Tyngsborough High School & Sinarmas World Academy BioBuilder Teams Virtual Meeting



CAMBRIDGE, MA, Nov. 11, 2019 – Global citizenship education is often seen as something outside the realm of science. All too often the media stereotypes science labs as having closed doors and competing with one another for funding or prominence. Science in high school is certainly an unlikely place to find international collaboration, right?

Wrong. As a part of the growing BioBuilder Education Foundation's programs, international collaboration is strengthened through virtual collaboration, symposia and meetings that are in line with and responding to the educational needs of our increasingly connected world.

Tyngsborough High School's BioBuilder group in Tyngsborough Massachusetts hosted an online laboratory experience for students at Sinarmas World Academy (SWA), located halfway across the world in Jakarta, Indonesia. The group's teacher leader, Rebekah Ravgiala, led her BioBuilder group through the "What a Colorful World" lab, parts and components for which were unavailable to students at SWA in Indonesia.



One member of the Tyngsborough High School BioBuilder team, Cate Barton, initiated the experience in part because she had travelled to Indonesia to participate in a summer program and come to realize the similarities that connected the student groups through BioBuilders. The meeting took approximately 1.5 hours and was conducted



virtually through the use of Google Hangouts. Eighteen students from SWA in grades 8 - 11 participated in the online meeting in which was hosted by eight Tyngsborough High students.

The experience was impactful with one SWA student saying, "I liked that we were able to talk with students who were around our own age... it was like we were both working on the same thing- but so far from each other, which was cool". In general, students loved meeting their peers from another part of the world and while synthetic biology was the focus, the unintended impacts on student world view and international-mindedness were significant.

As the SWA BioBuilder teacher leader noted, "the students loved the authentic context and learning about the biology through interacting with students from another country... there were just as many questions asked about the students as there were asked about the lab carried out. They all left with smiles on their faces buzzing about who they had met, what they were like... it was a mind-opening experience."

With a little initiative and an adventurous spirit, initiatives like these not only bring meaning to the science students are learning but bring an element of multicultural awareness and skill building that is unique to virtual collaborations. Given the ease of setting them up and positive impacts, we recommend many schools



give them a go. Plant the seeds of international collaboration and foster understanding of the community element of science. Get your BioBuilder group collaborating internationally today!

About BioBuilder

Created by an award-winning team at MIT, BioBuilder offers new ways to teach, learn, and explore cutting-edge science and engineering. BioBuilder provides students the chance to integrate biology and engineering through practical, hands-on lessons, club activities, and school-to-work experiences. Teachers learn new methods of teaching that engage and inspire the young scientists in their classrooms. Visit <u>www.biobuilder.org</u> or reach out to <u>info@biobuilder.org</u> for more information.

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