Teachers with whom we worked made some telling comments.

One teacher was asked about his students’ use of arrays . . .

Teacher A was surprised when a number of his students responded to a task based on a combination problem (‘If I have seven shirts and three pairs of shorts, how many different combinations of shirts and shorts can I wear?’) by drawing an array, in preference to a tree diagram. He had not suggested using an array and was asked specifically about arrays.

INTERVIEWER: How much do you use the array in your general teaching?
TEACHER A: If I’m honest with you, hardly ever . . . hardly ever, and it’s interesting that they all picked up on it [using the array]. Perhaps it’s something I should be bringing into my practice.

Another group of teachers commented about how little they had known about multiplicative thinking before they worked with us . . .

Teachers D, E, and F were also asked about how they would have reacted to student responses to questions such as those on the MTQ before they had become more aware of the underpinning mathematics. Teacher E said that they would ‘randomly plugging holes’ and Teacher D added,

“We wouldn’t have been plugging those gaps in the past because we wouldn’t have known that they existed . . . if we’d asked them what an array was, they wouldn’t have known but we wouldn’t have recognised that as a gap”.

What does this mean?