

New Bedford Public Schools awarded \$240,000 Massachusetts Life Sciences Stem Grant, largest stem grant statewide

NBPS Capstone Life Sciences College & Career Program will create makerspaces for young scientists.

New Bedford Public Schools is receiving a \$240,000 grant to support its STEM programs, the Baker-Polito Administration and the Massachusetts Life Sciences Center (MLSC) announced recently. It is the largest grant awarded among more than 90 schools receiving MLSC science grant funding across the Commonwealth.

For New Bedford, the funding enables the establishment of a Capstone Life Sciences College & Career Program – an innovative academic platform designed to provide seamless transition in life science curricula from middle school to high school.

As part of the program, a “makerspace” will be constructed at each of the district’s three middle schools (Keith, Normandin and Roosevelt) and at New Bedford High School. Unlike traditional school laboratories, these makerspaces will be specialized areas equipped with materials and tools for project-based, hands-on learning experiences for students.

The grant will serve students in high school, middle schools, and alternative schools in New Bedford Public Schools.

Dr. Ron Ho, NBHS Science Instructional Leader, authored the grant. He explained, “We will build vertically aligned

makerspaces in the three middle schools and in the high school. Capstone projects are not common in middle school, but we see them as important to fully prepare our students for high school and beyond and to increase vertical alignment. As we upgrade the technological infrastructure, students will learn design thinking and use makerspace materials and state-of-the-art tools such as 3D printers and laser-cutting equipment to practice STEM concepts.”

Students will “build projects that they will present during the Capstone Life Sciences Fair at the end of each school year. A panel of judges including teachers, parents, school administrators, business, and community partners will evaluate the projects focusing on the strengths of each,” according to the grant narrative.

Funding will also enable expanded professional development for teachers in STEM instruction (Science, Technology, Engineering and Math).

Superintendent Thomas Anderson stated “Our sincere thanks to Governor Baker and Lt. Governor Polito and to the Massachusetts Life Sciences Center for this deep commitment to our children’s future. New Bedford is centered in a growing blue economy, surrounded by marine science institutions and maritime industry from one end of Buzzards Bay to the other. Just as New Bedford High School’s MLSC-funded Bio-Tech Lab has become a remarkable advantage for students, this latest grant award will be utilized to reinforce vertical alignment and provide a more unified transition from middle to high school sciences in new and exciting ways for our more than 3,100 middle school students. Think of the new makerspace as a high-tech LEGOLAND®; students will learn science by doing, and love doing it.”

Dr. Ho commented on the grant’s long-term significance. “This MLSC grant allows our school district to build makerspaces and purchase new supplies and equipment for students to learn STEM

concepts through hands-on, inquiry-based activities and interdisciplinary projects. These learning experiences will help students develop the 21st-century employability and technical skills that are needed in the life sciences industry. We are very pleased to work with MLSC to build a pipeline for a talented and diverse life sciences workforce in the State of Massachusetts.”

In thanking Dr. Ho and Christopher Cummings for their work on the grant, Headmaster Bernadette Coelho remarked, “New Bedford High School’s staff and our comprehensive offering in all subjects continues to expand to get our students ready for college and career. This latest addition will deepen and further enrich their learning experience in the life sciences.”

Christopher Cummings, NBHS Manager of Career Vocational Technical Education noted, “This MLSC grant award will support the existing vibrant curriculum integration initiatives between Career Vocational Technical Education, the Science department and our industry and post-secondary partners. Our new makerspace will be the flagship laboratory for Life Science and Advanced Manufacturing career training.”

Since 2012, the MLSC has awarded \$21.5 million to more than 240 high schools and middle schools throughout Massachusetts. This includes more than \$20 million in funding for equipment and supplies and nearly \$1.2 million for teacher professional development. These awards have leveraged nearly \$3 million in cash and in-kind matching funds from industry and non-profit partners.