

Non – example

By Elizabeth Arkle

One point at which I have used non-examples is towards the end of a sequence of teaching to support self-explanation in order to check and deepen understanding. Take for example, a Year 4 maths objective 'to add and subtract up to 4-digit numbers. Once we have worked through the small steps, and all children are able to add numbers using the column method, I have used non-examples to explore common misconceptions. Children often seem to love nothing more than finding your mistakes! Non-examples have worked well here in getting children to watch what happens, think about the mistakes and errors, explain what I have done wrong, but then go on to explain what I should have done.

When teaching, I will put the example on the board first in linear format for example: $3456 - 798 =$

This allows me to go on and set it out with place value errors which are a common misconception.

I will then go on, without narration, to work through the question. It is important to note that at this point the children should be secure in the skill, this is the end of the teaching sequence and is giving them a chance to explore and reason about common misconceptions. The class know they have to let me finish - they are not allowed to jump in and shout out any mistakes or errors I make. Only once I have finished can children reflect on what I have done and offer an opinion.

Children will then work in their books first, putting my calculation in their books and reflecting on it. They then annotate my calculation to explain the mistakes and errors, then complete their own calculation alongside it to correct anything I did wrong. To develop reasoning, they then come up and explain why I am right or wrong then, if they think I am wrong, they will need to correct the example, narrating what I have done wrong. If they think I am right, then they have to work through my example to explain what I did and why it is right. Children know they are not allowed to interrupt each other but they can offer an opinion at the end.

Pupils have become more articulate in explaining their methods and they are much more aware of the common misconceptions or pitfalls they could fall into.

As a teacher, I have become much more aware of reserving time for children to think things through, then the time and space to talk through what is right or wrong. Using non-examples in this way has deepened the understanding of all pupils in my class. The fact that they are looking for my mistakes and errors really grabs their attention as well so they all tend to be really engaged and think deeply about the question so they can tell me if and where I have gone wrong.