

Math in the fast lane!

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

Senior High

Mr. Dennis Holmes

425 Grand Avenue
Billings, 59101

holmesd@billingschools.org
O: 406-281-5417
F: 406-281-6174

Application Form

Project Name*

Name of Project

Math in the fast lane!

Amount Requested

Amount Requested

\$36,850.00

Grade Level

Please select grade level below.

9th-12th Grade

Primary Subject Area

Please select the primary subject area of your grant.

Mathematics

School

Please select your school from the list below.

Billings Senior High School

Number of Students Served

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

1,000

Project Cost

What is the total cost of your project?

\$36,750.00

Statement of Need

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

Our project this year includes many different facets. In order to improve student instruction in mathematics this year, we are taking the approach of professional development and technology. Both of these areas will allow our teachers to be able to implement new strategies and tools into their teaching.

For professional development, we will be sending teachers to two different mathematical training opportunities. First, teachers from the the BPS high schools attend a local training opportunity at West High. Additionally, we would like to send two teachers to the National Council for Teachers of Mathematics.

In the arena of technology, we are looking to expand on the amount we have for each classroom, with the goal of putting the technology into the hands of students more regularly across all of the math courses. We

have been able to see the benefit of having Chromebook carts in the classroom, especially in the Pre-Algebra courses. We would like to be able to add more carts to other classrooms, as well. The Chromebooks allow teachers to individualize instruction and utilize tools that would not be available without devices in the hands of students (ie: Khan Academy, Geogebra, etc). We are also hoping to order 50 TI-84s for student use. One problem teachers face on a daily basis is that our students cannot always afford to purchase their own calculators (\$125 each). Having calculators available in the classrooms is imperative to allow these students to use the tools they need. Last of all, we have a couple of iPads in the math department. We would like to order more to put one in each classroom. Teachers have found very valuable apps and have been utilizing Reflector and Educreations and have had success. This allows students to share their work in a more inviting environment.

Primary Goal

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

Always, always, always, the goal of Senior High teachers is to help our students grow and experience success in each classroom they enter. Mathematics can be a frustrating and rewarding course for many students, and we would like the rewarding part to outweigh the frustration. Additionally, with the district's goal of a 2% increase in overall math scores, our teachers are looking for innovative ways to improve their instruction and the students' experiences. Technology is a great tool to allow teachers to individualize instruction and increase engagement.

Project Description

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

We are looking to professional development opportunities and technology in order to enhance mathematics instruction. As outlined in the Statement of Need, the professional development opportunities allow teachers to network with professionals, as well as other teachers in the district and nation-wide. The increased technology is explicitly to be in the hands of the students, increasing engagement and success.

Professional Development

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

Math teachers from Senior, Skyview, West, and the Career Center will be attending the "Principles to Actions: Ensuring Mathematical Success for All" workshop on August 4, 2015. This year is Senior High's year to pay, which is approximately \$3500 (for all schools' teachers to attend).

We will also send two teachers to the NCTM conference next spring. This is the annual National Council for Teachers of Mathematics, and has proven to be a valuable conference for our educators. The cost of this will be approximately \$5000, including registration, airfare, and lodging (roughly based on this year's cost).

Project Timeline

When will you implement your project?

Each of our technology tools will be implemented as soon as they can be ordered and set up for use. The ideas and concepts from the workshops and conferences will be shared at PLC meetings as soon as possible.

Plan for Evaluation

How will you evaluate student outcomes for your project?

The bottom line is that SD2 has the goal of increasing achievement in mathematics by 2% next year. Since this is our district goal, this is also how we will evaluate our students. Achievement will be measured by NWEA, ACT, and SmarterBalanced scores.

Project Budget

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

12 iPad Airs (including cases and the Reflector app): \$6000

TI-84 Plus Calculators (\$125 each): 50: \$6250

Workshop: \$3500

NCTM: \$5000

2 Chromebook labs (30 Chromebooks + carts): \$18,000

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

Applicant File Uploads

No files were uploaded