

ARRA Title IID Technology Competitive Grant Descriptions 2009-11 (Fund Code 776)

PRIORITY ONE

Priority 1 funding supports projects that work collaboratively with the Department to create, implement, and evaluate online courses/modules for underserved high school students in alternative education, credit recovery, or credit acceleration programs.

Assabet Valley Regional Vocational Technical School District

Project Title: *Virtual High School Alternative Education Project*

Contact: Dr. Charla Boles, 508-485-9430 x1426, cboles@assabet.org

Partner Organization: Virtual High (VHS)

Project summary: The goal of the project is to create an alternative instructional program that provides for credit recovery in Biology. A secondary goal is to develop a cohort of five teachers using a blended teaching approach with Web 2.0 tools. Virtual High School (VHS) will use a blended learning model for the purpose of increasing student engagement and learning in specific English Language Arts, Mathematics, and Biology courses. VHS will also assist with the development and hosting of the Biology alternative instructional program, while training classroom teachers for the blended learning classroom instructional model.

Boston Public Schools

Project Title: *LOG-ON Time: Learning On Line, Graduating ON Time for Underserved High School Students*

Contact: Monica Roberts, 781-858-7530, mroberts@boston.k12.ma.us

Partner Organizations: FableVision and EDC's EdTech Leaders Online (ETLO)

Project summary: The Boston Public Schools' (BPS) Learning On Line Graduating ON Time (LOG-ON Time) program will provide underserved students, who are at risk of dropping out, with a unique opportunity to reach graduation by offering engaging "anywhere-anytime" learning. LOG-ON Time program provides options that are individualized to meet the challenges these students face. Four schools and 30 educators will be selected to work with the BPS high school support and technology staff. FableVision and EDC's EdTech Leaders Online (ETLO) will design core content course curricula and deliver it in a student-driven online course management system. Building on the successful implementation of BPS's credit recovery program, in alignment with the Mayor of Boston's Community Learning Initiative, LOG-ON Time will leverage youth-centric 21st century skills and tools. This will help to turn students on to learning and keep them engaged in the flexible process, ensuring that they are college-ready and success bound. BPS's LOG-ON Time program taps into a learning modality that is intuitive for youth and can revolutionize K-12 classrooms. Students and teachers will be engaged in a collaborative and interactive online learning experience, which is necessary to succeed in today's digital society.

Fall River Public Schools

Project Title: *Collaborative Innovative Education (CoInEd)*

Contact: Marilyn Matzko, 508-675-8230, mmatzko@fallriverschools.org

Partner District: Framingham

Partner Organization: Northeastern University

Project summary: This program is a cross-district educational optional learning community that provides academic and social/emotional services for over-aged and under-credited students in Fall River and Framingham. In partnership with Northeastern University, program staff will design and implement a high-functioning, competency-based instruction and assessment platform. This environment, adapted for English language learners, will contextualize student learning through the use of hybrid and traditional pedagogies. Best practices in online instruction will be combined with real-time, real-world interactions among students, student support personnel, career counselors, and teaching faculty. When implemented completely, the program aims to change our entire academic structure and move it into the 21st century.

Hampshire Educational Collaborative

Project Title: *Differentiated Algebra Online: A Blended Model Utilizing the Learning Coach to Promote Individual Student Growth*

Contact: Antonio Pagan, 413-586-4900 x159, apagan@collaborative.org

Partner Districts: Amherst/Pelham
Gill-Montague
Ware

Easthampton
Northampton

Frontier Regional
New Leadership HMCS

Project summary: This program will help build intellectual capacity by providing a flexible engaging learning environment for alternative education students and underserved students needing to recover credit. The online Algebra course will assist up to 180 students and reinforce their learning in their areas of greatest weakness. This course allows students to achieve sufficient academic growth and to gain the credit they need to graduate and/or to score at least proficient on the MCAS. Adolescents today already feel comfortable with new technologies and prefer an active media-rich environment, which will be replicated in this course. Using a learner-centered approach with virtual instructors, combined with the direct support of learning coaches, the program will personalize learning and motivate students to master the content. After the coaches participate in training, they will help students develop and improve their cognitive and meta-cognitive skills necessary to achieve improvement. Learning how to process information effectively, as well as knowing one's own learning processes, is necessary for functioning well in future academic and workplace environments. Technology alone will not address the needs of today's youth to be prepared for the 21st century. In order for the teaching team to be effective in providing positive interventions and supports for their students, instructors and coaches will participate in a professional workgroup to become a resource for one another. An Education Data Engineer will work with districts and program staffs to collect, manage, and analyze student/teacher outcomes to make effective use of data as feedback to drive improvements.

