

\$5,000 Secondary Teacher Innovator Grant Application

Application Deadline: February 22, 2016

Date of submission: 1-22-16

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Proposal Name: A Virtual Reality Classroom

Estimated Cost: \$1,600

Summary of Proposal

The goal of this proposal is to bring a level of Virtual Reality to the classroom through Google Cardboard. Google Cardboard is an inexpensive virtual reality system which would allow students in a classroom to experience areas of the world and concepts otherwise not achievable in a classroom setting. For example: With the use of Google Cardboard students will be able to have a 360 degree view of anywhere in the world Google Street View is present (including such areas as Paris, London, Grand Canyon, Washington DC, and so much more). It is my hope that in my social studies classroom I will be able to take my students on virtual fieldtrips and tours. Recently I found a 360 degree tour of the International Space Station which I hope to use for my Space Race unit.

At this point over 85% of students surveyed have a Smart Phone which is part of our school systems bring your own device policy; this policy in conjunction with Google Cardboard will allow our students to use 360 degree viewing.

I would also like to use some of the funds from this grant to purchase two GoPro cameras that the school could mount side by side which would allow us to film events in 3D. This 3D filming equipment could be taken to sporting events, historical events, school trips, and so much more.

Overall this program will enhance student learning by providing them windows into areas of the world otherwise inaccessible. Here is a list of some of the amazing things that one can do with Google Cardboard Virtual Reality:

- 360 Walking Tours of: Grand Canyon, Paris, London, Washington DC, Pyramids, International Space Station, Taj Mahal, Dubai, Eiffel Tower, inside the White House, and many more
- 360 Walking Tours of art museums and history museums: Gyeonggi Museum of Modern Art, Museo Nacional de Antropología, The Israel Museum, Tokyo National Museum, The Louvre, and so much more
- More applications are being created for this emerging technology daily
 - Reenactments of Historical Events, Live Streaming of Political Debates, 360 Degree News, and much more on the way

Students will be impacted on multiple different levels. As previously stated students will be able to visit locations otherwise inaccessible. They will gain a better understanding of the use of emerging technologies such as 360 degree head tracking and 360 degree photography. Students who have difficulty with classroom engagement might find that this alternative approach to learning might lead to greater success for them in a classroom. I believe this product will help with differentiation of learning in the classroom of tomorrow.

The implementation of this proposal would take around 1-2 weeks. The reason this project won't take long to implement is because we could easily buy these relatively cheap products from Amazon.com / Prime. The implementation would be overseen by myself: Matt McEwen. I have experience with Google Cardboard and I am on the verge of finishing a master's degree in Technology Education. Finally with this implementation I hope to see more classroom engagement and overall better classroom understanding of class materials.

When gauging the success of this proposal we will use multiple different methods of measurement. For example we can survey students on overall engagement and enjoyment of classroom materials and we can review test scores before and after implementation. I hope to see an improvement in overall grades.