

DYSCALCULIA: WAYS TO HELP

Early Years:

Focus upon developing:

Accurate counting, the value of a number, partitioning of a number, counting a set in any order, concepts of more/less

- Teach counting using noisy items: e.g. a bead into a tin
- Ensure the concept of the final number said is the value of the whole set is reinforced
- Teach more than/less than using balances and scales to visually see the differences
- Use partitioning of quantities to teach the value of a number
- Play number games in a range of contexts
- Use a range of resources to count and mix them up
- Count on from a number e.g. 3 to 6, 5 to 9
- Have a number of the week: how many ways can you make this number? What is it near?
- Reinforce vocabulary related to number: more than/less than, between, how many?, how many more?
- Count backwards
- Use pegs on a number line
- Use sand or shaving foam to trace numbers or find a number of items
- Use stepping stones to jump between numbers

Primary:

Focus upon developing:

Making links and connections, deriving information from the known, understanding of key concepts, calculating rather than counting, application of number facts, a sense of value and magnitude, key vocabulary

- Count on from a given number, to a given number
- Use resources which illustrate the value of a number, e.g. Numicon
- Use feely bags to find a given value
- Use resources to demonstrate commutativity of addition
- Teach vocabulary explicitly
- Teach the pattern or rule: do not expect the child to see it
- Teach the context for the particular rule
- Use empty box notation
- Use an empty number line
- Practice rotation in PE
- Always teach a number concept with a familiar activity or resource
- Little and often: practice a little every day in a range of contexts
- Real money – make the most of being out shopping
- Focus upon one number: how many ways can you make this number? E.g. '5' (4+1, 7-2, 3+1+1, 10x 0.5)
- Use groups of real objects to learn tables, e.g. pairs of socks to count in 2s



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- Ask questions: is there another way? What would happen if I changed this number to...? Are there enough cakes for each person to have one?
- Use role play in KS1 for embedding key concepts of value, magnitude, and relationship
- Match number with the number of objects
- Encourage estimation
- Use arrays to develop understanding of number sequences
- Use dice with different dot patterns
- Use of dice with dot patterns and numbers to encourage adding on
- Use bead strings or pegs on a hanger

Secondary:

Focus upon developing numeracy and flexibility with number

- Develop connections and links between contexts by drawing attention to how a concept has been used in a different situation
- Be aware of the tendency towards learning a rule without understanding why the rule works – ask questions: is there another way? Is there a quicker way? What would happen if...?
- Be aware of the over-reliance upon calculators and difficulty in estimation leading to wildly inappropriate answers
- Use frames to structure multi-stepped calculations
- Model an activity or concept before teaching in an abstract way
- Continue to use real-world contexts e.g. with fractions, percentages and money
- Teach key vocabulary explicitly: e.g. 'factorisation'

Beyond Secondary:

Focus is upon self-help skills:

- Bank: make the most of Banking APPs to track personal finances. Set up an Excel Spreadsheet and keep it up-to-date to track income and expenditure
- Shopping: use a self service barcode scanner to track the cost of items as you shop
- Cooking: use metric to cook as this is easier to use when handling larger quantities, learn a few basic cooking skills such as scrambled eggs, pasta and rice, potatoes
- Time: digital clocks are easier to read, download an organisation APP and enter your daily schedule to give you time prompts

Access arrangements in exams:

There are no specific access arrangements associated with dyscalculia, but other difficulties may co-exist with dyscalculia and may require access arrangements in exams:

- Extra time for slow processing speed impacting upon rate of working
- Extra time for a weak working memory impacting upon ability to follow and complete multi-stepped activities
- Modified papers for visual perceptual difficulties

For more detailed intervention approaches contact SENDISS



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