Lower Pioneer Valley Educational Collaborative

Project Title: *LPVEC Adaptive E-Learning Project*

Contact: Zachary Smith, 735-2260, zsmith@lpvec.org

Partner Districts:

Agawam Public Schools	Amherst – Pelham	Hampden-Wilbraham Regional School District
Chicopee High School	East Longmeadow High School	Longmeadow High School
Ludlow Public Schools	Northampton High Schools	Southwick-Tolland
Westfield Public Schools	West Springfield Public Schools	

Partner Organization: UMass Amherst

Project Summary: The Lower Pioneer Valley Educational Collaborative (LPVEC) Computer Adaptive Differentiated Online Learning System (CADOLS) is designed to improve existing alternative and credit recovery/acceleration programs. This project will create a new program by incorporating highly qualified, content-certified instructors who will develop online courses for the project. These instructors will provide guidance for students in alternative settings where they can access the online courses. LPVEC will also collaborate with UMass Amherst's Research and Evaluation Methods (REMP) and Instructional Technologies programs to create adaptive online courses that are designed to make it easier to differentiate instruction for special needs and gifted learners. Classroom teachers, in alternative settings, will be offered professional development specifically in facilitating e-learning for students whose organizational and/or academic skills undermine their ability to succeed in traditional online courses. Specific district data will inform course development in order to ensure that the courses meet the districts' needs. Using district data, course developers and consultants will be able to create adaptive online courses with instructional interventions targeted to address specific curriculum standards. A team of special education teachers at LPVEC will receive training in online adaptive instruction and act as a resource in the region for future course development.

New Bedford Public Schools

Project Title: *New Bedford Public Schools Online Academy*

Contact: John Gomes, 508-997-4511 x3455, jgomes@newbedfordschools.org

Partner Organization: Educational Development Center (EDC)

Project summary: This project addresses the need to enhance existing alternative education programs by adding online credit recovery and credit acceleration courses. This project provides professional development for both in-class and online teachers in two areas: teaching in an online environment and designing online modules. As a result of this project, students in alternate educational settings will have access to standards-based online units of study, and a cadre of in-class and online teachers will be prepared to teach and design online content. The newly trained teachers will design eight to thirteen new modules to improve student learning in Mathematics, English Language Arts, and Social Studies, or to aid students in preparing for the MCAS.

North Adams Public Schools

Project Title: *Configuring the 21st Century High School: A Pilot Program in Curriculum Development and Online Learning*

Contacts: Tim Callahan, 413-662-3240, tcallahan@napsk12.org

Jean Bacon, 413-664-9633, jbacon@napsk12.org

Partner Organization: Center for 21st Century Learning

Project summary: The goal of this project is to develop and implement a series of interdisciplinary courses in the core academic disciplines of English, Mathematics, Science, and Social Studies for ninth and tenth grade students as an alternative to the traditional high school curriculum. These new courses will offer students the flexibility of a blended online and face-to-face learning environment so as not to impede academic progress by the restrictions of "seat time" and bell schedules. With its "anytime anywhere" learning

opportunities, the program will benefit both students who are at risk of falling behind because of inadequate attendance and students who wish to accelerate their learning. These new courses will also increase students' competence in 21st century skills, including communication & collaboration, critical thinking and problem solving, creativity and innovation, and technology and information literacy. Through this project, Drury High School will lay the groundwork to become a hub for virtual secondary education throughout the region. Program outcomes are expected to include improved student performance (specifically college-level skill readiness), reduced drop-out rates, and increased "on time" (i.e., four-year) graduation rates, as well as a series of more specific outcomes related to the district's current alternative education, credit recovery, and credit acceleration programs.

Somerville Public Schools

Project Title: *A Technology-Aided Credit Recovery and Acceleration Program for Alternative Education Students in Somerville*

Contact: Dr. Vince McKay, 617-625-6600 x6035, vmckay@k12.somerville.ma.us

Partner Organization: Education Development Center, Inc.

Project summary: This grant will provide an academic credit recovery and acceleration program that combines virtual and classroom learning. The target group is from Somerville's alternative education secondary school: students diverse in age, social-emotional needs, and academic performance. These students are highly mobile, at risk for dropping out, and "off track" from graduating on time. Mathematics courses will be the focus of a new program that combines the talents of a certified teacher with the embedded technology of online learning courses. The specific learning needs of students will be addressed using this technology, which offers students multiple entry points, self-paced, guided learning, and an individualized learning experience that will keep them engaged in the completion of critically important course work leading to high school graduation and productive adult lives.

