

School Name: Desert Academy

Team Number:

Team Members: Alex Newman, Luca Contarino, Avery Phillips

Sponsoring Teacher: Mario Ruiz

Project Mentor: Stephen Guerin

The problem: The problem we're evaluating is the relationship between kids starting to do drugs and dropout rates.

Area of Science: Behavioral and Social Sciences

Why this is important:

This is important because dropout rates and drugs are both big deals and could be connected. And that would be worth looking into. Things like divorced parents could lead to them being more likely to start drugs. The number of people who started out with drugs would lead to the range and speed of the spread. The academically inclined and declined would be there to see if how willing people would be to start drugs, and/or dropout. For instance, if someone with a very high academic record would be less likely to drop out even if they started drugs while someone with a low academic record would be more likely to drop out if they started doing drugs. We feel that it could be helpful to make this model to maybe see if how related drop outs are to drugs. School Name: Desert Academy

What we hope to show (results we hope to obtain):

We hope to show where and why kids start to drugs. So that it may be prevented in the future. People will know where drug exchanges are more likely so that they can prevent them and madey even prevent drop outs from happening.

Plan of Action/Methods (How we plan to work on it):

Using netlogo, we will design a model of a school floor plan with turtles as students. We will use statistics to program in bathroom breaks and which students get “infected” by the drug which will be acting like a virus. We will also be factoring in the child's likelihood to do drugs. For instance, if they have straight A's, they would be less likely to start drugs for fear that it might mess up their grades.