Social Justice Connections

Using the key features of social justice mathematics, how would you incorporate opportunities for **Reflection** - ways for students to consider their views towards themselves (Identity), others (Diversity), and/or fairness (Justice)?

- After running the simulations using parameters that reflect how OUR school has addressed reopening during Covid, consider how your sibling's schools, friends' from home schools, etc might affect the shapes of their curves?
    - We are a well-resourced boarding school. How might policies differ for a day school? For a public school? For an elementary school?
    - We considered splitting the population so that some of you come to class in person some days and you attend class online from other days. How might this model impact students/families of an under-resourced public elementary school?
- Given the experiments we ran, what populations are most negatively affected? How do those affects and the affected populations impact education policy going forward, if we are to avoid increasing equity gaps?
    - Just commenting that I second this! This is so important for thinking about different groups, and fairness.
    - And, what can we as math teachers do about it?
- After running the applet, you can see how social distancing and/or quarantining really do make a difference. Young people tend to think that when they see their friends it doesn't really matter.
    - I was thinking about launching our year with this to give kids this context of WHY.
    - I love this idea. Just be sure they know the model is limited -- it's not predicting what will exactly happen, and at the same time, gives good insights.
- What assumptions could bring for our school and other schools in our district? How may rural vs urban settings change this? How could the district support both settings in one policy?
- What are some of the assumptions our institutions/relationships rest on that weren't captured in the model?
- We talked about a lot of different factors that affect spread that were not accounted for in the models. How would the models be affected by those factors? Why are different communities being affected the way they are? Why would cultural influences affect the rate of spread? What can we do?
- Social Justice issues are often filled with very strong emotions...I think that mathematics can add the objectivity that is often needed to enable effective change. It was very calming to see through the app what the ramifications of my district's policies will be. While there is still risk, it does enable pretty safe learning and teaching to happen. I am going to start teaching data science in my classes to help students assess data on their own.
- The number of teachers in a school district is related to the money the school district has. How do we find equitable means for all districts that are not related to property values?
- Considering how their choices can dramatically influence the results

    - I like that! This can empower students to know their choices matter!
- Class sizes in inner cities vs the suburbs
- Technology discrepancies that prevent distance learning
- Needs outside of school
- If a hybrid model is utilized how will parents account for childcare when kids aren't in school - how does that impact the spread/willingness to use a model like this?
- Do all populations of students have identical "simulation runs"? with the same policy yield the same results in all schools with all populations
- I really loved the investigation, I want to KEEP investigating! I think "Fairness" is a huge topic for students, so knowing what is the quality of their education when they are home vs in school.
- Access to PPE
- YES to considering what learning at home looks like for different kiddos
- We can consider the impact COVID-19 has had on people of different races in the CT or the US
- What does it look like for subgroups of populations?
- Understanding that fair does not always equate to equal
- Asking students to weigh the risks/benefits: are these policies worth the risk or worth the benefit?
    - I like the idea of RISK! There are costs and benefits.
- How are these theoretical restrictions actually received by your family/community?
- Health issues of students and families.
- Is the impact the same for each group of people? How does it differ?
- Present findings to school/district administration
- How behavior impacts variables
- Identify topics based on student interest to increase engagement and buy-in
- Understanding your role and how it can impact others
- Compare data and pick a plan of action that we feel has the best outcomes
- Multicultural strategies
- Data is empowering - run different scenarios and analyze
- How are different populations of people being affected differently? What variables are different in different populations?
- Students can share stories of how the virus has affected them personally
- Consider access and ability to policy requirements
- How can we make mitigation strategies equitable? Some districts have more money to spend on mitigation strategies.
- Look at the differences in Covid numbers between races. How does race play into DOTS?
- Student-led inquiry: How is students' social life or well-being affected by the pandemic?
- Less direct instruction, let students struggle productively
- Differences in culture
- Students can use the data to write letters to politicians regarding policy
- Must begin to have REAL conversations
- Research which schools or families will have access to certain resources such as masks
- Promote personal responsibility
- Work to understand how these strategies might be applicable to other countries
- Share data and app with students so that they can see possible ways to flatten the curve

- Students determine questions of interest
- Assign students rural, suburban, or urban group and have them do the analysis based on factors that would most influence their group and make suggestions of actions to take