

Holdenville Education Foundation, Inc.  
P. O. Box 641, Holdenville, OK 74848

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## Grants to Teachers Application

### Cover Page

Date: April 2, 2009  
Grant Title: Smart Cart for Smart *Elementary* Students  
Grant Applicants: Danielle Patterson, Tracey Johnson  
School: Ethel M. Reed Elementary  
Grade Level: 1st  
Content Area: All areas, including math, reading, spelling, handwriting, language, social studies, science, morning meeting, art, music, video presentations

Ethel M Reed Endowment

Amount Requested: \$2600

Danielle Patterson  
Signature of Grant Applicant  
Tracey Johnson  
Signature of Grant Applicant  
Jean Alexander  
Signature of Building Principal

Please mail applications to:  
Holdenville Education Foundation  
P. O. Box 61, Holdenville, OK 74848  
Attn: Teacher Grant Committee

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Date:	April 2, 2009
Grant Title:	Smart Cart for Smart Elementary Students
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Grade Level:	1
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**What is the major educational need this grant addresses? Please give grade level and academic area.**

A well-known educational research and practice expert, Robert Marzano, recently divided 85 educators into two groups: One taught a lesson to students using interactive whiteboards and the other taught the same lesson using standard, more traditional tools. His data was undeniable. Of those classrooms employing the boards there was an immediate increase of 17% in test scores. He also found that if a teacher had been given 20-30 months to hone his/her test skills there was an average 20 percentile gain in test scores. The sweet spot, he says, the perfect storm of student achievement, according to his findings, was when a teacher was trained to use the technology and did so 75% of the time. That profile shows a whopping 29 percentile gain in test scores.

Interactive whiteboards are the future of educational strategies, and without proper adoption of these and other technology tools, teachers are doomed to become dinosaurs in their practices. Surrounding elementary schools in our area, including Wewoka, Moss, Seminole and Wetumka, are equipped with whiteboards in all classrooms.

Because of the high expense of technology-related items, our district has not had the resources available to acquire advanced-level technology tools for elementary classrooms. The district has added computers, Smart Boards, graphing calculators, projection cameras, hand-held computers, student response systems and digital projectors in the upper elementary and high school levels.

This request to the Holdenville Education Foundation is for a mobile set-up that includes a wireless Smart Board, a laptop computer, and a digital projector on a rolling cart that can be moved from room to room as needed. This will enable first grade elementary teachers who do not yet have access to advanced technology the ability to use these tools for instruction. The wireless board allows students to interact with the lessons being presented. The software included provides tools and templates for all curriculum areas. The laptop and projector will allow teachers the ability to project not only with a Smart Board but also provide visual lessons using online content and research. The digital projector can also be used for integrating other technology, involving streaming audio and video presentations. Additionally this cart and equipment can be used for larger group presentations in the cafeteria. The Smart Cart will help to fill in gaps until the district is able to provide these tools for all teachers who would like to use advanced technology in their classrooms.

**Approximately how many pupils will be affected by this project, both directly and indirectly?**

The potential number of students who will be affected by this technology is unlimited. Because classes are self-contained at Ethel M. Reed, the Smart Cart will allow all students access to technology-enhanced lessons for many years in **all areas**, including, but not limited to science, math, reading, language, handwriting, art, music, video presentations, spelling, morning meeting, and social studies. For example, 100 students using the Smart Cart in one particular day could be exposed to this innovative technology for every content area, not just one subject. In addition the Smart Cart could be available for use in the many programs our school has, including Magnificent Monday, assemblies, special visitors, etc.

