

Bayonne Board of Education Bayonne, New Jersey

District Goal 2019-2020



DISTRICT GOAL #1: STEM education is an integrated, interdisciplinary approach to learning that provides hands-on and relevant learning experiences for students. New Jersey has the most scientists and engineers per square mile in the world. Many studies highlight the need for a redoubled focus on STEM education to maintain a vibrant United States economy. The Bayonne Public School district will focus on STEM curriculum and resources (specific grade levels) for the 2019-2020 school year to foster critical thinking through problem solving to provide students with an academic edge and prepare them for college and or viable career.

| Major Activities | Staff | Resources | Timelines | Indicators of Success |
|--|---|--|----------------------------|--|
| STEM Committee Maker Spaces - Building libraries will be transformed into Maker Spaces infusing the design thinking approach into technology instruction Host 5-8 District STEAM Showcase. District wide event to highlight student STEAM projects | Superintendent, Assistant Superintendent, School Business Administrator, Accountant, Principals, Assistant Principals, Directors, Supervisors, Teachers, Technology Department. | Funding (Title I – Reallocated, Title IV, Grants, local) Time Computers (Laptops, iPads) Robotics Kits, replacement parts, Chromebooks, Engineering Logs, building and design supplies, | August 2019 - June 2020 | Copies of agendas. Minutes and sign-in sheets from committee meetings. Purchase Orders Engineering Logs, Documentation in Lesson Plans. |

| completed throughout | | | | |
|--|--|---|---|---|
| the school year. Grade 1 teaching staff will receive Ozobot kits to instruct students on basic coding theory using color patterns to control robots. Robotics purchases and training to incorporate small group instruction into technology curriculum and maker space | | Additional Robotics Equipment, additional team meetings, professional development. Additional equipment. | | Increase in the number of students participating in the program. Increased participation in the program. Successful district wide competition. |
| activities. Year 2 of implementation of Lego WeDo2.0 robotics into the Grade 4 Science Curriculum to enhance instruction in the areas of life, physical, earth & space science, and engineering technology. | Director of Science, BHS Engineering Teacher, Grade 7,8 Science Teachers. | Project funding, program funding, equipment funding. | February 20, 2020/National Engineers Week Feb. 16 - 20, 2020 | Successful research submission and participation in County STEM Showcase. Invitation to students, RSVP log, student/parent attendance. |

| Registration of an additional First Tech Challenge Robotics Team for BHS. Enhancement of Junior Robotics Program Grade 7-8 to include VEX robotics. | | | | |
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| Enhancement of Project Innovate: Elementary Research Program to include additional team representatives at the County STEM Showcase. "An Evening Of | | | | |
| Engineering For Girls" | | | J | |
| Research Practice Partnership with Rutgers University: RU Computer Science Ready?! | Director of Mathematics Director of Student Personnel Services | Funded by NSF | uly 2019 - June 2021 | Professional Development Site visits Greater interest in CS |

| Certified teachers of | | Increase Students |
|-----------------------|--|--------------------------------------|
| mathematics | | participating in |
| | | participating in Computer Science |
| | | Course work |
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