PRIORITY TWO

Priority 2 funding supports projects that create effective technology-rich environments to support existing tiered-instruction in English Language Arts and Mathematics.

Boston Renaissance Charter Public School

Project Title: *Mobile Intervention Media Lab*

Contact: Lisa Radden, 617-592-0934, lradden@bostonrenaissance.org

Partner Organizations: WGBH
Apple Computer

Project summary: The Boston Renaissance Charter Public school will purchase a mobile laptop lab, a mobile MP3 learning lab, and an upgrade to the school's reading intervention software to support and enhance tiered instruction in English Language Arts. The grant will also cover the cost of a web server that will allow students and teachers to collaborate on digital projects using Web 2.0 technologies such as blogs and wikis and share their work school-wide. The "Mobile Literacy Lab" will travel to select elementary classrooms for integration into lessons during literacy blocks. A suite of creativity software will enable students to create digital artifacts of their learning; students will read and respond to reading through writing, all the while learning 21st century skills. Teachers will be shown how to infuse their lesson plans with technology standards to improve student achievement in English Language Arts. Teachers will also learn how to integrate MP3 technology into small group instruction and listening centers, including the use of audio books, interactive educational apps, student response systems, and digital media. Special education and English Language Learner (ELL) classroom teachers and support staff will learn about the uses of MP3 technology and accessibility tools. Participants will monitor their own progress in technology skills and knowledge through the administration of pre- and post-TSAT surveys. In Year 2, participants will become members of a Technology Leadership Team, supporting their colleagues in the expansion of the program.

Cambridge Public Schools

Project Title: *Improving Tiered Instruction in Middle Grades through Full Implementation of RM Software and Other Interactive Technology*

Contacts: Mark Healey, 617-349-6683, mhealey@cpsd.us
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Partner Organization: RM Education

Project summary: The goal of this two-year project is to improve the district's tiered intervention program in middle school Mathematics through a phased training program for all middle school Mathematics teachers. As a first step, the district Mathematics coaches will align the program topics in its Mathematics software with the district's pacing chart. Over the two years of the program, six professional learning teams, each a partnership of one large and one small school, will receive professional development and follow-up site visits from RM Education. These teams will also meet to share experiences and to prepare and deliver presentations for a summer institute. Three teams per year will undertake this training. At the completion of the project, as a result of in-depth professional development and classroom experience with the RM program and auxiliary hardware, it is expected that teachers will be proficient in using the software as a way to enrich their Tier 1 instruction and as a tool for multiple Tier 2 interventions. This will lead to

significant improvement in student achievement in middle school Mathematics and better preparation for high level Mathematics courses in high school.

Chelsea Public Schools

Project Title: *Technology Enhancement Project for Middle Grades Mathematics Intervention and Remediation*

Contacts: Katherine Foulser, 617-466-5231, foulserk@chelseaschools.com
Claudia Acevedo Ziegler, 617-466-4454, cziegler@chelseama.gov

Project Summary: Over the past four years, Chelsea Public Schools has been successful in raising student achievement in middle school Mathematics by using an online assessment and reporting system. The district will use the grant funds for professional development and computer equipment that will extend its use of the system from assessment and reporting to instruction. Specifically, the District will explore (1) the use of handheld wireless student response systems as a means of ongoing formative assessment in the classroom, and (2) the use of online Instructional Dialog features in the system to personalize remediation and intervention.

Chicopee Public Schools

Project Title: *Integration of SMART Technology into the 21st Century Elementary Classroom*

Contacts: Deborah Drugan, 413-594-1448, ddrugan@chicopee.mec.edu
Maria Nassar, 413-594-1409, mnassar@chicopee.mec.edu

Project summary: The Chicopee Public Schools will use interactive whiteboards and student response systems to assist elementary and middle school teachers to instruct students in a variety of ways. These technologies will allow teachers to enhance visual, auditory and kinesthetic instruction delivery. In addition, the technologies will make it possible to assess students quickly and to use real-time data to inform instruction. Because of the interactivity of the technologies, teachers will find it easy to facilitate and encourage students to take leadership roles in their learning, interacting and demonstrating their knowledge and abilities. The technologies support whole class, small group, and individual learning. The district's goal for implementation of this project is to provide a platform for teachers to overcome the monotony of traditional instructional methods. It is expected that the project will result in improved learning for students, because that they will become more excited about what they are studying.

