Are two straws better than one?

Atmospheric pressure and suction

You will need….
✓ A glass of water
✓ Two straws

Background:
A pressure difference is required to raise the level of water in a tube.

Follow these steps:
1. Put a straw in the glass of water.
2. Hold a second straw outside the glass as shown.
3. Try sucking the water up through the straw.

So what happened?
The student will find it impossible to drink if one of the straws is outside the glass. If both straws are placed in the mouth it is difficult to maintain a sufficiently low pressure to cause the water to be sucked up because air enters through the second straw.

What next?
1. Does the diameter or length of the straws make a difference?
2. By joining straws together find out the longest straw that it is possible to drink through.