

**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:	Winnisquam Regional School District	Date:	February 12, 2010
Project Manager:	Suzan Gannett		
Position Title:	Director of Curriculum and Instruction		
Mailing Address:	433 W. Main Street, Tilton, NH 03276		
Email Address:	sgannett@wrsdsau59.org		
Phone:	603 286-4116 ext. 109		

***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: Winnisquam Regional High School

<b>Criteria</b>	<b>Applicants:</b> <i>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.</i>
<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.	This project will be part of the physics and integrated science curriculum. The physics classes are predominantly offered to seniors, the integrated science course is new to students as of 2011-12 and will be offered to juniors as another option for fulfilling the third science credit. This project will introduce the mechanics unit in the physics portion of both classes. It will help the student to see the connection of motion and mechanics while making a connection to the real world. Student will be assessed on the activities and presentations and lab reports that are produced.
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.	This project is proposed by Winnisquam Regional High School teachers so that students can answer, "How Can Biometrics Improve the Athlete's Performance?" The goal is for students to participate in a biomechanical analysis of motion involved with athletic and adventure activities using a fall sports and bunging jumping. The class will choose from the following sports: soccer, football, field hockey, or volleyball. Using video cameras and scientific probes students will document athletic activities and will review the extent humans will go to exert force and the thrill of motion on their bodies. With interactive whiteboards students will analyze motion, body position and work with sports professionals to provide students with individualized reports on how to improve their athletic performance. Secondly, students will investigate bungee jumping using the wireless dynamic sensor system to see further application of the project from the Mini Grant completed by Oyster River High School last year.
<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>The WRSD is continually increasing its use of technology in the classroom as a best practice for engaging students in all content areas. Technology integration has increased through the acquisition of grants allowing students and teachers to more readily access tools that provide their students with the opportunity to experience 21<sup>st</sup> Century skills and make the connection between school and the world beyond the school doors. The District is committed to the State's Scholars Program which connects students with business partners and requires them to take the course work that will be necessary for them to attend schools of higher education. The District is also undertaking the beginning of the STEM program. This program will encourage students to make a commitment to take more technology, science, mathematics and engineering courses. The acquisition of this grant and the materials which students will have the opportunity to use will increase the base for project-based programming.</p> <p>NECAP data shows that WRHS is maintaining scores of 23% of students being proficient or above. When looking at the breakout of science domains, it clearly shows that inquiry is where our students have scored the lowest. It is also the standard that the district has shown the most growth in when compared with 2008-2009 by 10 percentile points.</p> <p>This project will increase our students' opportunity to use inquiry based learning in a real-world application.</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.

**Essential Question:**

"How will the use of technology and biomechanical analysis improve athletic performance?"

**Enduring Understanding:**

~Transformations of energy take place in the movement of the human body while involved in exercising or athletic performance.  
~All changes in motion are caused by the forces that act on objects.  
~Understanding the nature of motion and how to describe to explain why motion occurs

**Curriculum Standards to be addressed:**

**Science**

**S:PS3:11:2.1** Interpret and apply the laws of motion to determine the effects of forces on the motion of objects.

**S:PS3:11:2.3** Apply the concepts of inertia, motion, and momentum to predict and explain situations involving forces and motion, including stationary objects and collisions.

**S:PS3:11:1.8** Given information (e.g., graphs, data, diagrams), use the relationships between or among force, mass, velocity, momentum, and acceleration to predict and explain the motion of objects. [PS3(9-11)INQ+POC-8]

**S:PS4:12:4.1** Understand the various scientific fields that use scientific content and skills and distinguish between professional and skilled science jobs/careers in the physical sciences.

**Math**

**M:F&A:10:1** Identifies, extends, and generalizes a variety of patterns (linear and nonlinear) represented by models, tables, sequences, or graphs in problem solving situations.

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

- Expand the repertoire of problem-solving strategies and use those strategies in more sophisticated ways.
- Formulate and redefine problem situations as needed to arrive at appropriate conclusions.

**ITSE**

**3. Research and Information Fluency**

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

- a. plan strategies to guide inquiry.
- b. locate, organize, analyze, evaluate, synthesize and ethically use information from a variety of sources and media
- c. evaluate and select information sources and digital tools based on the appropriateness to specific tasks
- d. 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 will:

- identify and define authentic problems and significant questions for investigation
- plan and manage activities to develop a solution or complete a project
- collect and analyze data to identify solutions and/or make informed decisions  
use multiple processes and diverse perspectives to use alternative solutions.

