SpLD in Maths and Dyscalculia

School Checklist

| Some statements could belong to more than category. Some statements could belong to more than category. Tick all that apply … | |  |
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| **subitising, number sense & comparison** | Finds it impossible to ‘see’ that four objects are four without counting (**subitising**). |  |
| Difficulty with **non-symbolic magnitude** comparison (e.g. which set has more objects?). |  |
| Difficulty with **symbolic magnitude** comparison (e.g. which is bigger 7 or 6?) |  |
| Does not see relationship between numbers (e.g. that seven is made up of five and two). |  |
| Finds it difficult to write numbers which have zeros within them, such as ‘three hundred and four’ or ‘four thousand and twenty-one’. |  |
| Does not understand 1 more/1 less than. |  |
| Difficulty with place value (does not understand the concept of zero). |  |
| Not know, nor understand, the underlying place value concept, when multiplying and dividing by 10, 100, 1000 and above. |  |
| Does not understand commutative property (e.g. that 4 x 5 = 5 x 4 or 2 × 6 = 6 x 2). |  |
|  | Difficulty remembering number names. |  |
| **one to one correspondence & counting** | Has difficulty counting objects accurately. |  |
| Lacks the ability to make one to one correspondence. |  |
| S/he points or touches each item as they count. |  |
| Difficulty counting in order – may omit or mis-sequence numbers or count randomly. |  |
| Does not understand cardinality, that the final number in the count is the quantity of the set. |  |
| S/he can accurately match the numeral to the number of items. |  |
| **number ordering & sequencing** | Has difficulty ordering numbers on a number line. |  |
| Difficulty counting forwards from a given number. |  |
| Difficulty counting backwards from a given number (particularly across a decade). |  |
| Finds it difficult to count fluently sequences that are less familiar, such as 1, 3, 5, 7 … or 4, 14, 24, 34 … |  |
| Does not see patterns or generalisations easily (e.g. 17 27 37 or that 1/2, 1/3, 1/4, 1/5 is a sequence that is getting smaller). |  |

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| **Some statements can fit it more than category. Tick all that apply …** | |  |
| **embedding & applying**  **skills, procedures & knowledge** | Confuses similar sounding numbers (e.g. thirteen and thirty). |  |
| Uses finger counting in simple calculations. |  |
| Reverses or transposes numbers (e.g. 17 for 71 or 324 for 423). |  |
| Makes ‘big’ errors for multiplication facts, such as, 6 x 7 = 67 or 6 x 7 = 13. |  |
| Difficulty remembering and understanding multi-step procedures. |  |
| Forgets mathematics procedures (e.g. decomposing, re-naming, re-grouping or borrowing). |  |
| Confuses the order in division (e.g. is it 4 divided by 2 or 2 divided by 4?) |  |
| Has difficulty calculating change in money problems. |  |
| Finds telling the time on an analogue clock difficult. |  |
| Difficulty understanding simple algebraic equations (e.g. 2 x  6 or 3x  1  7), continues at KS3. |  |
| Thinks that algebra is impossible to understand. |  |
| Difficulty simplifying equations at Key Stage 3 (e.g. (3x 2)2  (2x 1) (4x 2)  |  |
| Organises written work poorly (e.g. does not line up columns of numbers properly). |  |
| Becomes impulsive when doing mathematics, rather than being analytical. Rushes to get it over with. |  |
| Follows procedures mechanically without understanding them. |  |
| Difficulty explaining their answer or method. |  |
| Poor setting out on the page, numbers in the wrong column. |  |
| May not use visual images and so may find spatial reasoning difficult. |  |

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| **Some statements can fit it more than category. Tick all that apply …Some statements can fit it more than category. Tick all that apply …Some statements can fit it more than category. Tick all that apply …** | |  |
| **anxiety** | Gets very anxious about doing any mathematics. |  |
| Refuses to try any mathematics, especially unfamiliar topics. |  |
| Answer questions in front of others makes them anxious. |  |
| **fact retrieval** | Forgets where s/he is up to in calculations. Forgets the question asked in a mental arithmetic. |  |
| Uses tally marks when peers are able to use mental calculation. |  |
| Struggles with mental arithmetic. |  |
| Slow/inaccurate recall of basic number facts (e.g. number bonds). |  |
| Learns addition or multiplication facts and then forgets them. |  |
| **number calculation & fluency** | Only really knows the 2x, 5x and 10x multiplication facts. |  |
| Difficulty generalising from one situation to another (e.g. 3 + 5 = 8 to 3p + 5p = 8p). |  |
| Cannot reason logically (e.g. 38 38  76 so 38 37 ?). |  |
| Has difficulty understanding problems with addends (e.g. 2 + = 9). |  |
| Finds it difficult to ‘count on’ (e.g. 3 + 4, counts ‘1 2 3 ... 4 5 6 7’). |  |
| Doesn’t ‘see’ automatically that ‘7 + 5’ is the same as ‘5 + 7’ (or that 7 x 3 is the same as 3 x 7). |  |
| **estimating** | Poor estimation skills – makes wild guesses. |  |
| Finds it difficult to judge if whether an answer is right or nearly right. |  |
| Finds rounding numbers difficult. |  |
| Cannot adjust their estimation on basis of previous answer. |  |
| **word problems & symbol/**  **language** | Has difficulty choosing the correct operation in word problems. |  |
| May not understand the mathematical language used in calculations or procedures. |  |
| Confuses the four operational signs. |  |

**References:**

Chinn, S. (2019). *Dyscalculia Checklist.* Available: [http://www.stevechinn.co.uk/dyscalculia/the-dyscalculia-checklist. Last accessed 11.02.2020](http://www.stevechinn.co.uk/dyscalculia/the-dyscalculia-checklist.%20Last%20accessed%2011.02.2020).

Kelly, K (2020). *Identifying, Assessing and Supporting Learners with Dyscalculia*. London: SAGE Publications Ltd. p1-368.