**Describe your grant including methods, materials and objectives. Foundation grants are intended to fund a creative teaching plan, so if equipment or materials are requested it should be clearly stated as to why these are an integral part of the plan.**

Smart Boards involve a multi-sensory approach that enhances the processing of information and learning opportunities of all students. This technology is especially useful for students that are visual or tactile learners. Over 5000 templates are available through software that is used in conjunction with the Smart Board. The templates, which include, but are not limited to music, art, maps, solar system, shapes and graphs are projected onto a screen or board. The classes can use the projected Smart Board or laptop images to interact with a lesson, take virtual field trips, communicate with global experts, and access unlimited resources with online multi-media and multi-disciplinary content. The boards are an excellent tool for teachers to work with students with special needs, or students who need remedial or advanced instruction. The projected image on a large screen captures students' attention and keeps the focus on the lesson content. The laptop computer gives teachers the advantage of being able to project online content from the cart. Most teachers do not have projectors and their computers are not positioned so that the content can be projected to a central screen. The versatile mobile presentation stand features multiple work and projector services to aid in any electronic presentation. It has a slide-out laptop shelf, a pop-up projector shelf, and a drop-leaf shelf for notes or media. The locking cabinet safely secures the equipment when not in use. While the district has been able to fulfill the requests for Smart Boards and projectors in upper level classrooms, there is a significant gap between the availability of technology provided for the upper and lower grades. We are interested in providing the same technology rich content in our elementary classrooms and providing the same student-centered instruction that will increase academic achievement and provide a competitive edge for our students and school.

Objectives: The learner will be provided:

1. Technology related skills and instruction.
2. Opportunities for student-centered learning.
3. Competitive edge for future endeavors.

**Give a time schedule of implementation.**

The items listed below could be ordered as soon as funds are available. If items are ordered during the spring of 2009, the technology should be ready for use by teachers at the beginning of the 2009-2010 school year. The Smart Cart will be operational for the entire school year. A schedule will be created for the classroom teachers who use the Smart Cart so that as many first graders as possible will be exposed to the Smart Board technology and its benefits.

**Detail your budget request. Include specific information about kinds of materials and equipment needed, sources of supply, and costs (including shipping and handling). If possible, list alternatives if full funding is not available.**

Budget Request:

Mobile Presentation Cart from School Outfitters	\$ 284.99
Shipping on Cart:	\$ 59.52
InterWrite School Pad:	\$ 500.00
Epson Digital Projector from Staples	\$ 549.99
Shipping on Projector:	\$ 0.00
Extra Bulbs for Projector from Staples	\$ 205.50
HP Business Notebook Computer:	\$ 1000.00
Shipping on Notebook:	\$ 0.00
Total:	\$ 2600.00

Currently we are using out of date overhead projectors for presenting lessons in most content areas, especially math and handwriting. Overlays must be copied and cleaned off. They take up a lot of space in the classroom. The overlays can only be made in black and white. The Elmo visual presenter would enable us to have more advanced technology than we currently use. If funding is not available for the entire Smart Cart, please consider this technology as an alternative.

The Elmo TT-02S Teacher's Tool Visual Presenter is a high resolution document camera that captures 3D objects and images on flat paper, so large groups of people can see smaller visual aids. The curved camera arm rotates 180 degrees and even adjusts to fit microscope heads for science classes. It can be switched to a PC image display or project images to a TV monitor.

Alternative Budget Request:

2-Elmo TT-02S Teacher's Tools from School Outfitters @ \$692.10 each	\$ 1384.20
Shipping for 2 Elmo TT-02S	\$ 21.62
2-Epson Digital Projectors from Staples	\$ 1099.98
Shipping on Projectors	\$ 0.00
Total:	\$ 2505.80

Alternative to the Alternative Budget Request:

1-Elmo TT-02S Teacher's Tool from School Outfitters	\$ 692.10
Shipping on Elmo	\$ 10.81
1-Epson Digital Projector from Staples	\$ 549.99
Shipping on Projector	\$ 0.00
1-Large Multimedia Cart (to make this easier to share) Sch. Outfitters	\$ 204.99
Shipping on Cart	\$ 25.39
Total:	\$ 1483.28

**What methods will be used for measuring the stated objectives, or what definite evaluation will you make to determine whether the grant was successful? (Please be specific.)**

There will be a schedule for the classroom teachers who use the Smart Cart or alternative requests. Ideas will be shared between teachers of lessons found to be beneficial so they can be duplicated. Student performance and class discussion will be used to evaluate understanding of each lesson that includes the use of the new technology.

To develop community ownership, commitment and pride in Holdenville Schools, we would host an event at Ethel M. Reed where students, parents and community members could see how the Smart Cart has stimulated student learning and expanded our existing curriculum.