

Jeanie Ritchie Grant Application 2019-2020	
Project Title:	Engineering in Action!
Lead Teacher/ Project Director Name:	Anna Kogan/Christina Johnson
Email Address:	csjohnson@mpcsd.org ; akogan@mpcsd.org
Best Phone Number:	650-450-3683
Names of Other Teacher Participants (include school if project will span multiple campuses):	Yogi Sullivan, Mike Bratt, Heiko Ritter, Christina Johnson
Principal's Name:	Willy Huag
Director of Technology Name: (if applicable)	N/A

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

Has the review been completed? Yes No

Date of Review: 10/3/19

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: N/A

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.

Project Title: Engineering in Action!	
Note: This year, \$15k has been added to the JRG for grants on global awareness, global leadership or world culture. Please check box if your grant is in this category.	Type of Grant (check all that apply) <input type="checkbox"/> Global awareness, global leadership, or world culture focus <input checked="" type="checkbox"/> New <input type="checkbox"/> Repeat (____ # years) <input type="checkbox"/> Technology Support Approved
Grades Involved 6-8	Number of Students Involved Accessible to entire school population (~950 students)
Total Funding Requested \$ 1000	Date(s) when will the project be conducted: We can begin building in early 2020.
Project Description (Use this form or attach a separate sheet)	
<p>1. Goals: What are the goals of the project? What are you trying to teach? The main goal of the project is to increase student interaction through thought-provoking, educational activities during recess and lunch times. These activities would combine engineering and art in an outdoor interactive exhibit. We would start with one interactive board--a ball wall built from pvc pipes attached on a steel wall with magnets. This would be a fun, challenging activity students could participate in to move their bodies and minds during break times. At this time, there are not many non-sport activities for students besides lunch clubs. While having fun during break and lunch times, students would develop basic engineering skills.</p>	
<p>2. Core Activities: Describe what students will <u>do</u> as they participate in the project. How will the project accomplish its goals? Students will work to get a ball from the top-most portion of the wall to the lowest portion by positioning pvc pipes that are movable and connected to the wall with strong magnets. This would be a task for a small group of students. We would love to incorporate our ASB students and the leadership program in implementation and monitoring of the ball wall. We want the students involved so that they may interact with students across grade levels and to help with the maintenance.</p>	

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?

This connects to science, math, and makerspace curricula. Any classes could use it too. It allows kids to incorporate a kinesthetic approach to their learning. Instead of sitting around during lunch, they would be able to expand on the curriculum in the classroom during lunch time and exercise their body and brain.

4. **Success Evaluation:**

a. If this is a new grant, how will you know that the program has been successful? If students are using it, it will be successful. There is a group of students who would benefit from this interactive exhibit. If this ball wall is successful, we have a group of teachers who are working on developing other interactive activities for students during break and lunch times.

- b. If this is a repeat grant request, attach last year's completed evaluation form.
PLEASE NOTE: REPEAT APPLICATIONS WILL NOT BE CONSIDERED WITHOUT AN EVALUATION.

- c. If this is your 3rd year of funding, what steps are you taking to obtain funding from other sources? Funding from Jeanie Ritchie ends at year four.

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.

4' x 8' wood board-\$60

Pvc pipe-\$100, including free delivery of (5) 3" x 10' foot pvc pipe

Corner pvc:\$50

Magnets-\$200

Steel Sheet to expand over 8 feet: \$100

Small rubber balls/tennis balls- \$150 (extra needed if some get lost)

(Amazon 12 balls for \$30 (5 sets) - ASIN B072LXNYKR)

Epoxy glue: Loctite Heavy duty Epoxy: \$95

Cutting pvc Pipe--\$45/hour for 3 hours--\$135

Installation - dependent on maintenance staff (approx. \$150?)

Please email questions, comments and your final application to: jeanieritchiegrants@mpaef.org.

Thank you for submitting a Jeanie Ritchie Grant Application!