# NJSBA policy Services File Code: 6142.15

### \*Sample Discretionary Policy

*\*Note: the policy language below is sample language developed from web research. This is not a required policy and the practices within the sample language are not recommended or model practices. Your board should review the sample carefully and adjust it to the specific goals of your district. As with all new policies your board attorney should review the final draft before it is adopted.*

INTEGRATED SCIENCE TECHNOLOGY ENGINEERING ARTS MATHEMATICS: I-STEAM EDUCATION

The board of education recognizes that integrating science, technology, engineering, arts and mathematics education throughout academic and extracurricular programs improves and enhances achievement. The district shall be an active participant in our nation’s efforts to expand the capacity and diversity of the I-STEAM workforce pipeline to prepare more students for the best jobs of the future that will keep the U.S. innovative, secure and competitive. The district shall offer an educational program that promoted effective and innovative teaching and student achievement in science, technology, engineering, arts and mathematics providing the skills essential for success in the 21st century job market.

In addition to curriculum and programs offered during the school year, the board shall support within the confines of the district budget, I-STEAM initiatives, programs and activities in out-of-school-time settings such as before-school, afterschool and summer learning programs to further engage children and youth and spark their interest in I-STEAM.

The board of education directs the chief school administrator or his or her designee(s) to develop and integrate I-STEAM initiatives in the district’s educational programs, extracurricular programs and/or other activities sponsored by the district. Wherever possible, I-STEAM programing should be articulated across subjects and grades. The chief school administrator or his or her designee may develop and implement, with board approval, programing initiatives including but not limited to:

1. Research based curriculum and programs that ensure that student performance in science alongside mathematics and reading is effectively evaluated and measured;
2. Hands-on, inquiry-based learning activities, such as learning about the engineering design process, working directly with I-STEAM professionals through internships, and participating in field experiences and I-STEAM-related competitions;
3. Hands-on, inquiry-based learning activities that incorporate science, technology, engineering, arts and mathematics in all district programs involving district green initiatives such as energy and resource conservation, recycling, and organic gardens;
4. Targeted initiatives that promote the inclusion of underrepresented minorities, women and at-risk populations in I-STEAM education to supports the capacity and diversity of the I-STEAM workforce pipeline;
5. Programs that integrate and align K-12 education with higher-education programs and initiatives with workforce needs;
6. Cooperative programing with community colleges to supplement district opportunities for I-STEAM education and prepare students for continuing I-STEAM education and for the I-STEAM workforce;
7. District participation in research projects the further the development of a rigorous education research base to inform innovations in teaching, learning, and educational materials development;
8. Hiring practices that attract and retain talented and effective I-STEAM educators from all backgrounds;
9. Professional development programs for staff, which are dedicated to effective I-STEAM educator training and preparation;
10. Programs for community and parent/guardian educations about and involvement in district I-STEAM initiatives and programs;
11. Pursuing available funding mechanisms: federal and state as well as community organizations and business partnerships to promote I-STEAM-related educational innovation activities; and
12. The establishment of public-private partnerships and incentives that promote business and industry engagement in I-STEAM education activities with the district schools.

The chief school administrator may create a district I-STEAM committee tasked with the research and development of district I-STEAM initiatives. The chief school administrator shall present all curriculum changes and new program to the board for approval prior to implementation.

Adopted:

Key Words

Science, Technology, Engineering, Mathematics, Arts, STEM, I-STEM, STEAM, I-STEAM, 21st Century Classroom

**Possible**

**Cross References:** \*1100 Communicating with the public

\*1200 Participation by the public

\*1220 Ad Hoc committee

\*1230 School connected organizations

\*1330 Use of facilities

\*3500.1 Conservation and sustainability

\*4131/4131.1 Staff development

\*4213/4213.1 Staff development

\*6140 Curriculum adoption

\*6141 Curriculum design and development

\*6142.10 Internet safety and technology

\*6142.11 Career and technical education

\*6145 Extracurricular activites

\*Indicates the policy is included in the Critical Policy Reference Manual.