

Jeanie Ritchie Grant Application		2018-2019
Project Title:	<i>Music To My Ears: Exploring the Science of Sound</i>	
Lead Teacher/ Project Director Name:	Jeriann Hirsch	
Email Address:	jhirsch@mpcsd.org	
Best Phone Number:	(408) 781 - 3918	
Names of Other Teacher Participants (include school if project will span multiple campuses):	Rachel Bergeron Katherine Houston	
Principal's Name:	Linda Creighton	
Director of Technology Name: (if applicable)		

Before this application is submitted, it is necessary for the principal to review it.

Has the review been completed? Yes No

Date of Review: September 27, 2018

I have reviewed this proposal and am aware that it is being proposed for implementation and will be supported through the Technology Department.

Director of Technology Signature/Date: _____

Please Note: The Jeanie Ritchie grant process is anonymous. Your application will be considered according to an ID number only. Please do not include the name of your school in the body of your application. This title page will not be made available to the committee until the grants are awarded.

1. Goals: What are the goals of the project? What are you trying to teach?

Children love to explore sound and make music while they thump, clang, and clunk! Is there a better way to learn about vibrations or pitch than plunking on objects? We want to create a Music Wall at our school so that students can thump PVC pipes, tap wooden bowls, drum on plastic buckets, and glide across a bumpy wooden mat to their heart's content. And we want to introduce our Music Wall to the school with a BANG! by having a Street Beat Assembly to wow the students with amazing music from repurposed instruments.

Our goals are to:

- 1.) Enhance the 1st grade science PBL unit entitled "Animal Sounds". Our school has funds to support this PBL unit but our grant proposal wants to supplement and enrich this unit on sound so that 1st graders can do deeper exploration work.
- 2.) Enable 1st graders to conduct inquiry investigations related to their own unique interests regarding sound (which is at the heart of PBL) beyond classroom lessons during their free time. Students can also learn at their own pace during their free time.
- 3.) Extend the investigation on sound beyond 1st grade, allowing 2nd graders to revisit their explorations of last year during recess now.
- 4.) Empower 2nd graders to compose, arrange, and perform music (through Seesaw posts to their parents).
- 5.) Increase access for students with learning differences to academic content by allowing them to use different learning modalities (auditory and tactile/kinesthetic).

2. Core Activities: Describe what students will do as they participate in the project. How will the project accomplish its goals?

Here is a link for one of the Music Walls we are using as our inspiration:

<https://images.google.com/imgres?imgurl=https%3A%2F%2Fcdn.designrulz.com%2Fwp-content%2Fuploads%2F2017%2F09%2Fbateria-de-musica-con-palets-910616.jpg&imgrefurl=https%3A%2F%2Fwww.designrulz.com%2Foutdoor-music-wall-ideas%2F&docid=WbMjVOz2PM-r3M&tbnid=B2KKI03HaqGrJM%3A&vet=1&w=800&h=600&source=sh%2Fx%2Fim>

Our music wall will be in three 8' sections and extend 24 feet along one end of our playground. It will be available for students to use at recess as well as during music lessons.

Our Music Wall will enrich the 1st grade Project Based Learning (PBL) unit on Sound. As a part of the 1st grade PBL unit, the music teacher will lead students in sound exploration, both in the classroom using traditional classroom instruments, as well as outdoors at the Music Wall. Students will be allowed to explore how sounds are made on a variety of instruments, and why different materials produce different sounds. With the Music Wall, the students will be able to continue their exploration, observations, and music-making during recess or after school, as an extension of their in-class learning. This Music Wall will be carefully maintained and available to support this PBL unit for years to come.

2nd graders will also have access to the wall, and will be able to explore sound and make their own observations during recess. In addition to their free, individual exploration, the music teacher will lead them in a music unit using the Music Wall. The project will be aligned with the music standards, particularly in the area of creating and performing simple melodic or rhythmic patterns, including rhythmic ostinatos using percussion instruments. These performances will be available to parents through Seesaw.

ALL students will greatly benefit from access to a Music Wall. Students with learning differences can benefit in ways that are different from their regular learning/classroom experiences.

- Music is highly motivating - Using music to teach harder skills can lessen the challenge of a skill. For example, putting academics to music makes memorization easier and more fun.
- Music is a multi-sensory experience during which many different learning systems are engaged. Students' tactile systems are engaged as they hold instruments or mallets and hit the drums. Students' auditory systems are engaged as they hear a variety of sounds produced by the instruments. Students' visual systems are engaged as their eyes track the movements of their arms/hands/feet, etc; and students' kinesthetic systems are engaged as they move their bodies to play the instruments or respond/dance to music.
- Music is non-verbal - Students are able to express themselves and their feelings without words through music.
- Music encourages social interaction - When working with peers or adults, students will need to ask to take turns, follow-through on requests, and use conflict resolution skills. It also provides a mutual platform for students to form relationships over a common interest or activity.

- Music develops motor skills - Using a wide variety of instruments encourages the development of motor, both fine and gross, skills.

