

The Learning Shift

Road Map to
21st Century Schools

▶ In a twenty-first century learning environment, all students are able to learn. This new environment doesn't just wait for teachable moments; it literally creates them. This grant's goal is to demonstrate how schools can transform themselves through leadership and systemic change by providing your school with resources and professional development to leverage existing and emerging technologies, web 2.0 tools, and practices, as defined in the *Habits of Mind*, to create a teaching and learning environment that provides your students with the skills necessary to succeed in the 21st century. Students in school and adults in everyday life are challenged by problems, dilemmas, paradoxes, and enigmas for which the solutions are not immediately apparent. Drawing on the *Habits of Mind* means knowing how to behave intelligently when you don't know the answers. It means not only having information, but also knowing how to act on it. This grant will provide your teachers and students with access to international experts in the field of technology and instructional practice.



This grant will enable teachers to optimize learning by using Web 2.0 tools to create learning environments that are:

- ◆ Interactive and engaging
- ◆ Relevant and authentic
- ◆ Collaborative and inclusive
- ◆ Employing 21st-century tools & technology
- ◆ Leveraging experts and resources in and outside of school

Teachers need to be challenged to learn, use, and understand twenty-first century tools in their own lives. "Education will only change when educators embrace the read/write web in their own world." *Will Richardson*

NETS for Teachers

Essential Conditions for Teachers

- ◆ Preparation
- ◆ Shared Vision
- ◆ Access
- ◆ Skilled Educators
- ◆ Professional Development
- ◆ Technical Support
- ◆ Content Standards & Curriculum Resources
- ◆ Student-Center Teaching
- ◆ Assessment
- ◆ Community Support
- ◆ Support Policies

Standards for Teachers

- I. Technology Operations & Concepts
- II. Planning and Designing Learning Environments and Experiences
- III. Teaching, Learning and the Curriculum
- IV. Assessment and Evaluation
- V. Social, Ethical, Legal and Human Issues

More information about NETS for Teachers:

<http://cnets.iste.org/teachers/index.html>

www.iste.org

Visit our suggested reading list at:

www.oit.nycenet.edu/gps/readinglist

The Manhattan Office of Instructional Technology

Globally Positioning Students For the 21st Century



Creating Model Twenty-first Century
High Schools in CSD 1 & 2

www.oit.nycenet.edu/gps

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Who is preparing our students for the future that awaits them when they graduate?

▶ Business leaders, economists, politicians, futurists and many educational leaders all seem to agree that it is not the American School system. Future jobs will require mastery of engineering, mechanical, and computer driven control systems. There will be a great demand for multidisciplinary learners and workers, with expertise in many areas and capable of adapting to changing demands of the workplace. Tolerances are getting tighter and tighter, human resource specialists are warning educators that “we need people who can work with their heads and their hands.”

Students themselves recognize that there is a divide between what they learn in school and the world they encounter outside the classroom. Preparing students to be successful requires them to be armed with strategies to become self-directed learners who manage their own learning in an environment where distance, time and location are irrelevant.

New York City Community School Districts 1 and 2, located in the lower part of Manhattan, are facing this challenge by seeking to create three model twenty-first century high schools. In collaboration, and with support from outside experts, the staffs of these schools will examine and implement reforms that engage high school students in meaningful, authentic interdisciplinary learning experiences that develop knowledge acquisition and productivity skills and provide multiple opportunities to gain deep understandings and demonstrate mastery of the curriculum content, as it relates to the world around them. The impetus and mechanisms to finally transform classrooms everywhere is the availability of high speed Internet access in school and at home and increased access to technology and web 2.0 tools. These fundamental requirements along with a willing and

able school administration and staff are the grant criteria with which the candidates for becoming a model school were chosen.

The goal of year one is to meet the *Essential Conditions* for the ISTE standards and the goal of year two is to ensure that administrators, teachers and students have met all the ISTE standards for the twenty-first century. Year one will focus on creating a school vision, implementing exemplary interdisciplinary and content specific projects, and providing push-in and pull-out professional development opportunities on instructional practice, project-based learning and technology integration. Year two will continue to build on this work and teachers will independently create exemplary technology-rich, curriculum lessons. Schools will be encouraged to establish skill-based certification programs and internships to help students prepare for the job market. Strong robotics programs will be implemented in all three model schools.

This project will be carefully documented on the web and transparent to all the remaining public and nonpublic high schools located in these districts. It is hoped that the impact of this work will be evident in all of the district's high schools as they share in our quest, explore the research, attend the Office of Instructional Technology citywide workshops, replicate best practices, and participate in the online discussions where the model schools share their challenges and successes.

Title IID Expert Partners:

- ◆ Rob Bocchino, Heart of Change Inc.
- ◆ JDL Horizons, IT Professional Development
- ◆ Alan November, November Learning Inc.
- ◆ Will Richardson, www.weblogg-ed.com
- ◆ Marco Torres, Consultant, Filmmaker
- ◆ UniServity, Online Learning Platform

Title IID Model High Schools

Washington Irving High School

Dr. Denise DiCarlo, Principal
40 Irving Place
New York, NY 10002

Marta Valle High School

Jayne Godlewski, Principal
145 Stanton Street
New York, NY 10002

Xavier High School

Michael LiVigni, Headmaster
30 West 16th Street
New York, NY 10011

21st Century Inquiry Based Learning Projects

Detailed information about these projects can be found on our website at:

www.oit.nycenet.edu/gps

Robotics Program

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Digital Documentaries

Project Contact - Instructional Technology Specialist
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Where Does the Water Go?

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UniServity Online Learning Environment

Manhattan Office of Instructional Technology

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