ABLE Asset Based Learning Environments



"I learned more about technology and STEM but it was also a place to make new friends that aren't exactly like you" -ABLE Participant (Kenya)



"I'm someone who is actually very shy, but I try to step out of my comfort zone as much as I can. So I think it's a really good opportunity to come out of your shell and try to talk to more people and start doing things that you wouldn't expect to do." – ABLE Participant (USA)





What is ABLE?

A collaborative and global science, technology, engineering, and mathematics (STEM) media-making community

- Funded by the US National Science Foundation (NSF), ABLE is a STEM program for middle and secondary school students
- Participants' interests are approached with an asset-based mindset allowing for increased collaboration, STEM learning, and identity formation and treated with the intention to approach their background, skills, and interests as uniquely beneficial to the whole community: each person has a contribution, and each person needs the contributions of the others
- It represents a global network of middle and secondary school students and their teachers hailing from Kenya, the USA, Ghana, Brazil, Mexico, Singapore, and Canada...to name a few

What happens during a global meetup? Meet and collaborate with peers from around the world

- Synchronous global sessions take place over Zoom:
 - 15-20+ students, teachers, and researchers
 - Most Saturdays 7:00 -8:00 AM Pacific
- [10 min] Students attend break-out rooms to socialize and learn more about each other
- [30 min] Individual and group projects are shared with Q&A to follow
 - Projects are generally in the form of videos that students make, along with slide or other formats ABLE emphasizes creative communication of STEM ideas and problemsolving.
- [20 min] Feedback and opportunities for further global collaboration are discussed and encouraged
- <u>Asynchronous</u> communication takes place on the Slack platform
 - Discussions continue about current & future projects
 - Students stay connected between meetups

What do students gain?

Competencies develop across STEM areas, digital communication, and collaboration with peers internationally

- Based on the interests of the students, projects can take the form of challenges in a range as broad as AI, acoustics, environmental science, makers-spaces, mathematics, software engineering, biology, neuroscience, robotics, and more
- Collaborating students grow in global and cross-cultural awareness and communities of well-grounded, knowledgeable, and confident young adults
- ABLE promotes pro-inclusive behavior and a sense of belonging of and contribution by all participants, and enables participants to meet like-minded peers from around the world