**Students will know:**

- Newton's Laws of Motion
- Inquiry-based practice for scientific experimentation
- Appropriate analysis, modeling, and documentation for data produced.

	<p><b>Students will be able to:</b></p> <ul style="list-style-type: none"><li>• Use Newton's Laws to explain the biomechanical motion of the human body</li><li>• Students will understand how to use vector quantities to calculate the vertical and horizontal components of projectile motion of an object.</li><li>• Use video cameras and scientific probes to document athletic activities.</li><li>• Use interactive white boards and appropriate Vernier equipment to analyze motion and body position.</li></ul>
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<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>This project will be part of the mechanics unit for AP Physics, College Preparatory Physics, and Integrated Science. The unit will include three different laboratory experiments and associated activities. The activities will be followed by a presentation that students will make regarding their findings. The first activity introduces students to Vernier probes and sensors used in Physics and introduce them to the concepts of linear motion. The second lab allows students to use video cameras and Vernier sensors to further investigate the laws of motion as they relate to fall sports. The goal will be for the students to analyze the aspect of the sport they are studying using physics and technology to get better results. The third activity further expands student learning to investigate the extent to which humans will go to experience "forces" while involved in recreational activities.</p> <p><b>Lab 1: Graph Matching</b>  One of the most effective methods of describing motion is to plot graphs of position, velocity, and acceleration vs. time. From such a graphical representation, it is possible to determine in what direction an object is going, how fast it is moving, how far it traveled, and whether it is speeding up or slowing down. In this experiment, you will use a Motion Detector to determine this information by plotting a real time graph of <i>your</i> motion as you move across the classroom.</p> <p><b>Lab 2: Data Analysis of Sports</b>  This lab will allow students to select a favorite sport and focus on the motion of the ball, equipment, and/or person and analyze the factors involved to include forces, vectors, velocity, and acceleration. With the analysis, students will make suggestions as to how the student that has been video-taped might improve their skills at their sport. The students will also be able to work with someone who knows the sport. After making the suggestions and giving the student athletes the chance to practice, students will re-evaluate their play by a second round of videotaping and analysis and by further talking to the athletes to ask them to assess whether the suggested changes have increased their own abilities to be more successful at their sport.</p> <p><b>Lab 3: Bungee Jumping</b>  The physics of bungee jumping is all about competing forces and the resulting acceleration of the jumper. As the jumper leaves the platform and begins to fall, the predominant force is from gravity, and the jumper is nearly in freefall. Initially the gravitational force accelerates the jumper downward. As the bungee cord goes taut, it begins applying a force opposing that of gravity; at some point the cord's force balances the gravitational force. The jumper continues to fall, however, further increasing the cord's force. The acceleration is then upward. At the jumper's nadir the cord is applying a force much larger than the gravitational force. As the jumper then rises, the cord may go slack, and the jumper is again in freefall. When the jumper falls far enough to make the cord taut, the cycle begins again.</p> <p><b>Presentation</b>  Student will present to the class their findings and how their performance in the sport was enhanced. The presentation will include data collected from the labs using the technology.</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>The teachers involved in this project have the following goals:</p> <ul style="list-style-type: none"> <li>• Use of project-based learning</li> <li>• The implementation of technology and data collection software in into laboratories.</li> <li>• The use of inquiry based labs to access higher ordered thinking skills.</li> </ul>

