

**New Hampshire NCLB Title II-D  
Regular Funds for Round 9  
Competitive Grants – February 2011**

**Step 2: Application Narrative for Classroom Mini-Grants Program**

(Please be sure to complete Step 1 online at: [www.nheon.org/oet/nclb](http://www.nheon.org/oet/nclb))

District:	Laconia School District	Date:	2/21
Project Manager:	Rebekah Gonzalez		
Position Title:	Physical Education Teacher		
Mailing Address:	350 Pleasant Street, Laconia, NH 03246		
Email Address:	rgonzalez@laconia.k12.nh.us		
Phone:	(603) 524-2168		

***BE SURE TO READ ALL OF THE FOLLOWING STATEMENTS.***

**ASSURANCES**

I hereby certify that:

1. To the best of my knowledge, the information contained in this application is correct, and the school board of the district named above has authorized me as its representative to submit this application.
2. The District has submitted to the New Hampshire Department of Education (NHDOE) a General Assurances signature page for the current year.
3. The District has consulted with the appropriate non-public schools during the design and development of this Ed Tech project prior to all decisions that affect the opportunities of private school children to participate in the program.
4. All funding for this project will be obligated and reported no later than the quarterly report ending **6/30/2012** and expended and reported no later than quarterly report ending **9/30/2012**.
5. The grant funds expended will supplement, not supplant, funds from non-federal sources.
6. The District will keep records and provide information to the NHDOE as may be required for program evaluation, consistent with responsibilities under NCLB Title II-D as outlined within the Grant Application Guidance (e.g., annual tech survey, case study report).
7. The schools to be funded by this program are compliant with the Children's Internet Protection Act (CIPA) because the district employs a filtering mechanism for student access or because Ed Tech funds referenced in this application will NOT be used to purchase computers used to access the Internet or pay for direct costs associated with accessing the Internet.

**Superintendents: When you submit your final grant application in the online grants management system, you will be certifying the above assurances.**

## Application Form for Classroom Tech Mini-Grant

Applicant: Laconia School District

<b>Criteria</b>	<p><b>Applicants:</b> Criteria used to review each grant application are listed in the left column. Please do not delete the criteria column. By using this right column to describe how your project proposes to meet the criteria, you can increase the likelihood that you won't leave out important information. There is no page limit, but please be as clear and concise as possible.</p>
<b>Project Abstract (10 points)</b> A clear and concise abstract (100-150 word limit) outlines the mini grant project and overall goals, along with the process for implementing it in the classroom.	
1. Describes the project, including grade level(s) and content area(s), indicates how this project fits into school/district curriculum, indicates process for implementation and assessment, as well as how it would advance the achievement of students.	<p>This project integrates math, music, and health to enhance physical fitness. Students will make connections between optimum heart beat levels for maximum physical fitness by keeping up with tempos in music they have created. This project will teach the use of music creating software, and data recording and graphing. Students will be evaluated using rubrics appropriate for each grade level, and problem solve by determining the best music score for optimum heart function.</p>
2. Abstract includes an essential question, connected to the state frameworks, which probes for deeper meaning and broader understanding of the framework content addressed by this project, fostering the development of higher order thinking and problem solving.	<p>Laconia School District students will answer the essential question, "Can we connect our heart beat to a song beat?"</p> <p>600 students grades K-5 will use iPods and software to create original music pieces in various tempos. Then will use the pieces to chart and track their rate of heart beats while completing rhythmic aerobic actions. Data will be graphed to determine the optimum musical beat that corresponds to the optimum heart rate for physical activity.</p>
<b>Project Description (50 points)</b> Describes project in general terms and indicates whether it is a replicated project or an original project. Projects which can directly impact more than one classroom are preferred.  If project is replicated, proposal describes the intended changes to the project idea and how they will improve the project in order to be appropriate for the situation. Includes specific goals and objectives that relate to the essential question, and explains how those goals will be achieved by the project. Include a rationale for any changes made to the original project.  If your project is original, proposal describes how the project is appropriate for current situation. Includes specific goals and objectives that relate to the essential question, and explain how those goals will be achieved by the project.	