Clarksburg Public Schools

Project Title: *Developing Technology Rich Classrooms to Support Tiered Instruction*

Contact: Karen Gallese, 413-663-8735, karengallese@gmail.com

Partner Districts: Berkshire Arts and Technology Charter Public School
Florida School
Savoy Elementary School

Project summary: In a collaborative effort between the schools of the Northern Berkshire School Union (Clarksburg, Florida and Savoy) and the Berkshire Arts and Technology Charter Public School, each district will expand and enhance its capacity to provide technology-integrated instruction as a fundamental component of its schools' tiered instruction model. The shared objective among the partners is that technology be used by teachers to deliver curriculum, re-teach and reinforce skills, and immediately assess student learning. Resources from the grant will be used to create technology-rich classrooms and to share professional development opportunities in support of each school's overarching goal to create powerful learning environments that will extend knowledge and the mastery of skills for all students.

Fitchburg Public Schools

Project Title: *Project TEAM (Technology Enhancing Achievement in Mathematics)*

Contact: Eileen Spinney, 978-343-2149, spinneye@fitchburg.k12.ma.us

Partner District: Leominster Public Schools

Project summary: Project TEAM (Technology Enhancing Achievement in Mathematics) will strategically impact the middle school Mathematics experience of 3500 students in grades 6 through 9 and 60 teachers. The project will create 21st Century learning environments, rich with interactive technology, for the core and supplemental instruction of middle school Mathematics students. Technology will impact the three main components of a powerful core Mathematics instructional system: physical environment, teacher pedagogical content knowledge, and instructional tools and materials. Project TEAM will maximize the educational benefits of technology, providing timely, strategic interventions within core and supplemental instructional settings. The goal is to ensure each student's successful mastery of mathematical concepts and learning standards within the current tiered model.

Haverhill Public Schools

Project Title: *Creating an Effective Technology-Rch Environment That Supports Tiered Instruction in Middle School Mathematics Classrooms*

Contact: Steve O'Brien, 978-374-5740, sobrien@haverhill-ps.org

Project summary: This project will help to create a technology-enhanced Mathematics classroom environment. It will support and improve existing efforts in the development of a complete Tiered Instruction/Response to Intervention (RtI) model in Mathematics in grades 5 and 6 across the district's four middle schools. To improve student achievement in Mathematics, the project will procure technology for Tier 1, 2 and 3 instruction, creating technology-enhanced Mathematics classroom environments. The project will also provide ongoing quality professional development on the effective use of technology for Mathematics instruction, assessment, and the district's iSucceed MATH technology supplemental program. Additionally, the project will develop a middle school Mathematics Tiered Instruction Teacher Leadership Team to support successful staff implementation of technology-integrated Tiered Instruction/Response to Intervention (RtI) in Mathematics across the four middle schools. The district will continue to sustain its commitment to this project and the expansion of technology-integrated instruction. It is expected that this project will have an impact on technology-infused instruction throughout the middle school subject areas, extending to the elementary and high schools. Teachers and students will become more technology-proficient, and student achievement will increase.

Hill View Montessori Charter School

Project Title: *Hill View Montessori's Technology-Enhanced Math Instruction Project (TEMIP)*

Contact: Janet Begin, 978-521-2616 x100, jbegin@hvmcps.org

Partner District: River Valley Charter School

Partner Organizations: Public Consulting Group
IAK Educational Solutions/ALEKS

Project summary: Hill View Montessori's (HVM) Technology-Enhanced Math Instruction Project (TEMIP) will leverage technology resources and associated professional development to strengthen and solidify HVM's student support system in Mathematics. Enhanced technology resources and professional development will support the administration of computer-based formative assessments and analysis of the corresponding data to support the school's tiered Mathematics instruction. In particular, the project will use Assessment and Learning in Knowledge Spaces (ALEKS), a web-based, artificial intelligence system, to support Mathematics instruction and provide ongoing formative assessments. Further, customization of the assessment output will allow formative data to be uploaded to the state Data Warehouse so that customized reports can be created using both formative and summative mathematics data. These reports, indicating student knowledge and skills, can then be used with teaching teams to adjust teaching and to make informed decisions about the remediation, intervention, and enrichment aspects of the school's tiered Mathematics instruction. This work will be facilitated by Public Consulting Group, which will provide professional development and coaching designed to build a data-use culture aimed at improving student achievement.

Ludlow Public Schools

Project Title: *Elementary-Level Tiered Support Enhanced with Technology*

Contact: Christine DeBarge, 413-583-5665 ext 109, 121, c_debarga@ludlowps.org

Project summary: The district has established a format for providing tiered support for students in grades K-5 who are identified as performing below expected levels in literacy. The use of technology is considered an integral component in a teacher's ability to provide differentiated instruction to students during the literacy instruction block. The project will provide an opportunity for intensive professional development in the use of technology for tiered instruction, as well as the necessary hardware to implement instructional supports.

