

SOURCE OF THE TABLE

McMurray, S., Drysdale, J. and Jordan, G. (2009) ‘Motor processing difficulties: guidance for teachers in mainstream classrooms’, *Support for Learning*, 24(3), pp. 119–125. doi: 10.1111/j.1467-9604.2009.01411.x

Table 1: ‘Dyspraxia and related difficulties in the classroom: guidance for teachers’ (p. 124) and Table 2: ‘Multi-sensory approach for teaching handwriting: activity ideas’ (p. 125).

CLASSROOM GUIDANCE LEAFLET

For children identified as having motor processing difficulties

Dyspraxia and related difficulties in the classroom: guidance for teachers

About this leaflet

This leaflet reproduces the authors’ guidance table one section at a time. In their words: ‘It is vital that classroom teachers are familiar with strategies and teaching approaches that will have a positive impact on the dyspraxic learner’s ability to participate fully in everyday activities (see Tables 1 and 2 for strategies that can be easily implemented in mainstream classrooms).’

How each section is set out

COLUMN 1 Difficulty What you may notice in the classroom	COLUMN 2 Possible underlying reason(s) Why it may be happening	COLUMN 3 Intervention strategy What you can do to help
--	--	--

Contents

 Literacy	page 2	 Numeracy	page 4
 Organisation and behaviour	page 3	 PE	page 5
 Art	page 4	 Multi-sensory handwriting activities	page 6

Literacy

From Table 1: Dyspraxia and related difficulties in the classroom: guidance for teachers

Difficulty What you may notice	Possible underlying reason(s) Why it may be happening	Intervention strategy What you can do
Starts writing in middle of page	<ul style="list-style-type: none"> Poor organisational skills Difficulty crossing midline 	<ul style="list-style-type: none"> Place green dot on left side of page and red dot on right side of page
Loses place on page when reading (as child progresses reading seems to deteriorate)	<ul style="list-style-type: none"> Visual perceptual difficulties/distracted by too much information on page due to increased amount and reduced size of text 	<ul style="list-style-type: none"> Limit amount of information on page Increase size of text if necessary Provision of a window frame Use pastel coloured paper when possible to reduce glare of black print on white paper
Poor or inconsistent spacing of words	<ul style="list-style-type: none"> Poor organisational skills Visuo-motor/perceptual difficulties 	<ul style="list-style-type: none"> Encourage child to place a finger space between each word
Lacks automaticity in letter formation	<ul style="list-style-type: none"> Motor planning difficulties Visuo-motor/perceptual difficulties 	<ul style="list-style-type: none"> Implementation of multi-sensory programme (e.g. tracing letters in sand, in the air, etc.)
Letter and number reversals	<ul style="list-style-type: none"> Motor planning difficulties Visuo-motor/perceptual difficulties 	<ul style="list-style-type: none"> Implementation of multi-sensory programme (e.g. tracing letters in sand, in the air, etc.)
Not stabilising page with non-dominant hand when writing	<ul style="list-style-type: none"> Bilateral co-ordination difficulties 	<ul style="list-style-type: none"> Tape page to desk or place a non-slip mat under the page
Non-functional grasp on pencil	<ul style="list-style-type: none"> Proprioceptive/tactile processing difficulties Limited hand strength 	<ul style="list-style-type: none"> Provision of triangular pencil or specialised rubber grips
Slow speed of writing	<ul style="list-style-type: none"> Lack of automaticity 	<ul style="list-style-type: none"> Allow additional time to complete work or reduce amount of work

Organisation and behaviour

From Table 1: Dyspraxia and related difficulties in the classroom: guidance for teachers

Difficulty What you may notice	Possible underlying reason(s) Why it may be happening	Intervention strategy What you can do
Appears to ignore instructions	<ul style="list-style-type: none"> Unable to process verbal information, particularly when involved in another task 	<ul style="list-style-type: none"> Provision of visual cues/instructions
Not following instructions fully or correctly	<ul style="list-style-type: none"> Unable to recall and plan a sequence of instructions 	<ul style="list-style-type: none"> Break instructions into small steps Provision of visual cues
Difficulty following classroom routine/disorganised	<ul style="list-style-type: none"> Poor motor planning and organisational skills 	<ul style="list-style-type: none"> Provision of a visual schedule
Difficulty following timetable/not bringing correct subject books to classes	<ul style="list-style-type: none"> Poor motor planning and organisational skills 	<ul style="list-style-type: none"> Provision of colour-coded timetable and corresponding colour-coded books for each subject
Difficulty lining up, may unintentionally bump into other children	<ul style="list-style-type: none"> Spatial difficulties 	<ul style="list-style-type: none"> Position child at front or back of line
Distractibility and poor concentration	<ul style="list-style-type: none"> Unable to process simultaneous sensory input 	<ul style="list-style-type: none"> Allow child to work in quieter area of classroom and also limit amount of visual input on and around the child's desk <p>or</p> <ul style="list-style-type: none"> seat child at a table at front of classroom closer to teacher for instructions
Fidgeting and restlessness	<ul style="list-style-type: none"> Child is uncomfortable 	<ul style="list-style-type: none"> Ensure child is sitting with correct posture, chair and table correctly positioned with feet on the ground