<p>1. Proposal generally discusses how implementing this project will improve technology integration within classrooms and in the core content areas. Indicates the need for technology integration in school or district. Describes the determination of need for this project and includes one or more examples of data that support the rationale of need for the project, such as NECAP assessment or other data. This explains to the reviewer why the project is worthy of funding as it relates to student achievement.</p>	<p>This is an original project which seeks to integrate the use of iPods into the existing music, physical education, and mathematics curriculum through an integrated project relating human heart rates to different music tempos.</p> <p>Most students are well versed with how to use today's technologies like cell phones, iPods, computer forums, etc. This is the world they live in, and it is how they are comfortable communicating. This project will integrate these types of technologies through the use of the iPod touch. Through the music, physical education, and math components the iPod and its applications will be used to: create original music, record the results, keep track of heart rates and physical fitness levels, record, and graph data.</p> <p>Obesity rate among children is rising in New Hampshire and throughout the United States. According to the NH Department of Health and Human Resources over 40% of third graders are either overweight or obese (2009). Childhood obesity is directly linked to adult obesity (Serdula, 1993). It is essential that children learn to evaluate their health and fitness in order to take steps toward being lifelong movers. The tools and healthy habits that are taught and nurtured during elementary school can determine the quality of each child's life. Healthy adults are citizens that are more productive and beneficial to the communities in which they live.</p> <p>On the NECAP results our students scored lowest on Analysis and Interpretation as well as Data, Statistics and Probability. This project would allow students to record their data in order for it to be analyzed and interpreted. Not only will they gain experience in these areas but the data that they will be working with will be meaningful to their lives.</p> <p>Our schools have a high percentage (67%) of students who are economically disadvantaged. Many of them do not have the opportunity outside of school to work with technology. Music and Physical education reach all students. The students will have significantly increased access to technology.</p>
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2. Project is focused on one or more content areas, with the proposal indicating which content area and associated standards are the main focus. Proposal indicates how the project will address ICT literacy skills without focusing solely on the acquisition of ICT literacy skills devoid of core content learning.

## National Music Standards

- Improvise melodies, variations, and accompaniments.
- Compose and arrange music within specified guidelines.
- Read and notate music.
- Listen to, analyze, and describe music.
- Understand relationships between music, the other arts, and disciplines outside the arts.

## NASPE National Standards

- 3. Participates regularly in physical activity.
- 1. Demonstrate competency in motor skills and movement patterns needed to perform a variety of physical activities.
- 2. Demonstrate understanding of movement concepts, principles, strategies, and tactics as they apply to the learning and performance of physical activities.
- 6. Value physical activity for health, enjoyment, challenge, self-expression, and/or social interaction.

## Mathematics Standards

M(DSP)-5-1 **Interprets a given representation**(tables, bar graphs, circle graphs, or line graphs) to answer questions related to the data, to analyze the data to formulate or justify conclusions, to make predictions, or to solve problems.

M(DSP)-2-1 **Interprets a given representation** (pictographs with one-to-one correspondence, line plots, tally charts, or tables) to answer questions related to the data, or to analyze the data to formulate conclusions.

M(DSP)-3-3 **Identifies or describes representations or elements of representations that best display a given set of data or situation**, consistent with the representations required in M(DSP)-3-1

M:DSP:K:1 **Interprets a given representation created by the class** (models and tally charts) to answer questions related to the data, or to analyze the data to formulate conclusions using words, diagrams, or verbal/scribed responses to express answers.

M:PRP:2:2 **Students will use mathematical reasoning and proof and be able to:**

- Use models, known facts, properties, and relationships to explain their thinking.
- Justify solution processes and answers
- Draw conclusions using inductive reasoning.

M:PRP:5:2 **Students will use mathematical reasoning and proof and be able to:**

- Draw conclusions and solve problems using elementary deductive reasoning and reasoning by analogy.