North Brookfield Public Schools

Project Title: *SMART (Supporting Math and Reading through Technology) Kids!*

Contact: Erin Nosek, 508-867-9821, enosek@nbschools.org

Project summary: The North Brookfield SMART Kids initiative will serve to add a new technological dimension to English Language Arts and Mathematics classrooms in the district. The addition of interactive whiteboards in the elementary and secondary school classrooms will allow all students to benefit from a visual, auditory, and kinesthetic approach to teaching and learning. This approach will add to the core instruction in both subjects. Additionally, it will enhance student engagement and serve as a way to support students who may need a more interactive approach to learning. The technology enhancements will support the district goal of differentiation of instruction, giving the classroom teachers another tool to meet the needs of their students. Ongoing professional development and additional remedial reading software will also provide needed instructional support for tiered instruction in English Language Arts, Reading and Mathematics. Collectively these technology resources, coupled with ongoing professional development and collegial team work, will also provide a base for Tier 2 supplemental instructional supports.

Old Colony Regional Vocational Technical School District

Project Title: *Providing Tiered Instruction in the Vocational High School Academic and Technical Programs.*

Contact: Jackie Machamer, 508-763-8011 x139, jmachamer@oldcolony.us

Partner District: Old Rochester Regional

Partner Organization: Compassionate Computing

Project summary: The purpose of this project is to expand the current use of tiered instruction in the academic areas, as well as to begin tiered instruction in the vocational areas. The project will focus on the use of technology to support instruction, supplemental instruction, and intensive intervention. This grant will allow the English Language Arts, Mathematics, and Science instructors to expand their use of tiered instruction by incorporating technology into their instructional strategies. Additionally, a pilot program for Computer-Aided Drafting and Computer Information Technology will address the embedded English Language Arts, Mathematics, and Science standards in the technical programs and develop appropriate tiered strategies for these programs. In subsequent years, the use of tiered instruction will be expanded to other vocational programs.

Pittsfield Public Schools

Project Title: *Tiered Instruction through Technology*

Contact: Linda Avalle, 413-499-9523, lvalle@pittsfield.net

Project summary: The project will provide foundational technology as well as professional development opportunities to support implementation of the three-tiered system of intervention for Mathematics and English Language Arts at the middle school level. The project will provide laptop carts for Tier 2 and 3 students. Additional laptop carts and professional development will enhance the district's online district benchmarks, expand the use of an online assessment system in middle school classrooms, and support the use of formative data as a foundation for differentiated instruction to increase student achievement.

Revere Public Schools

Project Title: *Revere High School Tiered Instruction Improvement Program*

Contact: Dianne Kelly, 781-286-8257, dkelly@revere.mec.edu

Partner Organization: JFYNetWorks

Project summary: This project will provide high quality instructional services to nearly 10,000 students by further developing a three-tiered evidence-based strategy. The project has four main objectives: (1) provide benchmark and formative assessments in Mathematics to all of the district's grade 9 and 10 students using online assessment tools; (2) align intervention materials including Moodle, instructional software, and other resources; (3) embed real-time coaching and professional development for staff at all three tiers; and (4) develop the pedagogical capacity of our teachers through JFYNetworks's train-the-trainer strategy to effectively use appropriate instructional technologies.

Smith Leadership Academy Charter School

Project Title: *Using Technology for Multiple Learning Approaches to Improve Student Outcomes in Math and English*

Contacts: Thea Stovell, 617-474-7950 x11, thea.stovell@smithleadership.org

Elisif Brandon, 617-243-0557, elisif.brandon@smithleadership.org

Project summary: The Academy offers all students a tiered instructional program in Mathematics and English Language Arts. Teachers have used differentiated instruction for a few years and have observed the benefits to student achievement. This project will provide additional multimedia technology to enhance instruction in the Mathematics and English classrooms. As part of this project, the school will provide sustained, high-quality professional development on the use of technology in the classroom for differentiated instruction. It is expected that the project will result in increased student achievement in Mathematics and English Language Arts as measured by MCAS and internal assessments.

