

The Shape of Mystery Graphs

After groups have finished drawing the first draft of their mystery graphs, you hold a whole-class discussion of the general shapes, without touching on the subject of any graph. The point of this discussion is to help the groups clarify their graphs. Student observers are able to be quite specific about the shape of a graph, and this is sometimes very helpful to the authors.

Kenyana: I see highs in the afternoon and at 7 at night.

How would you describe the line after 7 o'clock?

Kenyana: It gradually goes down.

Nick: Gradually? It's pretty drastic.

Ahmad: It goes drastically down, then back up.

Rebecca: We made a mistake. The people come in at 7 and stay there. Can I fix my mistake?

[Rebecca takes her graph and draws the line after 7 o'clock at the same height as 7.]

Look at [another graph]. What is different about this one?

Rafael: It goes up and down a lot. A lot more coming and leaving. Most late at night.

Where is the high in the morning?

Rafael: Between 7 and 8. The low is between 1 and 5.

When are the most people there?

Teresa: All the peaks are about the same, but they make sort of a clump at night. I guess that's more people than in the morning.

[Speaking to the authors of the graph] So we see a small clump of people doing your activity between 7 and 8 in the morning. In the evening sometimes lots of people are there and sometimes very few. Is that what you wanted to show?