M:PRP:5:1 **Students will use problem-solving strategies to investigate and understand increasingly complex mathematical content and be able to:**

- Determine the reasonableness of solutions to real-world problems.
- Translate results of a computation into solutions that fit the real-world problem

M:PRP:2:1 **Students will use problem-solving strategies to investigate and understand increasingly complex mathematical content and be able to:**

- Formulate and solve multi-step problems from everyday and mathematical situations.
- Verify and interpret results with respect to the original problem.
- Determine if the solution of a problem is reasonable.
- Exhibit confidence in their ability to solve problems independently and in groups.

## ICT Standards

### 1. Creativity and Innovation

Students demonstrate creative thinking, construct knowledge, and develop innovative products and processes using technology. Students:

- create original works as a means of personal or group expression
- use models and simulations to explore complex systems and issues

### 2. Communication and Collaboration

Students use digital media and environments to communicate and work collaboratively, including at a distance, to support individual learning and contribute to the learning of others. Students:

- interact, collaborate, and publish with peers, experts, or others employing a variety of digital environments and media
- contribute to project teams to produce original works or solve problems

### 3. Research and Information Fluency

Students apply digital tools to gather, evaluate, and use information. Students:

- plan strategies to guide inquiry
- process data and report results

### 4. Critical Thinking, Problem Solving, and Decision Making

Students use critical thinking skills to plan and conduct research, manage projects, solve problems, and make informed decisions using appropriate digital tools and resources. Students:

- plan and manage activities to develop a solution or complete a project
- collect and analyze data to identify solutions and/or make informed decisions

### 5. Digital Citizenship

Students understand human, cultural, and societal issues related to technology and practice legal and ethical behavior. Students:

- exhibit a positive attitude toward using technology that supports collaboration, learning, and productivity

### 6. Technology Operations and Concepts

Students demonstrate a sound understanding of technology concepts, systems, and operations. Students:

- understand and use technology systems
- select and use applications effectively and productively

<p>3. Proposal describes in detail the project based learning unit(s) that will encompass the project, and project features support acquisition of digital and media literacy skills. Project based learning (or problem based learning) with a constructivist approach and essential questions are the heart of these projects. Team projects must show evidence that these pedagogies are clearly understood and applied.</p>	<p>The Arts are an amazing resource to show student understanding. They allow students to demonstrate what they know in a way that is unique and meaningful to the learner. Music and movement have a natural connection. Singing at young ages helps to develop language skills and movement to music supports cognitive development through bodily expression. Physical activity and music provide enjoyment. That enjoyment allows for intrinsic motivation to learn.</p> <p>All students at Elm and Pleasant Street Schools (grades K-5) will learn how to compose music of different tempos. iPads and composing software will be used to create the different compositions and will allow instant feedback and playback. Students of varying abilities will be able to compose songs and receive exposure to melodic composition and audio mixing technologies.</p> <p>These compositions will be used in Physical Education to create movements. The students will design performances within specific guidelines. Movements will be created on an individual level which allows for adaptation to each student's needs. Students will calculate their heart rate during each performance. After all compositions have been performed and recorded, the results will be used to rate the intensity of each performance. Data will be collected and recorded on an iPod touch using spreadsheets, graphing tools and other applications. This enables students to access the data in many forms and allows for 3D imaging. Students will be able to determine their target heart rate and can select music based on the beats per minute (bpm) to achieve their fitness goals. The graphs and data will be used to evaluate student learning using a rubric adjusted for each grade level.</p>
<p>4. Proposal identifies and explains at least three specific learning goals the team needs to address in its professional development activities and how the proposed professional development will address these.</p>	<p>Our goals through professional development are to:</p> <ul style="list-style-type: none"> <li>• Expand our knowledge of how mobile devices can be used as personal tools for teaching, learning, and leadership.</li> <li>• Discover how to personalize learning with mobile devices, apps, and iTunes U.</li> <li>• Learn how to manage mobile learning environments.</li> </ul> <p>The professional development we have selected is a workshop through Apple entitled Getting Started, Mobile Devices. Through this workshop we will explore new ways to use mobile devices, access applications, differentiate instruction and create content that can be transferred between devices. This workshop would be available to an additional 14 members of our staff to be used to enhance their teaching. Karen Switzer and John Martin, technology leaders in our district, will also provide guidance.</p>
<p>5. Proposal indicates that support has been obtained from the superintendent AND the principal, preferably by attaching letters of support within the grant application pages (not as separate files). Such support acknowledges that he/she has read the RFP, understands the requirements, and will allow the applying team to fulfill the requirements, if they are awarded the grant.</p>	<p>The Laconia School District has shown a very high level of commitment to technology integration and staff development. The district has completed an ARRA grant and numerous technology mini grants. Each member of the team, as well as the administration, understand the requirements in the RFP and look forward to participating, completing, and sharing results of our project.</p>
<p>6. Proposal supports schools, teams, or districts that haven't participated in mini-grants previously or partners with such entities.</p>	<p>Many schools are looking for ways to integrate hand held technology. Although we are not directly connected to schools that have not participated in any of the grant opportunities, we will invite our city private schools to participate in the project when final scheduling has been made.</p>
<p>7. Proposal indicates partnerships which involve NH teacher preparation program faculty.</p>	<p>Laconia School District has a partnership with Plymouth State University and we would be able to include teacher candidates in all aspects of the project including the professional development.</p>
<p>8. Proposal indicates thoughtful inclusion of students with special needs and uses appropriate technology to assist those learners in order to promote the achievement of all students.</p>	<p>Music and physical education lend themselves to inclusion of special needs students. We have a number of students with differing levels of autism and music is a place they can shine. Throughout the project, each step can be modified for students with physical or cognitive special needs working individually or in groups.</p>

