

*science-in-the-making*. Thus, to see the statement as a collaborative construction, we have to return to the records of its making which we have in the form of videotapes.

The following is the transcript of the episode during which the sentence was constructed. Although we treat the transcript as the interchange during which the sentence was constructed, the students' understanding developed over the course of their inquiry into the problem and thus has a much longer history than that presented here. The transcript begins after the three students have already established that there are three curves – A, B, and C – which are possible descriptions for the five data pairs in their plot. Now they were trying to describe each curve as their answer to the question 'Is there a relationship between light intensity and the density of brambles?'

- 1 Ron: Our first pattern, entitled pattern A
- 2 Ellen: Pattern A
- 3 Ron: In pattern A,
- 4 Ellen: Lets now, we can conclude
- 5 Ron: We can conclude
- 6 Ellen: That, which one is pattern A?
- 7 Ron: Pattern A
- 8 Ellen: That one of the readings could be a fluke
- 9 Ron: No, no,
- 10 Ellen: The reading
- 11 Ron: That's pattern a, right along here. So as the amount of candles
- 12 Ellen: Is the
- 13 Ron: The percent of brambles will stay the same
- 14 Ellen: With the pattern we concluded that if the amount of foot candles is higher
- 15 Ron: Exceeded, exceeded
- 16 Ellen: What do you mean exceeded, is exceeded by what?
- 17 Ron: Is has more
- 18 Theo: Exceeded is, there is a greater amount of
- 19 Ellen: If the amount is, (0.7) there will be a higher density of brambles
- 20 Ron: No its flat, its wrong, look at the graph
- 21 Ellen: Right
- 22 Ron: The density of brambles will stay the same, 'cause look that's what we concluded
- 23 Ellen: Ok, will get greater and then even out. There will be a higher density