

'Stern' at Southbrook College - Exeter

February 2009

Southbrook College decided to start using 'stern' maths apparatus almost a year ago with a small group of pupils who were identified as making little or no recognisable progress in mathematics.

Pupil's profiles: From September 08 the programme was offered to 4 young people in year 10 and a complete year 7 class who entered the College with P or level 1 'small steps' grades. The remaining year 7 classes only used 'stern' with selected pupils who were considered to need support with their number work.

Class sizes: 12 for a complete class (split into groups of 3 or 4 for more individual work).

Difficulties: Staff training could have proved a problem but an afternoon of inset training led by Vikki Horner adequately prepared the staff for further group work with pupils.

Apparatus: The pupils adapted very well to the apparatus and had no difficulty with any handling skills. The 'dual boards' and the 'number track' have proved to be most useful and lend themselves very much to the levels of learning of our pupils.

The Stern programme: One year 7 class is working progressively through book three. I am at the stage of moving three of the higher achievers (level 2's) onto a different programme better suited to their abilities.

The 4 pupils identified in the year 10 class are continuing to work from their book 3's twice a week.

I am introducing the 'stern' programme to lower ability groups in years 8 and 9 before $\frac{1}{2}$ term (4-6 in a group) working with a trained Teaching Assistant.

Results: At the beginning of the term in September 2008 I tested the year 10 group using 'Woodlands' speed addition and subtraction 2 minute tests. I retested the group last week and each one of the group has shown significant progress over this period. The 'Stern' group progress was recorded as above the rest of the class.

We are still analysing these results as they appear to show increased understanding of addition and subtraction as well as a speeding up of the cognitive processes.

In one particular case a pupil who came to us in September 08 with low self esteem regarding maths, especially number, has displayed increased understanding and ability in a range of mathematical areas including

measurement (time, temperature etc.) shape and mathematical application.

We operate 50 minute lessons and find that this has to be broken down to maintain the focus and concentration of a lot of our pupils. Children using the Stern apparatus maintain levels of concentration for longer periods even if they are just using the blocks for play activities.

The student workbooks allow for annotated comments from all members of staff and provide excellent feedback and discussion points for parents. Comments from parents have included; "I've never seen my boy do so much maths."

On the basis of our successes with the 'Stern' apparatus we have recently purchased more equipment to use across the College.

Mark Green

Maths Co-ordinator