<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 Superintendent of Schools, Dr. Tammy Davis, has written a proposal in support of the grant application. Dr. Davis has read the RFP and understands what the expectations of the grant are. Dr. Ronna Cadarette, Principal of WRHS has also written a letter of support in for the grant. She concurs that the team will be allowed to support the requirements of the grant. Both have written letters of support for the project.</p> <p>Last year a team from WRMS was awarded the grant and teachers participated in all aspects of the grant.</p>
<p>6. Proposal supports schools, teams, or districts that haven't participated in mini-grants previously or partners with such entities.</p>	<p>Teachers at the high school haven't participated in a mini grant previously.</p>
<p>7. Proposal indicates partnerships which involve NH teacher preparation program faculty.</p>	<p>The Winnisquam Regional School District is in the process of partnering with Plymouth State University as a Professional Development District. Southwick School, an elementary school in the district, serves as a site for Methods students. Currently there are 7 student teachers in the district (3 at the high school, 3 at Southwick School and 1 at the middle school). Dr. Marcel LeBrun, Chairperson of the Education Department at PSU will be the main contact to the district. The formation of this partnership will allow administrators and teachers from both organizations to provide support and professional development to one another. The district will provide hands-on experiences for those students in the process of becoming teachers.</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>The great part about the use of Vernier technology is that it is user friendly. It works like an I-pod and digital devices that the students like to use. Student will be able to do hands-on learning and actually see the connection between the motion and the graphical analysis. When conducting the labs, the teacher will be able to group students to better assist the students with special needs to help them succeed.</p>
<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.</p>	<p>If selected for the grant, teachers will present to their colleagues at the middle school and the high school. They will share unit plans and lesson plans. All teachers in the mathematics and science departments at both the middle school and high school will be invited to attend the Vernier workshop. Unit plans and lesson plans will be placed on the district website to be shared with others. The team will also contact CACES as a venue for presenting their work. The high school teachers have built a connection with Belmont High School as they review what a block schedule at a high school means and how to plan for it. Teachers will share their project with their colleagues in Belmont.</p>
<p>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.</p>	<p>This project involves the filming of the ball, sporting equipment in lab #2. The goal will be to create a PowerPoint that encompasses the process involved in teaching the units from beginning to end including notes, labs and will include the video and Vernier data analysis of the object.</p> <p>There will also be examples of the graphs and data tables that the student produces. It is our goal to have student present their findings in a final portfolio to the class or classes as a whole. These will be filmed so that portions of that can be included in the PowerPoint as well. It is our intention to present that to our School Board at the conclusion of the project.</p>
<p><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.</p>	

<p>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.</p>	<p>Diane Tandy teaches both mathematics and science. She is currently working on her doctoral degree in science. She is the leading force behind starting the STEM program here in the Winnisquam Regional School District. Students in her Physics class have participated in the NH DOT Bridge building project and taken first place. Ms. Tandy has also trained on the Vernier probes which the science department currently has.</p> <p>Joshua Keaton is the Head of the Science Department at Winnisquam Regional High School. He recently finished his Master's degree in Administration and Supervision. He has trained in the use of Vernier probes and recently was invited to present at a NHSTE Conference. He is a member of the high school leadership team.</p> <p>Jen Haskins is the chairperson of the Math Department at Winnisquam Regional High School. She is working on her Master's degree in Administration and Supervision. She is skilled in the use of using technology as a tool for learning. She regularly uses an interactive tablet in her classroom.</p> <p>The District supported a min-grant team at the middle school level in providing time for professional development, and attending the celebration. They also supported teachers and students by helping them with transportation to place their geo-cache supplies in the three towns that make up the district.</p>
<p>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.</p>	<p>The district has developed a five year plan for the acquisition of hardware and software. The Technology Plan for the district was accepted by the NH DOE last spring. WRSD is committed to students being involved in performance based assessments and using inquiry in science. The district has also been involved in vertical alignment committees between the middle and high school. These committees meet on monthly basis and explore the best practices, writing across the curriculum, inquiry based learning and technology integration. All teachers are required to use inquiry as part of each unit.</p> <p>This project links sports, technology, science and mathematics together in helping students to understand how the technology, science and mathematics can help the athlete to become a more skilled player. It is definitely a technique that is used in the sporting world to train world class athletes.</p> <p>The district supports professional development and technology leadership. Teachers throughout the district presented to their colleagues on how to effectively use and integrate technology into their classrooms. The district supports teachers learning new skills and provides them the time to do this. In the district budget as contracted through the WRTA, teachers have the opportunity to take 3 graduate courses a year and to attend workshops up to \$700. The budget has \$90,000 to allow for this opportunity.</p> <p>Teachers from last year's Mini Grant Project have presented their work at the Christa MacAuliffe Conference held in December of 2010. The teachers have presented to all district teachers at the Opening Day and to the School Board. They have proposed presenting at Pond and Peak and NH School Library Media Association.</p>