Webster Public Schools

Project Title: *Max Out on Math*

Contacts: Gregory Ciardi, 508-943-0104, gciardi@webster-schools.org

Paula Johnson, 978-943-1922 Ext. 2707, pjohnson@webster-schools.org

Project summary: This project will provide the resources needed to create an updated and technology-rich environment that will support the district's emerging tiered instruction model in Mathematics. It will also provide resources that will improve the core instruction, supplemental instruction, and necessary intensive intervention for students in grades 1 through 6. The district's current Mathematics program has supplemental and assessment resources that can be plugged into a tiered instructional model. Without the necessary hardware and professional development, these resources have not been available to teachers. This project will allow the district to update and expand its hardware, access online resources that were previously inaccessible to the district's teachers, and provide professional development in the use of the new resources. As a result, it is expected that the district three-tiered model will be more effective and that students' performance will improve.

Winchendon Public Schools

Project Title: *Technology to Support Tiered Instruction*

Contact: Valorie Miller, 978-297-0261, vmiller@winchendonk12.org

Partner Districts: Gardner Public Schools

Partner Organizations: Cambium Learning Technologies SmartTech
Fitchburg State College Wizcom Technologies

Project summary: The Technology to Support Tiered Instruction project will provide professional development to support the integration of technology in the classroom. The project will also provide interactive whiteboard technology, Mathematics software, text-to-speech software, electronic reading pens and e-book readers to support the Tiered Instruction model. Partnering organizations include Fitchburg State College, SmartTech, Cambium Learning Technologies, and Wizcom Technologies.

PRIORITY THREE

Priority 3 funding supports projects that provide quality online professional development, support teachers in the integration of technology into curriculum and instruction, and share promising practices with teachers across the state.

ACCEPT Education Collaborative

Project Title: *Project ABLE (Achieving Blended Learning Environments)*

Contacts: Susan Rees, srees@accept.org
Grace Magley, gmagley@millisps.org

Partner Districts: Ashland Holliston Medway South Middlesex Regional Vocational Technical
Dover-Sherborn Hopkinton Millis
Franklin Medfield Natick

Partner Organization: Virtual High School

Project summary: Project ABLE (Achieving Blended Learning Environments) is a two-year professional development grant that will support the development of rich blended learning environments in STEM-related courses, with attention to literacy skills. The funds will be used to train teachers to develop and implement rigorous blended learning unit plans that are standards based and universally designed. Teachers will learn to use online technologies to create interactive and engaging teaching materials that will help all students achieve successful outcomes. Students will gain a deep understanding of the content, become self-directed learners, and develop critical-thinking, problem-solving, decision-making, communication, and collaboration skills. Professional Development will be delivered to the participating educators in a blended environment that models best practices in both pedagogy and technology integration. Six online courses and seven face-to-face workshops will provide participants with the knowledge and skills they need to create a rich curriculum and an adaptive project-based learning environment. Throughout the duration of the grant, educators will participate in mentoring and collaboration opportunities to share best practices and successful outcomes for future promising practices. The project will serve 47 school teachers and up to 2,820 students in grades 8-12 in the eleven partnering ACCEPT member districts.

Easthampton Public Schools

Project Title: *Technology Integration in Math Instruction (TIMI)*

Contact: Nancy Follansbee, 413-529-1500 x140, follansbeen@easthampton.k12.ma.us

Partner District: East Longmeadow

Partner Organization: WGBY

Project summary: In this project, *Fostering Cooperative Learning, Discussion, and Critical Thinking in Elementary Math* (Grades 1-5), a WGBY TeacherLine course will be the vehicle for supporting elementary teachers in integrating technology into classroom instruction. This will help to expand the Mathematics program to include more focus on the process standards. Through use of laptop computers, electronic projection, and interactive whiteboards, teachers will involve students in lessons that foster problem solving; reasoning and proof; and communication. These are the process standards that connect to all five content strands and enhance both acquisition and application of content knowledge. They are also the cornerstones of the National Council of Teachers of Mathematics (NCTM) standards, the Massachusetts Curriculum Frameworks, and MCAS test items.

Gloucester Public Schools

Project Title: *Bringing the 21st Century Classroom to Life: The Interactive Mathematics Classroom*

Contact: Shayne Trubisz, 978-281-9833, strubisz@gloucester.k12.ma.us

Partner Organization: RM Education Software, Inc.

Project summary: The Gloucester Public Schools will partner with RM Education Software, Inc. to support teachers in grades 4-10 in creating model interactive Mathematics classroom instruction. Teachers will participate in extensive professional development opportunities (workshops, focus groups, user groups, classroom modeling, and collaborative lesson design). They will have access to the necessary technology and software (interactive slates, projectors, laptop carts, and computers). An online course will be developed for professional development purposes with the content of the course provided by RM Education consultants. A "trainer of trainers"

model will be developed during the grant period to enhance/expand and sustain the work. Lessons and the online course will be shared with the Department of Elementary and Secondary Education.

