Allenstown Elementary School

Title II-D Classroom Technology Mini Grant Proposal

"On Board with Mathematics" February 2011

1. District Contact Information and Statement of Assurances

This is the online version of the Classroom Technology Mini-Grant Application. Here you will copy/paste the information from the Word version of your application into the appropriate sections of this online version. Be sure to save your Word document. It will be used again if your grant is awarded. And good luck on your proposal!

ASSURANCES

Please be sure to review the following assurances with your superintendent:

As the superintendent of the applicant district, 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.

Superintendent: Peter Warburton
District: Allenstown
Project Manager: Lynn Allen
Position Title:Principal
Email Address: lallen@sau53.org
Phone 603 485-9574

2. Abstract (10 points)

A1. Description, Grades, Content

The Allenstown Elementary School, in support of its goal to improve mathematics

achievement for all students grades K-3, and responding to recommendations for technology integration and increased access to math manipulatives to support the goal, will purchase 2 Eno Boards to be shared among teachers in K-3 and "Manipulatives in Motion" Software to supplement the AES mathematics curriculum.

B. Essential Question

The professional development and new instructional activities will generate information to help answer the essential question of the Root Cause Analysis process: "Why do the percentages of students achieving proficiency in mathematics throughout grade levels remain low in spite of new efforts to improve mathematics instruction? ", and to validate the to date conclusion of the RCA Process that both manipulatives and technology do not have enough presence in mathematics instruction.

3. Project Description (50 points)

D1.Impact, Need

The Allenstown School District is in Corrective Action due to not meeting adequate yearly progress in mathematics by New England Common Assessment Program (NECAP) results. NECAP Scores for AES from 2005-2010 show little change in meeting improvement goals for grade three improvement in mathematics:
Student Achievement Trend Data from 2009-2010 AES Report Card from the NHDOE website page, www.nh.gov/residents/k12.html

2005-2006		2006-2007		2007-2008		2008-2009		2009-2010	
N	%	N	%	N	%	N	%	N	%
48	44	38	50	50	34	50	40	43	44

NWEA and AIMSweb assessment also support the conclusion that Allenstown's students are not reaching proficiency by standard assessments in mathematics or reading, and that there is a significant gap in achievement between two disaggregated groups: all students and students with disabilities.

The District is now participating in a second Root Cause Analysis (RCA) process to focus to answer questions about why students are not progressing as expected even given initiatives in mathematics curriculum and professional development in the past two school years. Although the RCA is in process, among the concerns that are surfacing are fidelity of instruction using the current mathematics program (Saxon, 2nd ed.), the access to and use of mathematics manipulatives, and the need for integration of technology into classroom instruction. The kindergarten program has most recently acquired the K level Saxon Mathematics program and will begin its implementation.

Of all of the Kindergarten, first, second and third grade classrooms (10) and special education programs (3), only three have Eno Boards. Those boards have recently been purchased with ARRA/IDEA funding to support inclusive classrooms and teachers are beginning to use them. Interest is growing in their

ability to enhance instruction, differentiate instruction, and promote problem-based learning. The Allenstown District Principal has observed instructional processes in other SAU#53 classrooms where technology integration is seen daily and has become aware of how the use of technology can also promote fidelity of program implementation. *(See letter of support from Allenstown Principal, section D.5)*

Because the Allenstown School District has not been able to keep up with trends in technology integration in classroom instruction through local funding, they have relied over the past few years on entitlement and competitive grant funding to populate their classrooms and provide professional development to move to 21st Century classroom environments. They are making progress, mostly recently as recipients of an ARRA Learning with Technology grant (2009) and IDEA Grants that have been used to support access to classrooms for students with disabilities.

The Allenstown School District qualifies as a New Hampshire "High Need" School District. (Appendix A of NHDOE/OET Request for Proposals, 1/26/11): Report of Current U.S. Census Data)

D2. Content & Information and Communication Technology (ICT) Skills

Although the School District has always shown an interest in technology integration, it is the mathematics content area need that also drives this request.
The designation of Corrective Action status for the Allenstown School District results in intense concerns for mathematics achievement, and has resulted in swift and coordinated action to help all students be proficient in mathematics. One of the ***first*** actions undertaken was the convening of a Root Cause Analysis Team, which among other things has identified technology integration as an area of need for mathematics. The need is likely to be incorporated in the Action Plan that will be completed in April 2011. A ***second*** action is the need to incorporate Kindergarten into the overall mathematics curriculum (Saxon, 2nd ed.) by purchasing Saxon programs for the Kindergarten level and to help teachers provide a variety of instructional strategies, while maintaining fidelity of curriculum implementation. A ***third*** is to incorporate Response to Instruction/Intervention protocols into mathematics instruction at all levels. This requires knowledge of a variety of ways to provide individual direct instruction to meet curriculum goals. Enhancing, coordinating and reinforcing instruction by knowledgeable teachers through technology integration has high potential for engaging students in instructional activities for individuals and groups.

