



Warner School and Partnering School Districts to Develop Digitally-Rich Master Teachers with \$3M Grant

NSF Grant to Help STEM Teachers Lead Districts in Digital Conversion Efforts

Newark Central School District is one of six in the region that will benefit from a \$3 million grant awarded to The [Center for Professional Development and Education Reform](#) and the [Center for Learning in the Digital Age](#) (LiDA) at the University of Rochester's Warner School of Education from the from the [National Science Foundation](#) (NSF) to support teachers in leading K-12 school districts through new digital conversion initiatives — a comprehensive process that provides each student with a tablet or laptop computer and uses these devices to enhance student learning.

In addition to the NCSD, this new Noyce Master Teaching Fellows (MTF) project will support efforts centered on transforming math and science teaching and learning by effectively integrating and supporting instructional technology into K-12 classrooms at five other area school districts: [East Irondequoit](#), [Geneva](#), [Dansville](#), [Penn Yan](#), and [Auburn](#).

An ongoing partnership of the six school districts with the University's [Warner School](#) of Education and [College of Arts, Sciences, and Engineering](#) and [Rochester Museum & Science Center](#), the project will recruit, engage, and support a cohort of select digitally-rich master teachers through a combination of coursework and mentored experiences. Fellows will receive a state-approved [Advanced Certificate in Digitally-Rich Teaching in K-12 schools](#). Additionally, a limited number of fellows will be able to pursue [NYS Certification as School Building Leader and School District Leader](#).

“Newark Central is honored to continue our partnership with the Warner School of Education at the University of Rochester,” Said Superintendent Matt Cook. “Over the last few years, we have been fortunate to learn with and learn from the team at Warner. Our teachers have benefitted from these grant opportunities, which ultimately benefits our students.”

The Warner School of Education initiative to support teachers in helping K-12 district through new digital conversion efforts comes on the heels of the Smart Schools Bond Act (SSBA) passed by voters in a statewide referendum in November 2014 authorized the issuance of \$2 billion of general obligation bonds to finance improved educational technology and infrastructure to improve learning and opportunity for students throughout the State.

The Act requires that each Smart Schools Investment Plan (SSIP) be thoroughly reviewed and approved by the Smart Schools Review Board prior to a district bidding, contracting or expending any SSBA funds. Not doing so will result in such costs not being eligible for reimbursement with SSBA funds.

Newark recently received its Smart Bond approval and will begin to rollout the 1:1 personalized learning initiative later this school year.

Over the next five years, this newly awarded Noyce MTF grant will provide intensive training to 20 experienced teachers who will serve as master teaching fellows in these six school districts. As part of the program, fellows will complete 41 post-master's credits of customized coursework at the Warner School, attend monthly leadership seminars, and engage in mentored field experiences. The goal is to provide digitally-rich experiences in STEM teaching, coaching, professional development, and reform and digital conversion over the course of project.

This grant is the third award the Warner School has received since 2010 from the NSF Teaching Fellowship/Master Teaching Fellowship Track, which aims to support the development of NSF Master Teaching Fellows by providing professional development and salary supplements for exemplary K-12 math and science teachers to become master teachers in high-need districts. The previous two awards, totaling \$5 million, will have prepared, by 2020, a total of 32 master teachers and teacher leaders in math and science in nearby urban districts—the Rochester City School District, Geneva Central School District, and Newark Central School District.

Building on the work to develop teacher leaders from the first two phases of the project, this new grant will address the growing national need for mathematics and science teachers who are equipped to provide high-quality instruction in digitally-rich classrooms. It will allow the project to continue another five years and also adds four additional high-need school districts: East Irondequoit, Dansville, Penn Yan, and Auburn.

“We are proud to partner with these six districts in this endeavor to bring digital learning to life in math and science classrooms and to empower educators with rich knowledge, skills, and experiences to enhance instruction,” says [Cynthia Callard](#), professor and executive director of the [Center for Professional Development and Education Reform](#) who serves as the principal investigator on the project. “We are thankful for the National Science Foundation’s ongoing support and commitment to preparing teacher leaders who can support the implementation of high-quality, technology-enriched STEM instruction that will help to improve student achievement.”

Research has shown that integrating technology into education can deepen and enhance the teaching and learning process. The Warner School has been engaging in research and course design to address the principles and implications of digital conversion and online learning. Most recently, the Warner School created the [Center for Learning in the Digital Age](#) to build and expand on its work.

In 2015, the Warner School formed a unique [partnership](#) with the [East Irondequoit Central School District](#), a leader in digital conversion in schools, to help promote the adoption of a digital conversion model in area K-12 schools. This collaboration led to the creation of a K-12 Digital Conversion Consortium in which the six partnering school districts are among nearly two-dozen participating districts across the state that are collaborating and sharing ideas and resources related to digital conversion efforts.

The UR Noyce MTF Program has the potential to serve as a replicable model for other universities working to support the development of similar cadres of digitally-rich master teachers in math and science in the future. Partners will continue to disseminate results and lessons learned at conferences and through journal articles.

The new Track III MTF funding is the sixth NSF-funded grant, totaling over \$10 million, awarded to the Warner School under the Robert Noyce Scholarship Program in the past decade. Learn more about the Warner School’s [Noyce Programs](#) and teacher preparation programs in [mathematics](#) and [science](#) and [K-12 Digitally-Rich Teaching](#).

The [Center for Professional Development and Education Reform](#) partners with organizations and institutions to improve educational practices and policies through professional learning, leadership development, and program evaluation. The center merges policy, scholarship, and practice to build capacity among its education partners while fostering a vibrant, intellectual community for collaboration on the most pressing educational challenges. For more information on professional development opportunities, contact the Center for Professional Development and Education Reform at warnercenter@Warner.rochester.edu or 585.275.2616.

The [Center for Learning in the Digital Age](#) aims to level the educational playing field by leveraging digital technologies to enhance learning experiences, developing new educational models, and increasing access to education in K-12 and higher education settings, as well as across the lifespan in a variety of non-traditional settings. For more information about the Center for Learning in the Digital Age, contact [Raffaella Borasi](#), the center’s director and Warner School’s dean, at rborasi@warner.rochester.edu.

About the Warner School of Education

Founded in 1958, the University of Rochester’s Warner School of Education offers graduate programs in teacher preparation, K-12 school leadership, higher education, education policy, counseling, human development, online teaching and learning, program evaluation, applied behavior analysis, and health professions education. The Warner School of Education offers PhD programs and an accelerated EdD option that allows eligible students to earn a doctorate in education in as few as three years part time while holding a professional job in the same field. The Warner School of Education is recognized both regionally and nationally for its tradition of preparing practitioners and researchers to become leaders and agents of change in schools, universities, and community agencies; generating and disseminating research; and actively participating in education reform.