We know that our Music Wall will be a loved part of our school community. We want to introduce the wall to students with a special celebratory assembly to generate great excitement and enthusiasm! Our assembly will feature an amazing performing group called "Street Beat" based in Los Angeles. The group was inspired by Stomp, the popular performing group out of New York City that uses repurposed-percussion instruments. Street Beat uses household items for instruments and produce electrifying assemblies that students love. The performer/instructors introduce and define basic music terms such as; pattern, beat, note, tempo, high/low sounds, pitch, pulse and counting. Students actively participate in all parts of the assembly. Students will be tapping on everything in sight!

Parents will also play a part in our Music Wall construction. Our PTO would like to organize a "Community Building Day" to construct the wall. If our grant is funded then parents across the school will come together on a Saturday to build our wall. The Amish know that participating in community building projects helps to ensure that they grow and stay strong as a group. Instead of a Barn Raising Party we will have a Music Wall Raising Party!

With consideration for our neighbors, much thought is being given to creating a wall that will produce pleasant sounds that will be pleasing to neighbors and yard duty teachers. We will have deep tones, not high pitched, ringing sounds or clanging metal. PVC pipes will be pitched in a pentatonic scale, so that familiar tunes and pleasant melodies will be possible to play.

All students will be instructed in how to play the instruments with respect in order to take care of our Music Wall. In addition, we will construct the wall in a way that can be maintained. If items are damaged they will be able to be replaced cheaply within the school and PTO budgets making this Music Wall available for years to come!

3. Innovation: To what standards and/or aspects of the curriculum is the project linked? In what ways does it go above and beyond what is normally required?

Our wall gets at the heart of experiential learning where students will be actively involved in the experience of making sounds and feeling vibrations. Exploring with instruments supports STEAM by helping students connect the Science they learn in the classroom with the Art of music. Students will have opportunities to explore how sound is produced, amplified, and varied. And students will have these STEAM activities available on a *daily* basis. Students will be able to explore at their own pace, too.

Another wonderful aspect of our Music Wall is that our grant combines Foundation support (hopefully!) with a 1st grade PBL while using the expertise of our school's music teacher along with the guidance of a special education and a regular education teacher.

The project is cross-curricular, involving music and science, across multiple grade levels.

Here is the **2nd grade Music Standard:**

Creating, Performing, and Participating in Music

Students apply vocal and instrumental musical skills in performing a varied repertoire of music. They compose and arrange music and improvise melodies, variations, and accompaniments, using digital/electronic technology when appropriate.

- 2.3 Play rhythmic ostinatos on classroom instruments.
- 2.4 Improvise simple rhythmic and melodic accompaniments, using voice and a variety of classroom instruments.

And the 1st grade Next Generation Science Standard:

Standards:

1-PS4-1 Plan and conduct investigations to provide evidence that vibrating materials can make sound and that sound can make materials vibrate.

4. Success Evaluation:

1. If this is a new grant, how will you know that the program has been successful?

One measure of our success will be the enthusiasm amongst our students for using the Music Wall. If present excitement with just the *idea* of a Music Wall is any indication then we are well on our way to implementing a successful project. An eight year old student overheard one of us talking to our custodian about this project. He went home and set up a lemonade stand in his front yard to help pay for it. Hayes was our first investor in this project. He has already delivered \$34.75 to school to help pay for his school's Music Wall.

The playground at Oak Knoll has outdoor instruments available for students during recess. Mrs. Gracia reports that those instruments at Oak Knoll promote creativity, collaboration, and movement. She said the kids love having the option of music creation at recess. And she added the instruments get A LOT of use! We will track the success of our project by tracking how much use our Music Wall gets during recess.

As Maria Montessori said, "Music manages to open the doors of the heart and sustain the spirit." We hope to swing wide open the doors of all the hearts at our school to enthusiastically embrace rhythm and song through our Music Wall and Beat Street Assembly!

5. Detailed Budget: Include all expenses, e.g., sales tax, shipping, etc. If any materials can be re-used in future years, please indicate this in the information provided.

COST PER STUDENT = \$10.80!! Actually the cost is even less than that because we will be able to fit 125 kindergarten students in to the Beat Street assembly.

\$2700 divided by 250 students = \$10.80

Tier 1: Music Wall (including construction of wall and instruments) and the Street Beat Assembly - We think this is the best way to carry out our project (and most efficient use of our time as teachers). We also think the wall itself will be more visually appealing if we can select the repurposed instruments that we ideally want. Total cost = \$2700.00

Tier 2: Music Wall (CONSTRUCTION of WALL ONLY, no instruments) and the Street Beat Assembly - We are so excited about the idea how a Music Wall can support our school's curriculum that we are willing to spend the time to find recycled PVC pipes and crates, etc, and ask for donations in order to get the instruments for the wall. We can still create a Music Wall with supplies we can find and we will be happy with what turns up. COST = \$2700.00 - \$737.00 = **\$1963**