9. Proposal indicates plans for dissemination of the project to other schools and districts throughout the state, including presentations at 2 or more venues.	At the conclusion of the project we will share the data and videos with our local school board, with the other three schools within our district, the McAuliffe Technology Conference (11/29/11-12/1/11), and at the Mini-Grant celebration day at Church Landing. Also we plan to submit a proposal to present at the NH Association for Health, Physical Education, Recreation and Dance (NHAHPERD) Conference Fall 2012. Presenting at NHAHPERD would allow us to share with educators throughout the state. We hope to inform the community as well as aid other professionals in their pursuits of technology integration, student achievement, and professional growth. This project could then be replicated at the various levels with age appropriate modifications.
10. Proposal indicates specific plans for video production training as needed and an outline for the promotional video that describes the various stages of design and implementation of the project.	Our fifth grade team received a grant last year that provided training for all teachers in green screen technology and creating movies with students. Members of this year's grant team have also used movie maker on many occasions with students to create finished products. At this point we have a wealth of support and expertise in creating movies. The next step for professional development would be to explore creating DVDs with our completed movies.
<b>Capacity for Success (35 points)</b> Describes the capacity of each team member to achieve meaningful success at achieving the goals of the Tech Mini-Grant Program in the school or district. Clearly articulates the program and policies in place that will support success in terms of professional development, technology leadership, and how this program would meet specific achievement needs of the students.	
1. Proposal demonstrates capacity for success by providing strong evidence that school/district and the individual team members are willing and able to conduct the scope of work involved in implementing this project.	Catherine Dwinal, Music educator at Elm and Pleasant Street schools is highly skilled in many music forms. She worked with the Information Technologies department throughout her time studying at Plymouth State University. Rebekah Gonzalez, Physical educator at Elm and Pleasant Street schools has advanced degrees in the Arts, training in a variety of technologies and has experience with OPEN NH courses. Both educators are familiar with video editing and movie making software. Music and Physical Education share a common block weekly that will be used to collaborate throughout the process. Our team is being assisted by Sonya Roberts and Karen Switzer who have worked on numerous Title IID technology grants in the past. They will be a valuable resource for organization of the project as well as creating the presentation and corresponding videos.
2. Proposal describes why participation in this effort is appropriate for district and the capacity the school or district has that will insure the success of the project.	Laconia School District is passionate about student achievement, the Arts, and the possibilities technology offers our students. This year the district has initiated a program called Learn it, Earn it. Teachers were offered the opportunity to learn ways in which either an iPad or lap top could be used to improve their teaching. Classes were held regularly and all participants have been collaborating in a Google group. Woodland Heights Elementary School is finishing their grant work and we aim to learn from their experiences.
3. Proposal describes any structures, policies, and/or procedures already in place in school or district that support the project and the project-based learning philosophy.	Elementary school has always been a place where projects abound and Laconia School District is no exception. Students learn the most and remember projects far more and longer than any other type of learning. Laconia embraces the project based learning philosophy at every level.
4. Proposal discusses the abilities and expertise of the individual team members with respect to their ability to collaborate, organize, schedule, and deliver a successful project to their students.	If you have ever known a specialist teacher that schedules 37 classrooms across two schools on a weekly basis, you will know that they have to be expert organizers, collaborators, and know how to schedule to make it work. Both members of this project team do just that. Collaborating with classroom teachers is very important and is done on a weekly basis in collaborative weekly meetings.

