2.4 Samuel's story (aged 10)

'I don't do multiply!'

Samuel had a diagnosis of ASD and had spent all of his primary education in a nearby special school before starting in the secondary school. He was a bright, cheerful boy who enjoyed drawing (and was very good at it). He also had a keen interest in electronic games. His ability in reading and spelling was average, but he had quite considerable gaps in his mathematical ability. It was a few weeks into the first term before the teacher discovered this because the introductory topic in Mathematics was *Shape* and Samuel had no difficulty learning to recognise and learn the various shapes. In the next topic, *Number,* Samuel again had no difficulty with the addition and subtraction exercises. However when the teacher gave Samuel a multiplication sum to do he announced in a very matter-of-fact voice, 'I don't do multiply!'

What the teacher / school did to help Samuel

When the teacher first met Samuel, on a P7 visit to his school in preparation for his move to the 'big school', Samuel greeted him very politely and then produced a sheet of paper from his pocket on which he had written 37 questions about his new school! The teacher must have answered most of them successfully because he duly arrived the following September.

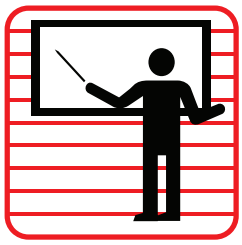
The in-built flexibility of the home-room provision in a secondary school meant that the teacher could arrange a programme for Samuel that would enable him to learn how to multiply.

One period a week was set aside to give him one-to-one teaching while the other boys in the small group did extension number work under the supervision of the classroom assistant assigned to them. Samuel was rather reluctant at the beginning, as he really didn't believe that he would ever be able to 'do multiply'. The teacher began with the few tables that Samuel could remember, consolidating them by saying them together with him, writing them out and playing games with them. At the same time, the teacher gave him multiplication sums in his exercise book, so that he would become familiar with the 'procedure'. After a few weeks, he began to relax and gain confidence and even began to look forward to this period each week.

At the same time, the classroom assistant used the mental maths period each week to do further work on the tables Samuel had learnt – throwing dice and multiplying by 2, 3, or 4 and other similar games. His parents were also involved, helping him to learn a multiplication table each week. The teacher made a multiplication square for him so that he could work at the same rate as the other boys while continuing the number topic.

When the class started to learn the more difficult tables, the teacher reduced the learning to half a table per week and also looked for patterns in the tables to help him remember them. He was particularly pleased to discover the pattern for the nine-times tables – he had thought it would be a really tough table to learn.
The level of difficulty was gradually increased and he was amazed to find that he could multiply really big sums. The whole process took the best part of that year to complete but it made it all worthwhile when he looked up at the teacher in class one day with a big smile and said, 'This is actually very easy!'

Key learning points from Samuel's story



- Plan small practical and achievable activities for the pupil
- Increase the level of difficulty as the child gains confidence and success
- Encourage the parents to consolidate the work, and the general approach to it, at home
- Don't give up, and enjoy the pupil's achievement.