

Math Lives Here: Helping Social Justice Take Flight

Junior Students: A Community in Transition – Math is in the Doing

>> The social justice piece was already there, because we are talking about community, we're talking about making a difference in the community, and remembering the people from the community. And the math part came in when we started talking about more about how the structures are going to be built. So we're talking about measurement; the length, the width, the height, the surface area, the perimeter -- all those things that are related to math to be able to create this project.

>> We have a real view here. This is, like, what it's supposed to look like from up top. We designed this before we actually did the actual memorial. Our model was like a scale model of, like, ten centimetres equalling, like, a meter. So our actual project was six by nine by three, three being the height, nine being from here to here and six from here to here, the length and the width. So we implemented a lot of symmetry into our actual build. As you can see, this side is very similar to the other side, here. Same with the bushes here. And not all the stones are symmetrical, but you get the idea. So there's, like, a little pool of water here and a pool of water there. Math in building a monument is mainly measurement, angles. There's also, like, a lot of guessing and checking, trial and error. Specifically with ours, we need to understand what something is to scale. Like, if we were to build a smaller model, what it is compared to something in the real world. To measure something and then to compare it to something that is much larger, and using it as a unit of measure is something that you would need to use as well.

>> It also helps us in our case, because we are making an actual memorial, right? And we are going out in the real world to search for examples on how our memorial, like, the height and the width, and what it would be like. So learning how to measure out in the real world would help us in our case, to learn the height and width of our memorial, and how it would be like.

>> Ten centimetres represents ten -- I mean, one metre in real life. So the benches are one metre and twenty centimetres. Like, when they sit down, they could read. Education is the most powerful weapon, which you could use to change the world.

>> I think it's really important, because for me, I don't want to teach math in isolation. And I think the way we structure our math sometimes, and the way we use our textbooks, everything is isolated. So we do -- one term we'll do measurement, and then we'll do probability, and then we'll do number sense. And there's always an isolation, and always in silos. And I think doing it this way makes students see that math is part of the real world. Math is part of everything you do. It's so important for them to understand that you can make these connections. Whatever you're doing is connected to math.