<p>5. Proposal indicates team member and district/administrative support with respect to:</p> <ul style="list-style-type: none"> <li>• implementing the project in classrooms,</li> <li>• supporting the professional development opportunities necessary to successfully participate in the Mini-Grant program,</li> <li>• participating in required mini-grant meetings,</li> <li>• producing the 3 minute documentary video for presentation,</li> <li>• preparing the lesson plans and materials necessary for sharing with other,</li> <li>• attending the Mini-Grant celebration day,</li> <li>• presenting the project within the district and at a regional or state venue, and</li> <li>• participating in post-project evaluations for program improvement.</li> </ul>	<p>The project members, administration, and classroom teachers are dedicated and excited each time a new project is planned and implemented. The learning that takes place and the connection to real life experiences motivates all involved to put in 110%. All aspects of the project and grant recipient responsibilities will be accomplished and the support of our administration has always been exceptional. The professional development will pertain to many great projects happening in our schools and will give us more tools to move forward even after this project is complete.</p>
<p>6. Proposal discusses the Extent of Impact within the School – indicates the anticipated number of staff that will be directly and indirectly impacted by the project, as well as the number of students that will be directly and indirectly impacted, along with supporting explanations for each.</p>	<p>The projects will impact 600 students across two schools directly. Each of these students will be involved in the creation and implementation of music and movement. Thirty seven classroom teachers will have a part in the graphing and interpretation of data with their students. The professional development planned through Apple will significantly impact the teaching of its sixteen participants.</p>
<p>7. Proposal discusses the Extent of Impact to Other Schools – Describes how the project will involve or include outreach to multiple schools, or multiple districts, in order to increase the impact of the project.</p>	<p>The project encompasses two schools within the Laconia School District. Sharing at the NH Association for Health, Physical Education, Recreation and Dance (NHAHPERD) Conference Fall 2012 would allow us to reach out to other schools that would like to use similar projects in their own schools.</p>
<p><b>Budget (5 points)</b> Budget contains a narrative and justification of expenses regarding equipment, supplies, travel, and professional development expenses appropriate to carry out the proposed project. The total for professional development is at least 25% of the total budget requested. Include \$100 per team member for each teacher to attend the spring 2012 celebration event.</p>	

Budget is formatted with the narrative in left column and total amounts in right column. Within the narrative, proposal describes a logical connection to district goals and shows how costs were calculated. Proposal includes \$100 per teacher for attendance at celebration event.

## Professional Development

### Apple Professional Development: Mobile Devices

1 Day 6 hour training 16 participants	\$2900.00
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Apple representative will be at our school to teach ways to enhance learning using iPad and iPod touch

Mini-grant celebration	\$ 500.00
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Sub total	\$3400.00
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## Hardware

32Gb 4 <sup>th</sup> generation iPod Touch	Quantity (8) \$300.00	\$2400.00
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These will be used in Physical Education classes to record data and graph results.

