

1. Abstract

The Graduate School of Education at Fordham University proposes to sponsor a Summer Institute for Teachers Program serving 120 educators assigned to districts administered by the **New York City Department of Education (NYCDOE)**. One of the “**Big Five**” districts in New York State, the NYCDOE is a local educational agency (LEA) responsible for the daily management of over **1,400** grade PK-12 schools serving more than **1.2** million students daily. Operating within one of America’s **largest** urban centers, the NYCDOE includes numerous schools that are in corrective action status, under registration review, in need of improvement or in restructuring.

As one of the Nation’s foremost **educational reform** leaders, New York City has implemented a comprehensive program which includes the launching of new curriculum, increased emphasis on assessment and management of data which drives instruction. In keeping with these innovations, the NYCDOE provides teachers, school administrators and other educational staff with sustained **professional development** to ensure that students reach city, state and federal standards in each subject area. Consistent with the Summer Institute for Teachers Program, a key **objective** of this professional development is to increase teacher content knowledge, understanding of pedagogy, mastery of data which drives instruction and ability to apply effective student assessment.

Through the NYCDOE’s progressive approach to educational reform, students have made steady, consistent progress towards the standards. An increasing number of New York City schools are being **removed** from the State’s SINI roster and are now considered in **good standing** with the NYSED. Through its **Children First** agenda, the NYCDOE works to ensure that students are equipped to meet the scholastic challenges posed by an increasingly demanding 21st century society. In line with this objective, the Summer Institute’s overarching goal is to expose teachers to **content rich, standards-based** strategies which exemplify **best practices** in the provision of science and mathematics instruction to grade 5-8 students. In pursuit of this goal, the Summer Institute will include sessions addressing the **integration** of **technology** into these subject areas in accordance with the State’s Mathematics, Science and Technology (M/S/T) curriculum.

Accordingly, teachers attending the Summer Institute will be introduced to emerging technology, e.g., the Achievement, Reporting and Innovation System and ACUITY Assessment Management System, currently being implemented in city schools. Participants will also investigate alternative, **research-based** instructional strategies which can be used in the classroom – e.g., using virtual manipulatives to teach math, or using journal writing as a meta-cognitive tool to facilitate student mastery of science. Summer Institute sessions will demonstrate the successful integration of these strategies with **existing** NYCDOE approaches such as **everyday math** and **impact math**.

In keeping with the program’s focus on best practices, participants will be introduced to a variety of public and private agencies, including the National Mathematics Advisory Panel and National Science Teacher Association, which set policy and established standards underlying the education of America’s elementary and secondary students. Teachers shall also be provided with a **directory** listing websites for each agency and encouraged to become **members** of these societies whenever possible. It is hoped that exposure to these groups, combined with Summer Institute sessions, will increase teacher ability to develop standards-based, content rich **lesson plans** and **facilitate** the delivery of related mathematics and science instruction to New York City students.