

## 2012-2015 Learning Technology Grant Program

### Abstract

(Abstracts are submitted by the LTG award winners)

MS 145, The Arturo Toscanini Community Junior High School **3AM (Anytime, Anyplace, Anywhere Math)** project is a mathematics initiative that will promote a hands-on, interdisciplinary approach to learning using 21<sup>st</sup> century educational tools. Students in grades 6-8 will use iPad and iPod Touch apps to engage in activities that will deepen their understanding of complex concepts in mathematics such as graphing algebraic equations and inequalities, analyzing probability patterns and solving geometry problems. Technology tools such as digital media and mobile technologies including hand-held devices such as cell phones will be used to create personal learning networks (PLN's) for research, problem solving and ongoing assessment activities involved in the project. The classes involved in **3AM** will maintain daily electronic journals of project data that they will share with their peers using cloud-based apps.

MS 145 students will partner with students from the Visitation School using a project Ning, Podcasts and Phonecasts to share their data across schools with faculty involved with the project. The school library media center will also serve as a critical component for content research and collaboration in this project in both schools. In addition, both schools will use videoconferencing to connect with businesses and experts in the field of mathematics such as the Bathysphere Underwater Biological Laboratory, an underwater biology lab to study shipwrecks of the Great lakes or Members of the Associated Builders and Contractors, Inc. in Northern Ohio to provide opportunities for students to make real world connections with careers that focus on a strong mathematics background.

The project will also highlight the principles of engineering focused on planning and designing end of year projects that simulate real world applications offering students a greater understanding of the role mathematics plays in their lives.

The goals of **3AM** are:

- To improve academic performance in achieving mastery of the NYS Learning and NYS P-12 Common Core Learning Standards in mathematics and literacy.
- To increase the use of instructional technology, specifically mobile and hand-held devices, in collaborative projects to enhance students learning and foster 21<sup>st</sup> century skills.
- To improve teacher effectiveness by emphasizing content knowledge and pedagogical best practices in using technology in the classroom and library media center.

Furthermore, **3AM** will focus on the NYS Board of Regents Reform goal for raising graduation rates for at risk students by increasing student engagement and offering higher level coursework in mathematics leading to a pathway to college and career readiness.