<p>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.</p>	<p>The WRSD has been proactive in providing students with up-to-date science materials. WRHS has a five year plan for textbook adoption and equipment acquisition. WRMS purchased new textbooks and Foss science kits last year providing students with more inquiry-based lessons and activities. This last year, the elementary schools received the Foss science kits. Again the focus is on inquiry-based learning. Implementation of all new programs came with professional development to help prepare teachers for the focus on inquiry.</p> <p>NECAP testing at the high school level shows 23% of students proficient and higher for the 08-09 and 09-10 SY. At the middle school went from 17% in 08-09 to 28% in 09-10. At the elementary level in 08-09, 55% were proficient and in 09-10 51% were proficient.</p> <p>The District believes the implementation of new materials and the professional development provided to teachers in how to teach using the inquiry method will help our students to become proficient in science. This program will allow students to set hypotheses, explore them and to report their effectiveness in a real-world application.</p>
<p>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.</p>	<p>All three teachers in this project are master teachers. Mrs. Tandy teaches both science and mathematics. All teachers are members of the vertical alignment committees that meet monthly and include members of the middle and high school. Mrs. Tandy collaborates with teachers from both math and science. She has worked with the NH DOT in a bridge building competition. Students from her classroom have won the competition. This is an example of students using their skills in a real-world application.</p> <p>Mr. Keaton is part of the Leadership Team at the school. His organization skills show clearly in the development of a five year plan for the science department's acquisition of textbooks and materials. He is also the advisor for Student Council. He works well with students in this capacity.</p> <p>Mrs. Haskins coordinates the NWEA Map testing at the school in the winter and the spring. She develops the schedule for this event. She is also skilled in the use of interactive whiteboards and daily integrates the use of technology into her classroom. As Department Head, she works with her colleagues to find the best way to meet the needs of those students that are low achieving. She is involved in the scheduling of classes and is also a member of the Leadership Team.</p>
<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 team members and district will support all parts of the proposal. The project will be implemented as part of the Integrated Science and the Physics classes at the high school. Mrs. Haskins will serve as a mentor to the science teachers in the use of the technology integration with regard to the white board. All members will participate in the min-grant meetings and will share in the production of the documentary video. Teachers will collaborate on the building of both unit and lesson plans. Members will develop a pacing guide for the unit. All will attend the celebration.</p> <p>Last year's mini grant team presented at the district's opening day and to the School Board. The team also presented at the Christa MacAuliffe Conference. They will also present this spring at the Library Media Conference. The team presented last spring to their colleagues at the middle school.</p> <p>The team presenting this proposal will make a similar commitment to present in a number of venues covering the school, the district and either a regional or state venue.</p> <p>All members of the team have agreed to participate in the post-project evaluations.</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 proposal will add additional probes to the science and math departments to allow both departments other ways to incorporate the use of technology into units and lessons involving inquiry. All teachers from both the science and math departments in the schools will be invited to attend the Vernier workshop. Thus the project will have impacted approximately 20 teachers. There are approximately 60 students in the two classes that will initially be affected by the project. The additional probes will allow more classes and students to incorporate technology as a tool for learning.</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>Over the past few years, the high school science staff at WRHS has worked to show the middle school science the use and benefits of Vernier technology.</p> <p>Last year the Advanced Placement chemistry students showed the administration and teachers how to use some of the probes we have. It is our intention to use this as a guide to help inspire and jumpstart the use of data collection software in the middle school at WRMS.</p> <p>Our use of this technology will also be presented to college students that are student teaching within the district. Over the past two years we have had two student teachers in the science department. It allows these teachers to see how technology can be used as a strategy for student engagement and learning.</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>																															
<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.</p>	<table border="1"> <thead> <tr> <th>Account</th> <th>Materials</th> <th>Amount</th> </tr> </thead> <tbody> <tr> <td>1100 610</td> <td>clamps, cables, data vests, brackets, tripods</td> <td>\$185.00</td> </tr> <tr> <td>1100 640</td> <td>Activity Based Physics Book HS and Resource Books for Team Use</td> <td>\$ 390.00</td> </tr> <tr> <td>1100 650</td> <td>Logger Pro Update</td> <td>\$ 70.00</td> </tr> <tr> <td>1100 735</td> <td>(3)Motion detectors, (2) Wireless Dynamic Sensor System, 3 Casio High Speed EX-FH 25 10.1 Camera, 1 Interactive Whiteboard and Projector Mounted</td> <td>\$5814.00</td> </tr> <tr> <td>2212 112</td> <td>12 hours of Curriculum development 3 teachers @ \$25 an hour</td> <td>\$ 900.00</td> </tr> <tr> <td>2212 220</td> <td>FICA</td> <td>68.00</td> </tr> <tr> <td>2212 232</td> <td>NH Retirement</td> <td>73.00</td> </tr> <tr> <td>2213 320</td> <td>1 Day workshop with Vernier, Celebration</td> <td>\$2500.00</td> </tr> <tr> <td></td> <td><b>TOTAL</b></td> <td><b>\$10,000.00</b></td> </tr> </tbody> </table>	Account	Materials	Amount	1100 610	clamps, cables, data vests, brackets, tripods	\$185.00	1100 640	Activity Based Physics Book HS and Resource Books for Team Use	\$ 390.00	1100 650	Logger Pro Update	\$ 70.00	1100 735	(3)Motion detectors, (2) Wireless Dynamic Sensor System, 3 Casio High Speed EX-FH 25 10.1 Camera, 1 Interactive Whiteboard and Projector Mounted	\$5814.00	2212 112	12 hours of Curriculum development 3 teachers @ \$25 an hour	\$ 900.00	2212 220	FICA	68.00	2212 232	NH Retirement	73.00	2213 320	1 Day workshop with Vernier, Celebration	\$2500.00		<b>TOTAL</b>	<b>\$10,000.00</b>
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**PROMOTING P.R.I.D.E.**  
**WINNISQUAM REGIONAL HIGH SCHOOL**  
435 West Main Street  
Tilton, New Hampshire 03276  
Phone: 603-286-4531 Fax: 603-286-2006




