

Evo Demonstrates Flattening the Curve

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Introduction

With the coronavirus pandemic dominating the news, not a day goes by in which the phrase “flattening the curve” is heard over and over again. To flatten the curve means to slow down the spread of the virus and lower the peak in the number of infections. Doing so should reduce the number of people needing hospitalization at any given time. The result is that fewer hospital beds, ventilators and other resources would be needed during the peak. Frequent washing of hands for at least twenty seconds, staying at least six feet from one another (social distancing), and wearing home-made cloth masks have been recommended by the Coronavirus Task Force as ways to flatten the curve.

The Ozomap for this Lesson

What better way is there to demonstrate flattening the curve than by using a pair of Ozobot Evos? Figure 1 shows the Ozomap that you will use for this lesson. A full-page version of this map, suitable for working with Evo, accompanies this lesson.

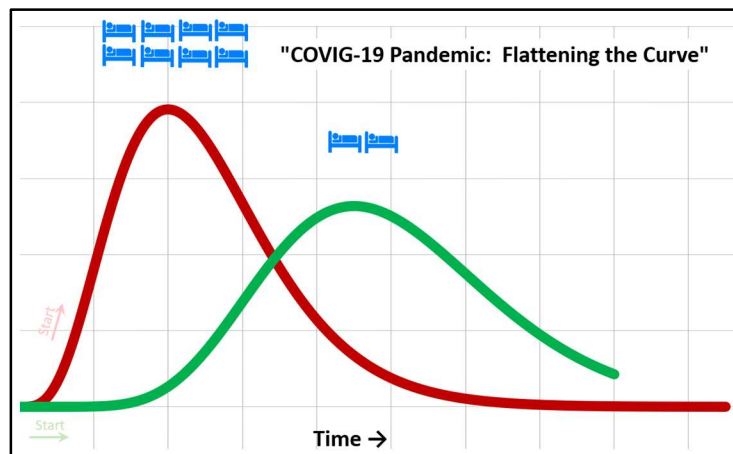


Figure 1

There are two curves on the Ozomap—the red curve with a very high peak, and the green curve which represents flattening. There are two short OzoBlockly programs that accompany this lesson. One of these programs is called *RedFast.ozocode*, and the other is called *GreenSlow.ozocode*. These two programs are loaded into a pair of Evos. They are placed on the start locations shown in the bottom left corner of the Ozomap. ***The programs are started simultaneously on both Evos.***

The OzoBlockly Flattening the Curve Programs

Figure 2 shows the two OzoBlockly programs. The code for the two programs is similar. The only differences are the line-following speed and the color setting of Evo's lights. The program on the left, with a speed of 15 mm/s and green lights, is for the flattened curve. The program on the right, with a speed of 50 mm/s and red lights, is for the curve with a very high peak.

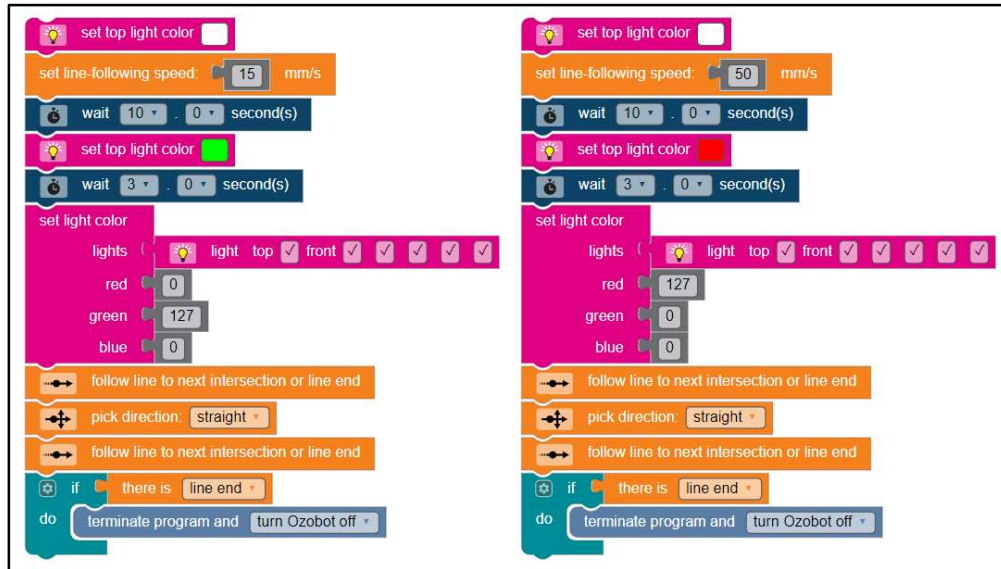


Figure 2