

Proposal Abstract

Provide a comprehensive description of activities that will be used to achieve the goals of the project. The response must be clear, specific and adhere to the required structure of the questions.

Provide a description of your proposal's activities in relation to **integrating instructional technology into learning opportunities to improve student achievement**. These activities **must include** 1) New York State Learning Standards (including Common Core), **and indicate how they are 2) aligned** with the goals of the Board of Regents Reform Agenda. **Projects may occur in the classroom, the library media center, or both**. Please include the project's purpose/objectives, grade levels targeted, intended results in terms of teachers' professional development and student learning opportunities.

Improving teacher and school leader preparation and effectiveness by emphasizing content knowledge, pedagogical skills, and measurable, performance-based evaluation can be attained through a coordinated effort to promote student proficiency in the use of mathematics tools in technology. Teachers have been asked to adhere to 6 Shifts in transitioning to Common Core State Standards in Mathematics (CCSSM). Effective use of graphing calculators have the capacity to address increasing fluency, deep understanding of important concepts in Mathematics, and interesting applications that students can explore in Mathematics. The graphing calculator is a terrific tool to implement the Modeling conceptual category of CCSSM in conjunction with the specific conceptual categories of Algebra, Functions, Geometry, and Statistics.

In Year One of this project, the objective will be to equip Secondary Mathematics, Science and Special Education teachers with graphing calculators and supporting software and equipment to allow them to teach mathematics and science in an engaging innovative manner. The project will provide training for teachers on how to use the graphing calculator as an instructional tool that supports deep understanding of mathematical content through various approaches including inquiry. In Common Core State Standards, the Standards of Mathematical Practice specifically recommend the use of abstract and quantitative approaches for instruction.

In Years Two and Three, RCSD will include the use of science probes as a vehicle to collect data and explore and create mathematical models based on this data.

The desired results of this project over the three year period will be higher student achievement on report cards, NYS Regents Exams, PSAT and SAT Exams, ACT Exams, and improved graduation rates.