Art

From Table 1: Dyspraxia and related difficulties in the classroom: guidance for teachers

Difficulty What you may notice	Possible underlying reason(s) Why it may be happening	Intervention strategy What you can do
Difficulty with some art activities, for example still life drawing and self-portraits difficult	<ul style="list-style-type: none"> Difficulty in seeing in three dimensions (Addy, 2003) 	<ul style="list-style-type: none"> Put supportive measures in place for these types of art activity

Numeracy

From Table 1: Dyspraxia and related difficulties in the classroom: guidance for teachers

Difficulty What you may notice	Possible underlying reason(s) Why it may be happening	Intervention strategy What you can do
Specific difficulties with processing mathematics (Dixon and Addy, 2004) <ul style="list-style-type: none"> Erratic placement of digits Reversing digits Inability to estimate or judge spatial dimensions Problems understanding and translating three-dimensional and two-dimensional figures Confusion about layout of calculations 	<ul style="list-style-type: none"> Spatial dyscalculia due to problems in visuo-spatial assessment and organisation 	<ul style="list-style-type: none"> Introduce mathematical symbols and formation of digits in groups, such as 1, 2 and 3 initially ensuring that 3 and 5 and 6 and 9 are not in the same groups. When competent the next group can be introduced (see Dixon and Addy, 2004)
Recounting and sequencing	<ul style="list-style-type: none"> Spatial organisation difficulties (Addy, 2003) 	<ul style="list-style-type: none"> Use number line to reduce dependence on fingers or counters for counting forwards and backwards. Rhymes, jigsaws and recipes can be used to develop sequencing skills (Addy, 2003)
Page of calculations appears cluttered	<i>(no reason given in the table)</i>	<ul style="list-style-type: none"> Provision of a 'card window' that covers most of the page revealing only one sum (Addy, 2003)
Disorganised layout of mathematical work on page	<ul style="list-style-type: none"> Poor organisational skills Visuo-motor/perceptual difficulties 	<ul style="list-style-type: none"> Provision of squared paper

PE

From Table 1: Dyspraxia and related difficulties in the classroom: guidance for teachers

Difficulty What you may notice	Possible underlying reason(s) Why it may be happening	Intervention strategy What you can do
Difficulty crossing the midline	<ul style="list-style-type: none"> Poor hand–eye, eye–foot co-ordination 	<ul style="list-style-type: none"> Activities developing hand–eye, eye–foot co-ordination
Slow to respond to instructions in PE, appearing defiant or unco-operative	<ul style="list-style-type: none"> Takes longer to process verbal information and complete actions 	<ul style="list-style-type: none"> Pre-warn child of changes through a discrete measure decided between child and teacher
Avoidance of or disruption in PE	<ul style="list-style-type: none"> Motor planning, co-ordination difficulties and visual figure–ground discrimination Overwhelmed by vast amount of space available in PE hall 	<ul style="list-style-type: none"> Provision of clear instructions and demonstrations Implementation of activities that require less co-ordination and planning Ensure area is restricted and that every child has their own space (Addy, 2003)
Avoidance of team sports	<ul style="list-style-type: none"> Motor planning and co-ordination difficulties, inability to perceive where other team members are and how they are moving 	<ul style="list-style-type: none"> Provision of more individual sports, for example swimming, athletics Smaller teams, for example five-a-side football
Solitary play in the playground	<ul style="list-style-type: none"> Motor planning difficulties: difficulty in team games 	<ul style="list-style-type: none"> Implementation of structured play activities for children in the playground

Multi-sensory approach for teaching handwriting

From Table 2: Multi-sensory approach for teaching handwriting: activity ideas

These activities support the 'Implementation of multi-sensory programme (e.g. tracing letters in sand, in the air, etc.)' recommended for **Lacks automaticity in letter formation** and **Letter and number reversals** (see Literacy, page 2).

LARGE MOVEMENTS

1 Using large chinks to draw letters on rough ground outdoors

2 Painting letters on large pages taped to floor or wall

3 Drawing large letters on blackboard or whiteboard

4 Tracing large letters in the air, either using index finger or ribbons

TOUCH AND TEXTURE

5 Tracing letters in trays filled with sand, dried lentils, rice or shaving foam

6 Tracing letters on sandpaper

7 Placing a page on a rough surface (for example concrete) and drawing letters

8 Forming letters using string, laces or modelling clay

WITH A PARTNER

9 Tracing letters (using index finger) on the back of another child, and he or she guesses the letter

The activities are grouped here for ease of use; the wording of each is exactly as it appears in Table 2.