



NORTH BERGEN S.T.E.A.M. & S.T.E.M. PROGRAM



Model Overview:

- Application to the program is available to any student in Grades 4-12 in the North Bergen School District.
- S.T.E.A.M. 5 - 8 and the S.T.E.M. 9-12 Academies is an application based cohort style learning. Students are invited to participate in the application process. Acceptance into the academy is determined on aptitude and a comprehensive assessment of various data points which include, but not limited to, a universal screen, state and district testing, and Renzulli scales.

New Jersey Regulations and Gifted Programming Standards On June 1, 2005, the State Board of Education readopted with amendments N.J.A.C. 6A: 8, Standards and Assessment for Student Achievement, which includes more specific requirements for gifted and talented programs. NJDOE defines Gifted Students as “Those students who possess or demonstrate high levels of ability, in one or more content areas, when compared to their chronological peers in the local district and who require modification of their educational program if they are to achieve in accordance with their capabilities.”

New Jersey Administrative Code - 6A:8-3.1(a)(5)

1. District boards of education shall make provisions for an ongoing K-12 identification process for gifted and talented students that includes multiple measures.
2. District boards of education shall provide appropriate kindergarten through-grade-12 (K-12) educational services for gifted and talented students.
3. District boards of education shall develop appropriate curricular and instructional modifications used for gifted and talented students indicating content, process, products, and learning environment.

4. District boards of education shall take into consideration the K–Grade 12 Gifted Programming Standards of the National Association for Gifted Children in developing programs for gifted and talented students.

Gifted and Talented Education Programming Standards

- Standard 1: Learning and Development Description: Educators, recognizing the learning and developmental differences of students with gifts and talents, promote ongoing self-understanding, awareness of their needs, and cognitive and affective growth of these students in school, home, and community settings to ensure specific student outcomes. ○
- Standard 2: Assessment Description: Assessments provide information about identification, learning progress and outcomes, and evaluation of programming for students with gifts and talents in all domains. ○
- Standard 3: Curriculum Planning and Instruction Description: Educators apply the theory and research-based models of curriculum and instruction related to students with gifts and talents and respond to their needs by planning, selecting, adapting, and creating culturally relevant curriculum and by using a repertoire of evidence-based instructional strategies to ensure specific student outcomes.
- Standard 4: Learning Environments Description: Learning environments foster personal and social responsibility, multicultural competence, and interpersonal and technical communication skills for leadership in the 21st century to ensure specific student outcomes.
- Standard 5: Programming Description: Educators are aware of empirical evidence regarding (a) the cognitive, creative, and affective development of learners with gifts and talents and (b) programming that meets their concomitant needs. Educators use this expertise systematically and collaboratively to develop, implement, and effectively manage comprehensive services for students with a variety of gifts and talents to ensure specific student outcomes.
- Standard 6: Professional Development Description: All educators (administrators, teachers, counselors, and other instructional support staff) build their knowledge and skills using the NAGC-CEC Teacher Standards for Gifted and Talented Education and the National Staff Development Standards. They formally assess professional

development needs related to the standards, develop and monitor plans, systematically engage in training to meet the identified needs, and demonstrate mastery of standards. They access resources to provide for release time, funding for continuing education, and substitute support. These practices are judged through the assessment of relevant student outcomes.

Additionally, this modernization effort is imperative to align with the state's Gifted and Talented requirements, which we are currently falling short of. Some key points from the State Department of Education include:

- All public schools must have a board-approved gifted and talented program.
- Students should be assessed in comparison to their peers within the local school district.
- District boards of education must establish an ongoing K-12 identification process for gifted and talented students, incorporating multiple assessment methods such as achievement test scores, grades, student performance or products, intelligence testing, parent, student, and teacher recommendations, among other appropriate measures.

For more details on the state's requirements, please visit http://www.state.nj.us/education/aps/cccs/g_and_t_req.htm.

Procedures and Services

S.T.E.A.M. 5	Students will engage in cohort-style learning, where they are grouped based on their applications, aptitude, and a comprehensive assessment of various data points, as well as Gifted and Talented (G&T) protocols.
S.T.E.A.M. 6	Students will engage in cohort-style learning, where they are grouped based on their applications, aptitude, and a comprehensive assessment of various data points, as well as Gifted and Talented (G&T) protocols.

S.T.E.A.M. 7	Students will engage in cohort-style learning, where they are grouped based on their applications, aptitude, and a comprehensive assessment of various data points, as well as Gifted and Talented (G&T) protocols.
S.T.E.A.M. 8	Students will engage in cohort-style learning, where they are grouped based on their applications, aptitude, and a comprehensive assessment of various data points, as well as Gifted and Talented (G&T) protocols. This approach will include opportunities for advanced classes and options for earning High School credits.
S.T.E.M. Academy 9-12 Honors and AP courses	S.T.E.M. 9-12 builds upon the existing S.T.E.A.M. model, which emphasizes cohort learning, selection based on application and aptitude. This program exposes students to extracurricular learning activities and opens doors to various opportunities offered by local universities and businesses. Honors and AP Track for students gifted in specific course offerings.

Oversight: The G&T program oversight is conducted by Mr. Robert Kornberg, Director of Special Service, Dr. Inaya Jaafar, K-4 Gifted and Talented Supervisor, and Dr. Jared Keshishian, S.T.E.A.M./S.T.E.M. Chair grades 5 to 12. This includes providing professional development opportunities and ensuring that the program effectively meets the students' needs.

Grant Research and Application: To support program enhancements, diligent research and applications for grants are crucial. This underscores the need for the coordinator to be relieved of teaching responsibilities, allowing for greater focus on securing external funding.

Feeder Program: The program model can serve as an excellent preparation for the North Bergen S.T.E.A.M. & S.T.E.M. Academy, aligning with the district's long-term educational goals.

Ongoing Professional Development: Sustaining a high level of expectations requires ongoing professional development for both teachers and administrators. This continuous growth and learning will help maintain the program's quality and effectiveness.