Catalyzing Change with Mad Science

Classroom Grant

Billings Public Schools

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Mr. Chad Jackson

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Application Form

Report Fields

Project Name*

Name of project Catalyzing Change with Mad Science

Amount Requested

Amount requested on application. \$784.92

Grade Level

Please select grade level below. Intermediate (4-6)

Primary Subject Area

Please select the primary subject area of your grant.

Counseling/Behavioral

School

Please select your school from the list below Pondersoa Elementary

Number of Students Served

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

380

Project Cost

What is the total cost of your project? 784.92

Statement of Need

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

This year I demonstrated the effects of unresolved conflicts through an experiment called Elephant Toothpaste that I paid for with my personal funds. I did this demonstration in conjunction with a lesson about forgiveness that focused on Nelson Mandela. It was many of my students' favorite lesson of the year, and they still recall principles and points from the lesson from six months ago. The visual nature and sensory stimulation enables me to much more effectively demonstrate counseling principles and ideas. This grant will provide me with kits, supplies, and books about various experiments that I can utilize to demonstrate numerous life lessons, principals and concepts relating to behavior skills, career readiness, and social skills. These kits will provide me with plenty of experiments so that I can develop a curriculum to do different experiments in different grade levels so that every year there will be new and exciting illustrations for the various lessons.

Primary Goal

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

My primary goal in this endeavor is to excite and evoke passionate responses from students. When I conducted the experiment this year, it had such an overwhelmingly positive response that I wanted to duplicate that strategy. It also is a fantastic method of reaching different modalities of learning. Depending on the experiment the students become active learners that are able to engage tactile, kinesthetic, visual, and auditory modalities of learning. So many experiments naturally lend themselves to life lessons, logical principles, and other counseling related topics. Ultimately my goal with this grant is to positively impact students, but with a dynamic approach that will facilitate positive change in the school culture and climate.

Project Description

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

As I developed the idea for this grant, I elicited help from SteveSpanglerScience.com. I have included the response letter that was provided to me giving suggestions of experiments and products that would assist me. I would like to purchase the Chemistry Kit which will include equipment, a manual explaining 333 experiments, which can be utilized year after year. It also provides the chemical substances which can be replenished. The Chemistry Lab has so many applications including, safety, responsibility, action and reactions (of choices), effects on each other, and even tying it into bullying behavior. I have also included the Optical Science kits for talking about how perception determines our reality. The Halloween Science Party provides activities designed for a class and also provides some extraordinary sensory experiments with numerous counseling like the number one mental health issue of anxiety. I am particularly excited about the Dry Ice Science kit because I would like to use it to demonstrate smoke screens that students use to hide the real problems that they are facing. I will describe prejudice and overcoming appearances in order to discover character through the Color Changing Energy Beads and Fireworks Rainbow Glasses, and Water Jelly Crystals Classroom Kit. Newton Beads can demonstrate the effect of both positive and negative influences in our schools and classrooms. One person can catalyze positive or negative effects on others.

Professional Development

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

I have been in contact with a team from Steve Spangler science. They put together a list of potential kits, tools, and supplies that I could implement in my lessons. I have emailed them, spoken on the phone, and requested training on various experiments. Their recommendations and input have helped me to discern the most effective tools, make sure that I have ordered the right resources to teach me to conduct these demonstrations.

Project Timeline

When will you implement your project?

As soon as these supplies arrive, and I have an opportunity to read the directions, I will begin implementing them. I also will receive resources so that I can use these supplies for years to come. The impact of this project will be immediate here at Ponderosa. It will also be something that I can utilize in all

grades Kindergarten through 6th grade. I will be able to utilize these experiments far beyond this year or next year. I can easily incorporate these experiments into my counseling curriculum for years to come.

Plan for Evaluation

How will you evaluate student outcomes for your project?

I am currently a part of TILT and have learned of various assessment tools that I am already using in the classroom. An example is something simple like Kahoot in order to create quiz that students can take, surveys to communicate their favorite lessons, and forums for students to provide feedback for my lessons.

Project Budget

Please explain how the funds from this grant will be spent to support your project goal. You can either type or upload a project budget to show how funds will be used. Please identify other funding sources if applicable.

Please see attached PDF labelled Itemized Report Mad Science.

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 completely optional.

Steve Spanlger Letter.PDF

Attachment 2

Itemized Report Mad Science.xlsx

Attachment 3 Experiments.jpg

Printed On: 18 March 2014

File Attachment Summary

Applicant File Uploads

- Steve Spanlger Letter.PDF
- Itemized Report Mad Science.xlsx
- Experiments.jpg

Chad,

I received your email and hope I'm on the right track. I really want to help and these were some ideas we came up with for the lessons and experiments you choose for this grant.

Energy stick - **Making friends** through connections. Each student has to touch each others skin (Hand) in some way to make the Energy Stick work. Showing that coming together, even small connections can make something work.

Energy beads- **Making friends** and **Teamwork**. Giving each student the ability to get outdoors while also putting a bead in each persons hand. This will show that each color bead can come together or utilizing **teamwork** to complete a goal, or make it so they need to make a rainbow with all the colors. Showing that they don't always we have to be a like to come together.

Dry Ice Kit and Chem C3000- **Safety** and **following instructions**. You have to perform proper **safety** measures in order to handle the dry ice. If you don't follow **directions** you can hurt yourself.

Optical Science and Rainbow glasses - The kit shows many products that can be illusion or impair vision. **Bullying** and **choices** play are role that can cloud your vision both visually and mentally. Speaking out to the students by saying if we can **resolve conflicts** your vision will clear up. This kit can really show perspective to students too because life can be confusing and their many different ways around the same problem. Showing the each others **perspective** on how each student would see a **resolution** to that problem.

Vanishing Jelly Marbles- You can write a message of **kindness** and print out this sheet for each Vanishing Jelly Marble kit. If you **follow the instructions** when purchased, the students in a team should have to work together to get the message to appear.

If there are any questions or comments please let me know.

--Brian Weiss

Brian Weiss |Customer Service| <u>SteveSpanglerScience.com</u> 4400 South Federal Blvd, Englewood, Colorado 80110 Office: 800.223.9080 | 303.798.2778

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800-223-9080

Itemized Report for Equipment

ltem	Order #	Cost	Description
Chemistry Kit Chem C3000	WCHE-400	\$249.99	333 experiments, 90 pieces, 192 manual
Halloween Science Party	WHWK-200	\$189.99	Designed for classroom, multiple experiments
Optical Science	WOPT-300	\$34.99	Perception, appearance, illusions
Dry Ice Science Kit	WDRy-500	\$89.99	Smoke, effects of cold on objects
Color Changing Energy Beads	W9850	\$29.99	1000 color changing UV beads
Fireworks Rainbow Glasses	WRBG-150	\$39.98	15 pack of glasses X2
Water Jelly Crystalss Classroom Kit	W9850	\$49.99	Beads absorb 300x their own weight
Shipping		\$100.00	
Total:		\$784.92	

Itemized Report for Equipment

Counseling Connection	
Problem Solving, etc.	
Anxiety and Fears	
Perspective	
Coping skills, smoke scree	ns
Overcoming prejudice	
Perspective	
Effects of kindness	

