

Bronx PATHWAYS (*Providing Applications in Technology Helping With Achievement for Youth in Schools*) is an NYSED **STREAM** project that will serve over 400 students in grades 9 through 11 over the next three years. Current research has demonstrated that reading and writing are essential components of science education, thus, **STREAM** (Science, Technology, Reading, Engineering, Arts and Math) will be the focus of this collaboration between the **Bronx High School for Visual Arts**, a NYS designated Priority school and **St. Raymond's**, a local Catholic school within the geographic community. **Bronx PATHWAYS** schools came together out of a common need: to develop mastery in literacy at the high school level in all disciplines, maximizing their potential for academic success, school to career readiness and driving teacher effectiveness, all key components of the Regents Reform Agenda. **Bronx PATHWAYS** will promote a hands-on, interdisciplinary approach to literacy using 21st century educational tools in a cloud-based Google Classroom environment. Beginning with nonfiction anchor texts in ELA, a targeted group of grade 9 to 11 students will work to create visual art and 3D models of topics they study in math and science while taking advantage of all of the accessibility tools provided by mobile devices (i.e. text to speech, language translation, camera and audio recording features) to support vocabulary development and language fluency. Simultaneously, schools will be engaged in the Career Visions Model, a validated NYS Educ. Dept. youth services program, which engages students in a process of exploring career interests leading to becoming successful professionals.

Bronx PATHWAYS will promote student's ability for hands on independent learning using such tools as Notability, an app for daily electronic journals supporting audio recording, text and free-hand drawing. Supported by a visual artist in residence, students will use digital media Apps such as Educreations and iMovie to engage in interdisciplinary reading and writing activities.

The goals of **Bronx PATHWAYS** are:

- To improve academic performance in achieving mastery of the NYS Learning and Common Core Standards in literacy and NYS MST Standards integrated with the arts.
- To increase the use of instructional technology, specifically use of mobile devices, in collaborative projects to enhance students learning and foster 21st century skills.
- To improve teacher effectiveness by emphasizing pedagogical best practices in using mobile technologies and cloud-based apps in the classroom and library media center.

Major project activities for **Bronx PATHWAYS** include the following:

Analytical and Applied Reading and Writing – Students will strengthen their content knowledge in all disciplines using anchor text and reading and writing strategies from NYC validated literacy curriculum as a model for developing their own writing. Students with disabilities will strengthen understanding of nonfiction content through such tools as NEWS ELA and Learning Birds videos. **(CCLS RI 9.1-9.2, 9.4, 9.9) Writing Process- Understanding of Writing Structures and Language** – Students will be able to understand and apply the stages of writing process including planning, revising, editing and publishing original works. Through an understanding of the peer review process and use of a writing rubric, students will engage in cloud-based activities in peer writing and presenting using the Google Suite with students at partner school. **(CCLS W 9.2, 9.3, 9.5, 9.6, 9.7, 9.8) (CCLS SL 9.1e, 9.2, 9.5) Sharing and Community and Social Skill Building** – Students will share their multimedia projects on nonfiction topics via synchronous chats with students at other schools. Students share writing via online social networks in the form of digital media, audio recordings and text using Google Presentation and iMovie. Sharing and discussing across communities, students will develop an understanding of people from diverse cultural backgrounds and increase their ability to interact positively with others, accept alternate viewpoints, and offer mutually constructive feedback. **(CCLS L 9.3-9.6)** Peer review and self-assessment are key components of the **Bronx PATHWAYS** staff development program, as emphasized in the NYS Professional Dev. and NYS Teaching Standards. All schools will apply these strategies with an eye toward student performance.