Greater Lowell Regional Technical School District

Project Title: *MassFinity: Using Thinkfinity and MassONE to Increase Student Achievement*

Contact: Michael R.H. Barton, 978-441-4969, mbarton@gltech.org

Partner District: Wilmington Public Schools

Partner Organization: Verizon Thinkfinity

Project summary: MassFinity is a project between Greater Lowell Technical High School (GLTECH) and Wilmington Public Schools (WPS). The partners will work collaboratively with Verizon Thinkfinity and MassONE to provide targeted professional development by implementing a train-the-trainer model. The goal of the project is to integrate the use of technology into curriculum and instruction, resulting in increased achievement and literacy for low-performing students. The program design is a two-tiered approach. Year 1 will feature extensive training of selected teachers to become certified Thinkfinity trainers, who will then utilize MassONE to create and disseminate lesson plans aligned to the Massachusetts Curriculum Frameworks. Professional development will be a combination of online and face-to-face training supported by key district personnel, a Verizon Thinkfinity trainer, and a MassONE liaison. MassFinity will utilize information gleaned from the Education Data Warehouse system to identify students who are at risk, as well as the specific standards that are critical to their success. In Year 2, the certified trainers will provide training to the next group of teachers. The expected outcomes are increased literacy skills for students who are identified as limited English proficient (LEP) or formerly limited English proficient (FLEP), as well as increased English Language Arts and Mathematics achievement for students who are in the low income and special needs subgroups.

Hampshire Public Schools

Project Title: *WEBOT: WEstern Massachusetts roBOTS*

Contact: John Heffernan, 413-369-4399, jheffernan@hr-k12.org

Partner Districts: Gateway Regional School District Ashburnham-Westminster Easthampton Public Schools
Greenfield Public Schools Northampton Public Schools South Hadley Schools
Amherst-Pelham Regional School District

Partner Organization: Technology in Education Partnership (TEP)

Project summary: This project will enable elementary and middle school teachers in western Massachusetts to engage students in mathematics- and science-rich lessons through the use of robotics. Grant recipients will receive robot kits, funding for the educational technology needed in their schools to carry out this project, and 45 hours of professional development to create a technology-rich and engaging program for students. Professional development will include a hybrid online and face-to-face course using MassONE Moodle, as well as coaching and mentoring to teacher. While this project is of benefit to students in Science and Mathematics, it will also support learning in science/technology and engineering--an area that has traditionally been difficult for many districts to address. In addition, robotics education builds skills in cooperative learning. The project will benefit students of both genders by providing a place to shine for some boys who struggle academically but have lots of hands-on experience and by providing early Science, Technology, Engineering, and Mathematics (STEM) experiences to young girls. Robotics provides an introduction to advanced technologies and processes critical to our high tech economy and our future.

Lawrence Public Schools

Project Title: *Building Technology Literacy through Integrated Curriculum*

Contact: Patricia Knox, 978-975-5905 x330, pknox@lawrence.k12.ma.us

Partner Districts: Community Day Charter Public School
Lawrence Family Development Charter School

Partner Organization: Education Development Center, Inc

Project summary: This project will assist middle-school teachers and students in developing technology literacy skills through implementing a curriculum that integrates technology with content based on the Curriculum Frameworks. The target population includes public school teachers in Lawrence, where all schools are high need with respect to both technology and achievement goals. The effective application of technology tools by teachers in an integrated curriculum will provide students with opportunities to apply skills and develop a deeper understanding of curriculum content. The professional development will be a hybrid model (combination of face-to-face and online), and all online courses will use MassONE Moodle for instruction.

Malden Public Schools

Project Title: *21st Century Classrooms and Professional Development: Malden Public Schools and WGBH*

Contact: Sidney Smith, 781-397-7204, ssmith@malden.mec.edu

Partner Organizations: WGBH
Salem State College

Project summary: The Malden Public Schools will collaborate with WGBH on the development of 21st century, technology-rich, classroom learning environments; a research and inquiry-oriented, collaborative learning experience for students; and a related online course, delivered through MassONE Moodle, that will assist other teachers in developing similar environments and learning experiences for their students. Students will utilize wireless netbooks, WGBH's Teachers Domain, and online resources to identify resources (text, visual, oral, musical) that include the most important ideas and details associated with topics within the high school history and science curricula (and related Massachusetts standards). Working from these selected online resources, students will generate the most important ideas and details, in collaboration with one another; collaboratively question and respond to these ideas and details in a thoughtful manner; and generate new understandings under the expert direction and tutelage of highly-trained teachers. In year one, the project will focus on developing exemplary demonstration high school history and science classrooms, as well as a related online course for teachers. In year two, the project will focus on expanding to additional history and science classrooms and on refining the online course. In year three, after the grant funding has concluded, the Malden Public Schools will expand the work to additional classrooms.

