

**Team Number:**

**School Name:** San Juan College High School

**Area of Science:** Behavioral and Social Sciences

**Project Title:** Load of *Bull*-ying

Schools face an issue they have been trying to deal with for generations; bullying. Student depression and suicide rates are growing, especially with the ever-expanding access to technology and social media. Simply telling these bullies isn't enough. They don't seem to realize just how big this problem really is.

To show everybody the risk, we are planning to create a simulation through NetLogo to show how bullying can affect small populations. We give the subject control over the population size, the number of counselors, and number of bullies. After setting these numbers, the simulation will begin.

We wanted to format this off of a template that was given to us when we installed NetLogo. It showed the spreading of the disease commonly known as HIV from one person to another. We think this can be used to show the effect of bullying.

Our white characters will be regular students. The red characters will be the bullies. The green characters will be counselors. When a red student interacts with a white student, it goes into the grey, victim state for a short period of time, processing the certain chance of that character becoming either a green counselor (survived and teaching others), a red bully (dog-eats-dog world), or a blue depressed. The depression state is very unstable, making one uncertain of suicide or even depressing any greys around it.

We hope this project can show others the effect of bullying and help end it for good.

**Team Members**

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**Sponsoring Teacher(s)**

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**Project Mentor(s)**