DR. RONNA CADARETTE  
PRINCIPAL

DR. MARK CHRISTENSEN  
ASSISTANT PRINCIPAL

MRS. ANNA HELBLING  
GUIDANCE COUNSELOR

MS. LISA RANSOM  
GUIDANCE COUNSELOR

February 4, 2011

TO: Dr. Cathy Higgins, NH DOE, Office of Technology  
From: Dr. Ronna Cadarette, Principal 

I would like to lend my support to the **Using Technology and Biometrics to Improve the Athlete's Ability** project proposed by the teachers at Winnisquam Regional High School. This project is designed to incorporate the use of technology in a meaningful way. The goal is for students to participate in a biomechanical analysis of motion involved with athletic activities: golf swing, field hockey stick use, and baseball bat swing. Students will use video cameras and scientific probes to document athletic activities; interactive whiteboards to analyze motion and body position; and work with sports professionals to provide students with individualized reports on how to improve their athletic performance. The project is mirrored from the Mini Grant completed by Oyster River High School last year.

The three teachers involved, Joshua Keaton, Diane Tandy, and Jennifer Haskins are involved with the use of Vernier probes in both science and math. This project based program makes the connection between technology, science, math and the improvement of athlete's skills.

I have read the RFP, understand the requirements and will allow the team to fulfill them if awarded the grant.

*Proudly serving the communities of Northfield, Sanbornton and Tilton.*

*Winnisquam Regional High School is committed to promoting a sense of PRIDE:  
Productive Citizenship ~ Respect for Self and Community ~ Individual Growth and Achievement  
Determination to Succeed ~ Excellence in Education*

# SCHOOL ADMINISTRATIVE UNIT • FIFTY-NINE

433 West Main Street, Tilton, New Hampshire 03276 • 603-286-4116 • 603-286-7402 Fax

TAMMY DAVIS, Ph.D.  
SUPERINTENDENT

SUZAN M. GANNETT  
DIRECTOR OF CURRICULUM & INSTRUCTION

CHERYL SOMMA  
BUSINESS ADMINISTRATOR & FACILITIES DIRECTOR

LORI KRUEGER  
SPECIAL EDUCATION ADMINISTRATOR

JANICE L. GRENIER  
DIRECTOR OF HUMAN RESOURCES & ACCOUNTING


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WINNISQUAM REGIONAL SCHOOL DISTRICT: TILTON • NORTHFIELD • SANBORNTON

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February 7, 2011

To: Dr. Cathy Higgins

From: Dr. Tammy Davis, Superintendent 

RE: MINI GRANT PROJECT

I would like to lend my support to the **Using Technology and Biometrics to Improve the Athlete's Ability** project proposed by the teachers at Winnisquam Regional High School. This project is designed to incorporate the use of technology in a meaningful way. The goal is for students to participate in a biomechanical analysis of motion involved with athletic activities: golf swing, field hockey stick use, and track. Students will use video cameras and scientific probes to document athletic activities; interactive whiteboards to analyze motion and body position; and work with sports professionals to provide students with individualized reports on how to improve their athletic performance. The project is mirrored from the Mini Grant completed by Oyster River High School last year.

The three teachers involved, Joshua Keaton, Diane Tandy, and Jennifer Haskins are involved with the use of Vernier probes in both science and math. This project based program makes the connection between technology, science, math and the improvement of athlete's skills.

I have read the RFP, understand the requirements and will allow the team to fulfill them if awarded the grant.