\$1,200 13inch Macbook Pro with 2.4GHZ, 4GB Memory

250 GB Hard drive	Quantity (1) \$1200.00	\$1200.00
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This will be used to update, install software and access itunes for the iPads and iPod touch.

16GB iPad (With Wifi only)	Quantity (5) \$500.00	\$2500.00
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iPads will be used to compose in Music Education classes.

Subtotal	\$6000.00
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## Accessories

Speck PixelSkin HD for iPod touch (4th Gen.)

Quantity (8)	\$30.00	\$ 240.00
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iPod touch covers increase the durability and life of the iPod.

Apple iPad Case	Quantity (5)	\$39.00	\$ 195.00
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iPad cases increase the durability and life of the iPad.

Subtotal	\$ 435.00
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## Applications

iPod and Itune Applications	\$ 65.00
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Applications will be used for composing, spread sheet, and graphing

Total	\$10,000
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## LACONIA SCHOOL DISTRICT

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*School Administrative Unit Thirty*

*"Developing the potential for success with every student, every day, in every way"*

**Robert A. Champlin, Superintendent of Schools**  
**Terri L. Forsten, Assistant Superintendent of Schools      Edward N. Emond, Business Administrator**

February 18, 2011

To Whom It May Concern:

Please accept this letter of support for the team of Rebekah Gonzalez, Catherine Dwinal, Karen Switzer, and Sonya Roberts in their application for a Title IID grant. This team is a very diverse team including physical education, music, technology and classroom teachers. The physical education teacher and music teacher split their time in two schools in the Laconia School District - Elm Street School and Pleasant Street School, offering the added benefit of being able to support two elementary schools. Student wellness is very important in our school district and we have recently formed a Student Wellness Committee to address the growing problem of obesity in students. This grant would provide developmentally appropriate physical activity and exercise through physical education classes, music, and mathematics. Students will see the real life application of technology in music and how it can support their physical activity. In turn, mathematic concepts will be demonstrated with technology and student physical activity as they graph and analyze their data.

I have read the request for proposal and support all aspects of the requirements of this project.

Sincerely,

Bob Champlin  
Superintendent

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# *Elm Street School*

478 Elm Street

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Laconia, New Hampshire 03246-2399  
Phone (603) 524-4113 Fax (603) 528-1249  
Eric Johnson- Principal  
E-mail: ejohnson@laconia.k12.nh.us



2/15/2011

To Whom it may Concern:

This letter is to support Rebekah Gonzalez , Catherine Dwinal, Sonya Roberts, and Karen Switzer in their application for a Title IID grant. Elm Street School is a school that has an economically disadvantaged student population of 67%. The grant would help support our student population in physical education, music, and mathematics. With the addition of this technology, students will see the real life application of technology in music and how it can support their physical activity. In turn, mathematic concepts can be demonstrated with technology and student physical activity as they graph and analyze their data. The added benefit of this proposal is that it will affect two schools in the Laconia School District- Elm Street School and Pleasant Street School.

As of present, Elm Street School students only get 1 PE class a week. They get music twice a week, but only for half of the school year. With the proposal this team has put together, there will be more integration of the two classes with math to give a more complete experience in the short time they have in specials. Our academic data shows that our weakness is in math more than literacy. We also have a deficit in the area of analyzing and interpreting information. This grant would help provide a program to help strengthen the areas in which we are weak. Again, a nice aspect is that this program affects two schools- Elm Street and our sister school, Pleasant Street.

I have read the request for proposal. I will support this team in fulfilling the requirements of the grant. As a team, this is a group that will get the project done and done to a high standard of quality. The members are organized, knowledgeable in their field, and committed to the children of Laconia. I want to thank you on behalf of the students of the Laconia School District for your consideration of this proposal.

Sincerely,

Eric Johnson  
Principal- Elm Street School