D3. Project Based Learning (PBL) Pedagogy

Project/problem based learning will be supported in various ways:

- software from the Saxon Mathematics curriculum "Manipulatives in Motion" which will be available to all classrooms, with priority use in the Kindergarten classrooms.
- web tools to promote project/problem based learning
- developmentally appropriate primary level teacher created inquiry based lessons that use the above
- replications of project/problem based learning observed in other SAU#53 classrooms
- suggested lessons created by individuals and in AES learning communities that focus on mathematics and technology integration, such as one suggested by Maria Knee of the Deerfield Community School, "I have successfully used a wiki to collect information about names of children and then used that data for counting work, and comparing data for various beginning letters."

- lessons will differentiate the needs and activities of all students and adjust with the formative assessments methods prescribed in Response to Instruction/Intervention.

D4. PD Goals

Goals that the "On Board with Mathematics " program will address are:

1. Grade three students will meet their growth targets in mathematics over the next three years.
2. Kindergarten and primary classroom walkthrough data will show increased engagement of students with technology and with project based learning.
3. Technology integration will be observed and reported as an effective tool in the Response to Instruction/Intervention process in mathematics and other content area instruction.
4. There will be an increase in primary grade mathematics lessons that are based on inquiry and project/problem oriented activities.

D5. Admin support

see attached letters

D6. New Mini-Grant teams

The Allenstown Elementary School has not to date participated in the Classroom Mini-Grants Program.

D7. Teacher Prep

See attached letter

SAU #53 Districts have engaged with both Granite State College and the University of NH teacher preparation programs to bring interns into classrooms to support technology programs, and to learn as they participate. If funded, the On Board with Mathematics Program will use a similar model with Granite State College. A collaborative venture is anticipated: students get the experience with the implementation process of technology in the classroom, have an opportunity to participate in "On Board with Mathematics" professional development; experiment with supervision with project based vs. traditional methods that incorporate technology, and report the results; assist in video tracking the work of the project.

D8. All Students

The special education department has been increasingly seeing smart board technology as a way to promote student goals in both special education and inclusive classrooms. It has become a coordinated goal of both special and regular education to supply classrooms with this technology, specifically Eno Boards and to coordinate professional development to guide their implementation and use. By using IDEA ARRA funds and II-D mini grant funds, most AES K-1 classrooms will have Eno Boards, and professional development support the project for implementation to support proficiency in mathematics and other content areas for all students.

D9. Presentations

Participating teachers will produce a three minute video with the help of interns from teacher preparation programs, students, and others who wish to participate. This video will highlight the equipment, the process of receiving and using the equipment for mathematics instruction, discuss changes in instruction or student achievement that result, and have participants (including students) talk about their experience. The three minute video will be posted on SAKAI, presented at Parent

meetings, community events, and school board meetings locally; and at regional and statewide conferences on request.

D10.Video

Training in video production will be provided by AES staff, SAU #53 staff or others who are available to provide technical assistance as part of professional development support for this project. Special education staff is frequent users of video equipment to record, communicate and evaluate student progress. They will be apt recorders of the progress in use of the Eno Boards to show applications for all students.

4. Capacity for Success (35 points)

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.

C1. Scope of work

A dynamic new Allenstown District leadership team has formed strong partnerships among grade levels and acknowledges Kindergarten and Grade 1 as the foundation for success in improving district-wide mathematics achievement. Kindergarten and Grade 1 teachers have sought instructional leadership input as they have begun to develop initiatives such as Response to Instruction/Intervention and data analysis. Current summative assessments include NWEA, NECAP and AIMSweb. Through Data, Leadership, Curriculum and Root Cause Analysis Teamwork, the data has been aggregated and analyzed over the year and reported to all staff, parents, and the Board of Directors to gain support and energy for new instructional initiatives to improve student achievement.

C2. Appropriate for District

In past few years, Allenstown Elementary school has been able to purchase a few "smart" boards with entitlement funds. The new equipment has been readily used by a few teachers, and has caught the attention of other teachers who have requested both the boards and help with using them in classroom instruction. In other districts within SAU# 53, teachers and technology specialists have been moving forward with the use of digital media not only in the upper grades but in primary grades, as in the Deerfield Community School.

