

SCIENCE AND MATH INSTRUCTION

The Board of Trustees believes that instruction in science and mathematics is crucial for student success in today's rapidly changing and competitive world, which increasingly demands higher levels of scientific and mathematical skills, as well as experience in technological applications. The Board therefore supports an interdisciplinary instructional program which encourages and expects basic literacy in science and math, and prepares interested students for further study and/or careers in these fields.

The Board of Trustees contends that purposeful instruction in science and math can only be realized when the interdependent nature of the two fields is accepted. Science itself cannot stand alone, and is, by its own nature, intertwined with not only math, but technology and engineering as well. The board, by default, faithfully promotes an interdisciplinary approach to science and math instruction that supports both process and content in order to prepare students for a world that does not yet exist. To accomplish this, the Board will encourage and expect essential understanding in math and science enabling students to further pursue study and/or careers in the field of STEM.

Basic Essential literacy in science and math includes instruction in a "core" body of information, but also emphasizes problem-solving and critical inquiry processes. Students shall be encouraged to apply such skills to contemporary concerns and problems facing the school and the community in a "hands-on" learning environment (i.e., recycling projects, energy conservation projects, etc.).

The Board directs the Superintendent to oversee the development of a flexible science and math curriculum, which takes into consideration new developments in all related fields and emphasizes the world's changing needs. Such curriculum shall include the following:

1. basic essential knowledge and skills in science and math, and the opportunity to develop such skills and apply them to societal and individual problems;
2. opportunities and encouragement for all students to participate in appropriately challenging courses of study;
3. opportunities for students to develop an understanding of and appreciation for the relationships between science, mathematics, engineering and technology through interdisciplinary study;
4. opportunities for students to develop a positive attitude towards science and mathematics and a spirit of inquiry towards the natural world;
5. information on career opportunities in science and mathematics;
6. opportunities for students to develop confidence in their ability to apply and develop scientific/mathematic knowledge and skills;
7. individual and group problem-solving experiences and enrichment activities;
8. student participation in a variety of experiences and course-related materials, including field trips, laboratory and classroom experiments and use of computer-based technology; and
9. evaluation of student progress in assimilating and applying scientific/mathematical knowledge and skills, and periodic feedback to students regarding such progress.

The Superintendent shall inform the Board of all curricular changes, and advise the Board of necessary and up-to-date instructional materials to properly implement such curriculum. The curriculum should be designed to properly prepare all students for their role in society, and ensure district compliance with the curricular requirements of the State Education Department.