

## Proposal Abstract

MS 301 Paul Dunbar School is located on a peninsula in the south Bronx and is a **Priority** school with need for improvement in both our students' math and ELA scores. We are partnering with Saint Anselm Parochial School, a non-public school that shares a common goal to improve our students' performance, across our general population with particular attention to two groups, students with disabilities (SWD) and English Language Learners. 27% of the students in MS 301 Paul Dunbar School are SWDs and 28% are English Language Learners (ELLs). Our scholars need support to strengthen their basic and higher-level skills in both literacy and math and because skills related to these subjects impact performance across subject matter, our program, *Success in the Making*, will take a blended curricular approach with an emphasis on enhancing students' math and ELA skills.

Each school will identify a team of teachers made up of and sixth through eighth grade math, literacy, science and social studies teachers, a technology specialist and school librarian. At their school sites, teachers will receive in-school and in-class support from Makeosity, Inc., to engage in collaborative unit and lesson planning that will integrate active learning and instructional technology with their instruction. They will also receive assistance in technology identification and acquisition and materials management. A member of Makeosity staff will assist to model instructional strategies and implement the activities in the classroom. Goals for the program include:

- Help students attain higher levels of performance in the NY State Learning Standards including the Common Core Learning Standards, with a focus on ELA and math.
- To improve teacher effectiveness by emphasizing content knowledge and pedagogical best practices in using technology in the classroom well as better data-driven instructional strategies.
- To increase the knowledge and skills of teachers and school librarians to support the greater use of technology to enhance teaching and learning and create new effective learning environments for students.

For example, at MS 301 Paul Dunbar School and St. Luke's students will conduct research on the Internet to create a class blog on the 6th grade social studies essential question of "Why do civilizations rise and fall?" They will be prompted to connect the question to the role of technological innovation throughout history. They will research inventions (e.g. water pumps and water wheels, engine-powered mechanisms, robots etc.) throughout history and engage in design thinking about simple and complex machines. They will utilize software (e.g. Tinkercad) to design their machines and materials to build these mechanisms. Students will post their research findings, their designs and photographs/videos of their final built devices to the blog. These activities require literacy skills to research, design, read and create instructions and to engage in critical thinking and discussions with other members of their class and design teams. They also require the application of math and scientific thinking to build the devices and then capture, graph, measure and calculate data and describe results.