

# Math and Science Enhancements

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*Dewey J. Hansen & Helen Cothron Hansen  
Memorial Fund*

## ***Laurel High School***

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# Application Form

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## Report Fields

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### Project Name\*

Name of Project

Math and Science Enhancements

### Amount Requested

Amount Requested

\$36,340.00

### Grade Level

Please select grade level below.

9th-12th Grade

### Primary Subject Area

Please select the primary subject area of your grant.

Other

### School

Please select your school from the list below.

Laurel High School

### Number of Students Served

Please enter the number of students that will be potentially served by this grant.

650

### Project Cost

What is the total cost of your project?

38,000.00

### Statement of Need

Please describe the need for this project. For example, how will this project impact student learning?

The receipt of this grant will allow for the continued incorporation of technology in both the science and mathematics departments at Laurel High School. The needs of both departments are addressed below.

It is our desire to continue the goal of incorporating more laboratory experiences for our science students. The purchase of additional materials and training will ensure that our students regularly engage in inquiry investigations and hands-on experiences that will prepare them for college and make them competitive in the global workplace.

As we continue to incorporate Common Core standards into our mathematics curriculum, we see the need for additional technology. Common Core Standards do not treat technology as a separate entity, but incorporate expectations of technological proficiency throughout the content standards. The purchase of the proposed technology for the math department will give our students the tools necessary to meet both the math and technology standards and will afford them the opportunity to be ready for college-level mathematics courses and the use of math in their future careers.

## Primary Goal

Please describe the primary goal of the project and how it blends with School District 2 goals and curriculum.

These purchases reflect the technology goals, graduation requirements, and philosophies of the Laurel School District as defined by its Strategic Plan and high school goals.

## Project Description

Briefly identify the major activities and materials involved in your project.

As we have increased the lab experiences for our students, it has become necessary to continue to update and expand equipment needed for those labs. The purchase of electronic balances and hot plates will meet some of those needs, and we plan to continue our expansion with the use of future funds.

The receipt of the grant for the 2013-2014 school year allowed our math department to purchase a classroom set of Chromebooks, a mobile computer lab available for use by all of the mathematics teachers. While these have primarily been used by math teachers, sharing among staff has convinced the science department teachers of their value, and it is our desire to have a second set for the math department and a set for the science department.

As we incorporated the new Chromebook technology into our building using last year's funds, we encountered an unexpected but necessary expense. Before they could be used, we needed to purchase a monitoring service to ensure that students were using the technology in an appropriate manner. This unexpected expense meant that we were not able to purchase all of the materials proposed in last year's grant. It is our intention to purchase the set of calculators, document cameras, and training from last year's proposal with this year's grant money.

## Professional Development

If your project includes professional development, how will it improve student performance?

Vernier offers professional development opportunities including a one-day hands-on workshop taught in our school using our equipment. This was the training we were unable to purchase last year and are planning to schedule for August of 2014. In addition, we intend to send our four science teachers to an summer institute on the use of Vernier LabQuests in Missoula, MT this summer.

The math department intends to pursue training on the TI-Nspire Navigator calculators that will be purchased with this year's funds. This training will be an on-site training specific to the needs of our teachers. At the conclusion of the workshop, participants will be comfortable using the TI-Nspire Navigator System to evaluate student work and best respond to students' varying instructional needs.

## Project Timeline

When will you implement your project?

Materials will be used upon receipt and throughout upcoming school years.

## Plan for Evaluation

How will you evaluate student outcomes for your project?

Students are currently evaluated using state-mandated testing and the ACT Exam. It is our hope that through the incorporation of these technologies which require our students to perform at levels dictated by national standards, that we will see increased test scores.

## Project Budget

Please identify other funding sources, if applicable. You may either type or attach a budget

The Laurel School District will provide the infrastructure necessary to allow these new technologies to access wireless internet required for them to function at their optimum levels.

Attached please find our proposed budget.

DeweyHansen\_2014-15.pdf

## Supervisor Approval\*

I have received approval from my supervisor to apply for this grant.

Yes

## Attachment 1

Please attach any photos, pages from catalogs, or other documents below. This is optional.

## Attachment 2

## Attachment 3

# File Attachment Summary

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## ***Applicant File Uploads***

- DeweyHansen\_2014-15.pdf

Proposed Budget

	<b>QTY</b>	<b>ITEM DESCRIPTION</b>	<b>UNIT PRICE</b>	<b>TOTAL PRICE</b>
Science	30	CB-Samsung Chromebook	\$ 279.00	\$ 8,370.00
Science	30	CB-Management EDU	\$ 30.00	\$ 900.00
Science	1	CB-36 Unit Chromebook Cart-Ivory-Smart Power-28.5"x33"x45"	\$ 1,500.00	\$ 1,500.00
Science	1	Cart Shipping	\$ 299.00	\$ 299.00
Science	4	Professional Development-Vernier Summer Institute	\$ 99.00	\$ 396.00
Science	1	Travel Expenses for Summer Institute	\$ 750.00	\$ 750.00
Science	1	Professional Development-Vernier Workshop at Your School	\$ 1,600.00	\$ 1,600.00
Science	6	Balance, Electronic, Sartorius VIC-303 (Flinn Scientific)	\$ 563.00	\$ 3,378.00
Science	6	Hot Plate, 7"x7"	\$ 249.20	\$ 1,495.20
Math	3	Nspire CX EZ-Spot Yellow Teacher 10-pack with docking station	\$ 1,374.70	\$ 4,124.10
Math	1	30 Student System Navigator for Nspire CX	\$ 2,367.00	\$ 2,367.00
Math	1	Professional Development - Exploring with Nspire Navigator in HS Math	\$ 1,789.00	\$ 1,789.00
Math	30	CB-Samsung Chromebook	\$ 279.00	\$ 8,370.00
Math	30	CB-Management EDU	\$ 30.00	\$ 900.00
Math	1	CB-36 Unit Chromebook Cart-Ivory-Smart Power-28.5"x33"x45"	\$ 1,500.00	\$ 1,500.00
Math	1	Cart Shipping	\$ 299.00	\$ 299.00
Math	1	Shipping for calculators, navigator and digital camera	\$ 75.00	\$ 75.00
			<b>TOTAL</b>	\$ 38,112.30

2013-2014 Remaining Funds	\$ 1,683.02
2014-2015 Funds	\$ 36,340.00
<b>TOTAL GRANT FUNDS</b>	<b>\$ 38,023.02</b>