

# Google Comes to CMA!

## Monday March 19th, 2018

"Google is beta testing the company's new Google Expeditions Augmented Reality technology. Camden Military Academy was fortunate to be one of the schools selected from across the country to be a part of the Google Expeditions AR Pioneer Program. All of the teachers were trained by the the Google Expedition AR Pioneer Team on Monday, March 19. CMA teachers and students had a daylong sneak peak of the unreleased Google Expeditions AR app. It's touted as a new learning tool for teachers where the images students view are controlled through the teacher's guide phone. Camden Military Academy teachers then conducted sixteen AR Expedition sessions with cadets throughout the day.

The app teaches students using 3D technology by bringing the solar system, volcanoes, earthquakes, World War I and World War II, Ancient Rome, DNA and RNA strands, organic chemistry and Da Vinci's inventions to life in the classroom. The app has the potential to take the educational experience through history, geography, physical science, biology, chemistry and math and make it three dimensional.

The Google Team brought their own router, sixty phones and selfie sticks to provide the AR technology. The CMA teachers taught the AR curriculum related lessons to cadets. With Google equipment, cadets and teachers immersed themselves into augmented reality experiences. The teacher programmed the guide phone and students follow the AR Expedition on their own phones. Cadets took turns moving and pointing the phones around the room.

Three dimensional images were displayed on their phone screens making the image appear real and stepped back to see the full "picture." LTC Will Rice taught the students about the 1950's "Space Race" between the United States and Soviet Union. Students viewed Saturn V, Vostok I, Apollo 11, the Command and Lunar Modules and then experienced the actual landing on the moon. "It was one of the best teaching experiences in my career. The students were enthusiastic and actively engaged for the entire lesson," Rice stated after the seventh graders' Expedition. LTC W.C. Mobley conducted an Expedition on World War II Warfare as students held German U-boats and the Higgins boat in their hands. With Expedition AR, Mobley's students reached out, trying to touch the Republic P-47 Thunderbolt as it flew through the air and sat in the front seat of the original Jeep.

The students were able to walk around and view the different 3D images from every side and angle. Google's 3D technology maps a physical location and places a 3D image in that location. Students were in the eye of a category 5 hurricane, got up close in a strand of DNA and RNA, gathered around the statue of David, and followed a drop of blood throughout the circulatory system with a 3D heart on their desks. Rice said "It was great to see students walking out of a classroom in awe."

Google will gather extensive feedback from students and teachers to create new expeditions and consider changes throughout the school year. Currently, there are about thirty AR Expeditions with Google, adding new expeditions based on feedback from teachers as they beta test AR technology. Col. Eric Boland said, "We are very honored that we were selected to participate in Google's AR Expedition Pioneer Program. It was an excellent opportunity for our students and faculty to learn from experts in the field of technology. Our teachers were excited to field test Google's cutting edge technology and especially to use it to enhance their curriculum."

(Mrs. Celia Boland)



"It was a cool experience with Google to be able to look at the Augmented reality!"  
William Smith (Venice, Florida)



"Yesterday Google came to CMA and they tested their new AR. It was very interesting to use and try out."  
Wyatt Hart (Milton, Georgia)



"I had a blast participating in the Google Pioneer program and trying out new experiments!"  
Peyden Su (Durham, North Carolina)