Seven Hills Charter School

Project Title: *Optimizing Teacher Use of SMARTboard Technology in Core Curriculum*
Contact: Josh Coyne, 508-799-7500, jcoyne@sevenhillscharter.org

Partner Organization: Aegom Interactive

Project summary: With a solid infrastructure of computers and interactive whiteboards in the school's classrooms, this project will provide comprehensive professional development for teachers on using 21st Century technologies to integrate instruction and increase achievement among students. Significant and proficient use of these technologies will allow teachers to enhance the delivery of instruction and curriculum.

PRIORITY FOUR

Priority 4 funding supports projects that use appropriate technology effectively to implement formative, benchmark, and summative assessments, particular the Massachusetts English Proficiency Assessment (MEPA).

Boston Public Schools

Project Title: *Digital A-B-Cs for Early ELLs: Building Capacity in Schools to Infuse Instruction & Assessment with Technology to Support Young English Language Learners*
Contact: Melissa Dodd, 617-635-9199, mdodd@boston.k12.ma.us

Project summary: The Boston Public Schools will pilot the use of technology in kindergarten through grade 2 for the purposes of (1) improving instruction for English Language Learners (ELLs) through technology-infused instruction and assessment and (2) providing early learners with preparation for online assessments, which begin in Grade 3. This project will introduce technology resources and professional development into kindergarten through grade 2 classes to enable teachers to administer baseline English language skills assessments at the time of district entry, prior to the first available MEPA. Early assessment will enable teachers to individualize lessons and differentiate instruction to meet the needs of limited English proficient (LEP) students. It will also enable teachers to prepare students for success as they strive to meet grade-level reading and writing requirements through online MEPA testing in the later elementary grades. If successful, the project will raise achievement levels for ELL students and improve student technology skills for online MEPA testing by Grade 3.

Pittsfield Public Schools

Project Title: *Using Interactive Technology to Foster Independence, Engagement, and Interaction of English Language Learners*
Contact: Virginia Guglielmo-Stees, 413-499-6304, vguglielmo@pittsfield.net

Project summary: In this project, interactive whiteboards, handheld computing, learner response systems, and supporting technologies will serve as valuable tools in facilitating the sheltering of content and English language development in the content area classrooms. These strategies will foster independence, student engagement, and peer interaction between native and non-native English speakers. Instruction using a variety of modalities (i.e. visual, kinesthetic) will allow learners with little or no literacy in their native language to tap into their style of learning while acquiring English and understanding the content area material. In addition, focused professional development relative to the application of these technologies and assessment of English language learners will be provided.

Quincy Public Schools

Project Title: *Implementing Online Benchmark, Formative, and Summative Assessment for English Language Learners*
Contact: Colleen Roberts, 617-984-8760, croberts@quincy.k12.ma.us

Project summary: In this project, the district will implement online assessment in English Language Arts, Mathematics, and Science. The district will also integrate the use of technology content libraries, as well as benchmark and summative assessment, in English and Science for secondary level English Language Learners. The district has already successfully piloted online applications at the elementary and middle school level. This project will expand the integration of web-based academic resources to assist teachers in sheltering English Language Arts and Science content and assessment for English Language Learners. Professional development will assist teachers in reaching English Language Learners, as well as in becoming oriented to online resources to augment the English and Science curriculum content. English Language Learners will experience online assessments in the classroom; this daily assessment experience will prepare them for the online MEPA.

Worcester Public Schools

Project Title: *Building 21st Century Skills for English Language Learners*

Contact: Hope Oliveras, 508-799-3494, oliverash@worc.k12.ma.us

Project summary: This project will allow English Language Learners to use technology to learn their second language (English). The English Language Learners entering Worcester Public Schools are ethnically, culturally and linguistically diverse and have varied educational backgrounds. In order to meet the needs of the current students who are second language learners, Worcester presently provides the New Citizens Center and three elementary school sites. These schools will have new technologies that the students can use to access learning tools and assessments. Both the students and teachers will learn about the different software that comes with the computers. A professional development component will focus specifically on technology and English Language Learners. The students will become adept at using the technology so that they will be able to take the MEPA online.