

# Children with Motor Difficulties in Grade 1/2: A Resource for Educators



*Kyle, a six-year-old boy, is starting to think there is something wrong with him. He looks like everybody else, but he feels different. He has trouble doing up the button on his jeans, he can't hit a baseball, his teacher can't read his printing, and he can't tie his shoes. It seems like all the other kids in his class can do these things easily and quickly. Kyle's parents sensed there was something wrong with their son from the time he entered the preschool program. They noticed some subtle problems with learning daily tasks, a very low tolerance for frustration and have seen him become more isolated from his peers. Kyle's teacher feels frustrated with him. He seems to be bright enough and can tell*

*very interesting and complex stories, but he really seems to struggle whenever he has to do anything. Printing, getting ready for recess, eating his lunch, arts and crafts and activities in gym class seem really laborious for him and he takes a long time to complete most tasks. She tells him to focus and to try harder, but it doesn't seem to make any difference.*

## RECOGNIZING MOTOR DIFFICULTIES

### What is DCD?

Developmental Coordination Disorder (DCD) is a medical condition in which there is marked impairment in the development of motor coordination, and the impairment significantly interferes with academic achievement or activities of daily living (DSM IV, 2000). DCD may exist in isolation OR may co-occur with other conditions such as language-based or non-verbal learning disabilities or attention deficit hyperactivity disorder. Children with DCD usually have average or above average intellectual abilities.

### What will a teacher see if a child has DCD?

- The child may appear to be clumsy or awkward in his/her movements. He/She may bump into, spill or knock things over frequently.
- The child may experience difficulty with gross motor skills (e.g., running, hopping, climbing), fine motor skills (e.g., pre-printing tasks, cutting with scissors, doing up buttons or zippers), or both.
- The child's motor skills might not match his/her abilities in other areas. For example, intellectual and language skills may be quite strong while motor skills are delayed.
- The child may have difficulty learning new motor skills. Once learned; however, certain motor skills may be performed quite well while others may be performed poorly.

- The child may avoid or appear to be uninterested in particular activities, especially those that require physical activity.
- The child may experience secondary emotional problems, such as low frustration tolerance, decreased self-esteem, and lack of motivation.
- The child may have difficulty with activities of daily living. For example, dressing independently, managing lunch, and tying up shoes.

## WHAT CAN A TEACHER DO TO HELP A CHILD PERFORM AT SCHOOL?

The most important thing a teacher can do to help a child reach his/her full potential is to make sure the task and the learning environment are right for the child. The following “M.A.T.C.H.” strategy will help the teacher *match* the activity to the child.

### M.A.T.C.H. the Activity to the Child

#### **M**odify the task

This involves changing aspects of an activity that are too difficult for the child to perform. The important thing about modifying a task is that the child can still experience success if they make a genuine effort to participate in the activity.

#### **A**lter your Expectations

Consider what the ultimate goal of an activity is and then think about where you can be flexible. Allowing extra time or alternate methods of completing a task can make the difference between a lesson learned and an experience of failure for a child with DCD.

#### **T**eaching Strategies

Children with DCD have full capacity to learn with their peers, but may require a slightly different teaching approach. Investigate alternate teaching strategies designed for children with special needs.

#### **C**hange the Environment

Pay attention to what is going on around a child when he/she is experiencing success or difficulty (i.e. noise, level of activity, visual distractions). Minimize the environmental factors that make performance difficult for the child.

#### **H**elp by Understanding

Understanding the nature of DCD will help you to problem solve and provide all of your students with rich learning experiences. If children feel supported and understood, they are more likely to attempt new activities and to persevere until they achieve success.

# Grade 1/2

## MATCH the Activity to the Child!

- M**odify the activity
- A**lter your expectations
- T**each strategies
- C**hange the environment
- H**elp by understanding

What you might see...	How can <u>you</u> MATCH?
<b>Avoids colouring and has poor written output</b>	Allow the child to dictate stories to a scribe.
	Avoid unnecessary writing (e.g., date and/or title of book when doing reading responses; only write the spelling word, not the entire sentence).
	Reduce the amount of written work required (especially when printing is not the primary focus).
	Use fill-in-the-blank worksheets; photocopy math questions so the child only has to fill in the answer.
	Create a balance between written, oral, and pictorial responses.
	Explicitly teach printing using multisensory means and allow time for practice and consolidation.
<b>Slow to finish written work, often incomplete</b>	Allow more time to complete work.
	If speed is the objective, accept a less accurate end product (and vice versa).
	Reduce amount of output required (e.g., do odd-numbered questions only). Be clear about what you need in order for child to demonstrate understanding or to meet grade level expectations.
	Teach child to self-evaluate.
<b>Messy / disorganized desk</b>	Ensure students have enough time between activities to put materials in their desks neatly.
	Teach and review with all students how to organize their desks.
	Provide visual cues or labeling to assist with effective use of space (i.e., for pencils, notebooks, etc.).
	Minimize what children keep in their desks. Instead use bins (e.g., language bin, math bin, etc.).
	Use containers that are fixed to desktop for pencils, pens, and scissors.

