of after-school programming, scheduled for October 4th, and are excitedly planning engaging enrichment activities and trips for our students.

## Gifted and Talented

by Joe Cullen, Office of Gifted and Talented

Newark Board of Education has entered into a 3-year professional learning partnership with Johns Hopkins Center for Talented Youth with the goal of helping develop a coherent and robust framework to identify, educate and

support advanced learners from all demographic sectors of the district.

Some highlights include:

Engaging 4 key audiences in sustained professional learning:

1. Central office leadership
2. Elementary school principals
3. Teachers and school counselors
4. Parents and families

The 5 elementary schools that were initially selected to pilot the work include:

1. Elliott
2. Chancellor
3. Mt. Vernon
4. Camden
5. Hawkins



## Career & Technical Education (CTE)

by Chamiris Mantrana, Office of Career & Technical Education

The Office of Career and Technical Education finalized the approval of CTE curriculum for Advanced Manufacturing, Biomedical Science, Cinematography & Film/Video Technology, Cosmetology, Culinary Arts, Engineering, Law Studies and Teacher Education. The updates will provide our teachers and students with curriculum aligned to the required academic, post-secondary, & industry standards. The Office of CTE is looking forward to hosting career panels and hiring School to Career Coordinators to support Work Based Learning Initiatives. In addition, there will be Advisory Committee meetings and Student Organizational Chapters as part of the CTE Perkins Academies.