The Allenstown District Principal has visited sites where the technology has been used in mathematics instruction and has seen the benefit of technology integration for project based learning in action. Maria Knee, Technology Integration Specialist at the Deerfield Community School has offered technical support if "Mathematics on Board" Project is funded. AES has two teachers, a special educator and classroom teacher who have applied to participate in the Technology Leadership Cohort along with the Allenstown District Assistant Principal and will be able to lead their colleagues throughout the District in the effort to create 21st Century Learning environments.

C3. Structures, Policies, Procedures

The Allenstown School District has a Technology Plan and Professional Development Plan in place as well as an active DINI/Corrective Action Plan that currently drives activities for school improvement related to its priority content improvement area of mathematics.

Allenstown's new leadership encourages the use of technology and monitors use of technology by teachers and students during walk-through observations. The leadership team models technology applications during staff meetings by using interactive boards and the recent addition of Light Speed audio classroom technology.

The Leadership Team has toured other schools in SAU #53 to gain additional ideas for integrating technology into the curriculum.

Allenstown educators have participated in numerous in-district and out of district professional development using interactive white boards.

All elementary teachers are scheduled to receive training in Saxon Mathematics and K-3 teachers will be prepared to use Manipulative in Motion software by June 2011.

C4. Team Expertise

The AES Technology Integration Specialist will lead the "On Board with Mathematics" project. She and the On Board with Mathematics Team will be supported by the Allenstown District Principal, who has a long history of school and special project leadership, and the Special Education Director who has been very active and supportive in the integration of technology into learning environments and potential of technology in learning across the curriculum, ability levels and learning styles. Three teachers will be selected to be part of the core team- one kindergarten, one second grade, and one special education.

C5. Team Admin and Commitment

Team members will enthusiastically participate in the project by:

- developing and sustaining a learning community led by one team member to share information and implementation strategies related to project based learning; discuss successes and challenges related to technology and software us; plan a short video production; develop presentation for AES, SAU #53 Technology day; and other site; determine best assessment and evaluation strategy. Include pre-service teachers as participants and observers in the learning community;
- including the expectation of mini-grants to visit the Edutopia website, http://www.edutopia.org/blog/project-based-learning-findings-study-bob-lenz to understand more fully the project based learning approach and summarize that information for other Allenstown Elementary School Teachers at a faculty or Curriculum Team meeting;
- contacting the LESCN www.lescn.org site or Matt Treamer matt@ncedservices.org about training events, or customized professional development relating to the mini-grant project;
- attending a LESCN sponsored celebration activity to share experiences, including a three minute video produced by participants, summarizing the implementation and results of "On Board with Mathematics";
- attend the Constructing Modern Knowledge summer conference to help prepare for 2011-12 implementation; and

- attend a mini-grants webinar and an online mini course to review project expectations;
- increase the fidelity of use of the existing mathematics curriculum by organizing and promoting the cross-grade K-2 with special areas by engaging both teachers and learners in the use of interactive white boards and software and related professional development.

C6. Extent of Impact within

Staff that will be most directly impacted by the project are the core team of three teachers with a technology integration specialist who will participate as leaders in all opportunities aspects of the On Board with Mathematics project. Others who will be significantly impacted are the greater team of K-1 Teachers and specialists who will have Eno boards in their classrooms, through the Mini-Grant, ARRA/IDEA, or other funding. As a group, these 9 teachers of 85 students will have ongoing support from the core team who will provide opportunities for participation in mini-grant professional development through faculty and curriculum, blogs hosted on SAKAI , informal consultations, and assistance with developing project based learning activities.

C7. Extent of Impact to other schools

The Team agrees to present their project at two regional events: the Christa McAuliffe Conference and one other. The video produced by the project will be posted on SAKAI, on the District Website, and other sites on request, and as determined appropriate by the District.

5. Budget (5 points)

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.

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Item/activity	**Amount**
2 Interactive white boards -Polyvision Eno One 2610+WXGA =$4918.00 with 2Tripp 25 ft SVGA VGA Monitor HD15m/m =$34.58.	4852