<b>(continued)</b> <b>What you might see...</b>	<b>(continued)</b> <b>How can <u>you</u> MATCH?</b>
<b>Last to get ready for recess and home, or has messy/untidy appearance</b>	Allow more time, or send child out earlier than classmates.
	Pair with older student for help.
	Label or provide visual cues for front/back/right/left.
	Suggest Velcro or clothes without fasteners, such as T-shirts and sweat pants.
	Ensure child has enough space to dress - use end cubby or locker.
	Provide a chair or bench for dressing.
	Keep end of day routines consistent.
<b>Takes a long time to eat a snack or lunch</b>	Suggest easy containers (e.g., Ziploc bags instead of rigid plastic, plastic juice container with pull up straw, lunch bags with Velcro closure).
	Provide the opportunity for a few of the children to get 'set-up' for lunch a few minutes early.
	Suggest finger foods only.
<b>Avoids playground equipment and games; plays alone at recess</b>	Develop a bank of toys that the child is comfortable using and loan these out to 3-4 kids at recess to help create social play opportunities.
	Consider recess buddies (entire class is paired up at recess).
	Teach how to use equipment (rules of games and movements required).
	Be patient if the child needs multiple attempts to master a task.
	Practice on the playground equipment in off hours.
<b>Clumsy; hesitates to participate in gym class</b>	Use large blow up balls, balloons or Nerf balls to decrease anxiety.
	Emphasize fun, activity, and participation rather than proficiency.
	Be aware of safety risks to a child with poor coordination.
<b>Trips and stumbles frequently; has difficulty with uneven surfaces</b>	Remove any unnecessary items from floor.
	Use gym floor rather than outside field for learning new tasks.
	Place child's desk on the end of a row and near materials that he/she will need to access.
	Mark level changes or stairs with yellow tape.
	Observe traffic patterns and create open pathways in these zones.

(continued) <b>What you might see...</b>	(continued) <b>How can <u>you</u> MATCH?</b>
<b>Poor posture (slumps forward onto desk); leans on people or objects; lies down at circle time; falls off chair in classroom</b>	Ensure well-supported desk position (i.e., chair is close to writing surface, feet can touch the floor, chair seat is flat).
	Allow frequent altering of positioning (e.g., sit instead of stand, working on the floor).
	Allow child to sit next to (and lean back onto) a bookshelf or wall at circle time, instead of leaning on other children.
<b>Easily frustrated/low tolerance for motor tasks; resists new activities; decreased self-esteem &amp; motivation to perform</b>	Think about and reduce the amount of movement that is required to perform the activity.
	Break the activity into small parts.
	Teach each skill component discretely to allow success.
	Be available to assist/intervene when the child has difficulty.
	Provide lots of encouragement for child's attempts to try new activities.
<b>Rushes through tasks or is unusually slow; gives up easily</b>	Encourage self-evaluation of process (e.g., "I did my best." or "I did this quickly and it doesn't look as good", etc.).
	Allow more time to complete an activity.
	If the goal is to promote speed, accept a less accurate product (and vice versa).
	Reduce amount of written work required so that the child can finish within the same time period as their peers.

**If a child is still experiencing difficulty performing motor tasks despite your best efforts, consider speaking with his/her parents about making a referral to a health professional.**

### WHO ELSE SHOULD THIS CHILD SEE?

Encourage the family to see their family physician. It is important that a medical practitioner rule out other conditions that might explain the child's motor coordination difficulties.

A physician, teacher or parent can refer the child to an occupational therapist. Occupational therapists (OT) are educated and trained in analyzing motor skill development and also in determining the ability of a child to cope with the demands and activities of everyday life. The OT will observe and assess the child and may then make recommendations including: specific strategies for handwriting and classroom tasks; tips to make self-care tasks easier; activities to

improve the child's motor coordination; ideas for community leisure and sports activities; and techniques to ensure that the child experiences success.

A referral to a physiotherapist may also be appropriate if the child has gross motor difficulties such as running, stair climbing and other forms of physical activity.

## REFERENCES AND FURTHER INFORMATION

The term "Developmental Coordination Disorder" (DCD) has only recently received the attention and acceptance of practitioners and researchers in health care and educational fields. Other terms that you may find helpful to search for include "clumsy" and "physically awkward" children. Very little has been published about children with DCD in professional journals and even less has been written in the popular press or parenting magazines. For further reading on DCD, please refer to references in the booklet "Children with Developmental Coordination Disorder: At home and in the classroom" located on the *CanChild* web site.

### Acknowledgements

The authors are grateful to Lisa Rivard, Brianna McGuire and Michele Leslie for their contributions to the content and to Nina Cavey for graphic design. This project was funded, in part, by the Canadian Institutes of Health Research.

**For more information about children with DCD, visit the *CanChild* Centre for Childhood Disability Research website:**

**[www.fhs.mcmaster.ca/canchild](http://www.fhs.mcmaster.ca/canchild)**

**Cheryl Missiuna, Ph.D., OT Reg. (Ont.)**  
Professor and Scientist  
School of Rehabilitation Science and *CanChild*  
McMaster University, Hamilton, Ontario  
[missiuna@mcmaster.ca](mailto:missiuna@mcmaster.ca)

**Nancy Pollock, M.Sc., OT Reg. (Ont.)**  
Associate Clinical Professor and Scientist  
School of Rehabilitation Science and *CanChild*  
McMaster University, Hamilton, Ontario  
[pollock@mcmaster.ca](mailto:pollock@mcmaster.ca)



McMaster University  
Institute for Applied Health Sciences  
1400 Main St. West, Rm. 408  
Hamilton, ON  
L8S 1C7  
Phone: 905-525-9140 ext. 27850  
Website: [www.fhs.mcmaster.ca/canchild/](http://www.fhs.mcmaster.ca/canchild/)