Software- 6 copies, Saxon Manipulatives in Motion for 3 Kindergarten, 2 grade 1, 1 special education classrooms 113.50x6=678;	678
Supplies	
PD Events -$100.00 per team member for 2012 Spring LESCN Celebration Conference= $400.00; $675.00 toward team members attending the Constructing Modern Knowledge Conference July 2011=$675.00; $100.00 per one day attendance at Christa McAuliffe or other regional conference per team member.	1475
PD Other- technical assistance regarding use of Eno boards and software, project based learning from LESCN, content experts, other,as needed; stipend for team member to lead learning community to support implementation, edutopia site conversations, video production, develop presentation for presentations to other sites, determine best assessment and evaluation strategy.	1075
Other- travel to Mini grant Celebration event, Christa McAuliffe, Constructing Modern Knowledge and other regional events to attend and present as required by project participation.	72.52
Other- stipends for substitutes to support team teachers attendance at 2012 Celebration, Constructing Modern Knowledge, McAuliffe and other events as required by project participation. 3team members, 2 events x $75.00 per day substitute stipend = $450.00	450
Other- Eno Board Installation, 2 boards @620.00=	1240
Other-Indirect	157.48
Grand Total	**10000**

Allenstown School District

"Committed to Excellence in Education"

Lynn Allen – District Principal
Joseph Vignola – District Assistant Principal
Anthony Blinn – District Director of Special Education

Allenstown Elementary School
30 Main Street
Allenstown, NH 03275
485-9574 / 485-1805
Fax 485-1805

Armand R. Dupont School
10 ½ School Street
Allenstown, NH 03275
485-4474 / 485-5152
Fax 485-1806

February 21, 2011

Dear Tech Mini-Grant Review Committee,

This letter is written with enthusiastic support for the *Allenstown Elementary School On Board with Mathematics* Tech Mini-Grant. As a new district leader in Allenstown, I recognize the potential within our community of educators and students to improve student achievement in mathematics. Not only am I an initiator of this grant, I will be an active participant on the implementation team.

As Allenstown's instructional leader, I recognize the importance of access to technology for all students. Eno boards have proven to be successful in engaging our students at the middle school level and I am excited to promote the use of them at the primary level. The boards will assist our district in its goal to promote fidelity with the use of Saxon Mathematics and its interactive software Manipulatives in Motion. Program fidelity has been identified this year as a root cause of our District in Need of Improvement status. The ability to use program compatible software with the necessary technology will positively impact student performance in class and in the future on standardized assessments.

Thank you for your considering the *Allenstown Elementary School On Board with Mathematics* application. You have my assurance that Allenstown educators are eager to work together to implement this Tech Mini-Grant and increase their students' opportunities for mathematic success.

Sincerely,

Lynn M. Allen
Principal

NEW HAMPSHIRE SCHOOL ADMINISTRATIVE UNIT NO. 53

267 PEMBROKE STREET
PEMBROKE, NEW HAMPSHIRE 03275
TELEPHONE (603) 485-5187
FAX (603) 485-9529

February 28, 2011

To Whom It May Concern:

This letter is in full support of the Technology Grant Application to supply interactive white boards (Eno Boards), "Manipulatives in Motion" software and related professional development to benefit students in primary grades at Allenstown Elementary School. This will provide these students and teachers with much needed innovative and current technology to meet school improvement goals for mathematics and other content areas.

Technology today is truly ubiquitous and important to both engage students and provide them with a such necessary tool. Students in Allenstown will make good use of this technology to support their early efforts in literacy and numeracy. Additionally, teachers will share techniques with each other as they learn what applications work best with their students.

Knowing the teachers and administrators at the Allenstown Elementary School, I believe they will make excellent use of this grant and the new technology.

Sincerely yours,

Hélène Bickford
Assistant Superintendent
SAU # 53

February 28, 2011

Cathy Higgins, Ph.D.
Education Consultant
Educational Technology
New Hampshire Department of Education
101 Pleasant Street
Concord, NH 03301

Dear Dr. Higgins,

Granite State College, a leading provider of field-based educator preparation and development in New Hampshire, is committed to collaborating with the Allenstown Elementary School to improve mathematics achievement for all students in grades K-3. This collaboration will include:

- Participation of the GSC Teacher Candidates and/or GSC Faculty in developing and facilitating project-based lessons;
- Participation of the GSC Teacher Candidate and/or GSC Faculty in professional development activities;
- Utilization of the Manipulative in Motion Software in the GSC Post Baccalaureate Teacher Certification Program and on-site at the Allenstown Elementary School;
- Participation in the development of a short video that will track the project's implementation and outcomes.

Granite State College, as a leader in providing learning opportunities for adult learners statewide and delivering online and blended education and support, looks forward to exploring additional collaborative online professional development opportunities with the Allenstown Elementary School.

Sincerely,

Mary J. Ford, Ed.D.
Associate Dean of Education Programs

Granite State College
University System of New Hampshire

Office of Education Programs 8 Old Suncook Road Concord, NH 03301 603.513.1393 Fax: 603.513.1388