Does your child have DCD?

Understanding Developmental Coordination Disorder

By Cheryl Misuuma, PhD, OT Reg (Ont)

DCD is usually noticed first by those closest to the child because the motor difficulties interfere with academic achievement or with activities of daily living (e.g., dressing, playground skills, handwriting, gym activities). It can exist on its own or may be present with learning disabilities, speech/language impairments and/or attention deficit disorder.

Fortunately, a diagnosis can be made by a medical doctor who will ensure: 1) that the movement problems are not due to any other known physical, neurological or behavioural disorders; and 2) whether more than one disorder may be present.

How do coordination difficulties occur?

Motor coordination difficulties may arise for many reasons and can occur at a number of different stages as a child processes information and uses it to perform skilled movement. Children are constantly receiving information from the environment through the various senses. A child may have difficulty analyzing sensory information from the environment, using this information to choose a desired plan of action, sequencing the individual motor movements of the task, sending the right message to produce a coordinated action, or integrating all of these things in order to control the movement while it is happening.

The result of any of these problems is the same: the child will appear clumsy and awkward and will have difficulty learning and performing new motor tasks (see What to look for). What can parents do?

If your child is diagnosed with DCD, you may hear that he or she will ‘grow out’ of this disorder. However, conclusive studies have shown that most children do not outgrow these problems. While children do learn to perform certain motor tasks well, they will continue to have difficulty with new age-appropriate ones.

Fortunately, there are many small modifications that can make life easier for a child with DCD. Here are a few useful ideas:

At home:

1. Encourage participation in games and sports that are personally interesting and which provide practice in, and exposure to, motor activities.
2. Introduce new activities or a new playground on an individual basis, before he or she is required to manage the activity in a group. Review any rules and routines at a time when he or she is not concentrating on the motor aspects.
3. A child may prefer individual sports (e.g., swimming, running, bicycling) over team sports. If so, encourage him or her to interact with peers through other activities.

In the classroom:

1. Ensure proper positioning for table work. The child’s feet should be flat on the floor, with the desk at the appropriate height. Forearms should be comfortably supported on the desk.
2. Set realistic short-term goals.
3. Provide extra time to complete fine motor activities such as math, printing, writing a story, practical science tasks and artwork.
4. Provide prepared worksheets that allow the child to focus on the task. For example, prepare math sheets, pages with questions already printed, or ‘fill in the blanks’ pages for reading comprehension questions.
5. Introduce computers as early as possible to reduce the amount of handwriting that will be required in higher grades.

What to look for: Common characteristics of DCD

PHYSICAL

The child may...

• Bump into, spill, or knock things over.
• Experience difficulty with gross motor skills (whole body), fine motor skills (using hands), or both.
• Have difficulty learning new motor skills. Once learned, certain skills may be performed quite well while others may continue to be performed poorly.
• Have more difficulty with activities that require constant changes in body position or adaptation to changes in the environment (e.g., baseball, tennis or jumping rope).

EMOTIONAL/BEHAVIOURAL

The child may...

• Appear to be uninterested in, or to avoid, particular activities, especially those which require a physical response.
• Experience secondary emotional problems such as low frustration tolerance, decreased self-esteem, and lack of motivation due to problems coping with activities which are required in all aspects of his/her life.
• Avoid socializing with peers, particularly on the playground.
• Seem disinterested or lack performance (e.g., erases written work, complaints of performance in motor activities, shows frustration with work product).

OTHER

• Have difficulty with academic subjects such as mathematics, spelling, or written language which require accurate, organized handwriting.
• Have difficulty completing work within a normal time frame.
• Have general difficulties organizing his/her desk, backer or homework.

Try one-on-one activities before your child is expected to manage in a group.
to illustrate their thoughts, type a story or report on the computer, record a story or exam on a tape recorder.

10. Allow the use of a computer for draft and final copies of homework. If the teacher wants to see the ‘non-edited’ product, the child can then submit both the draft and final versions.

11. Allow him or her to dictate stories, book reports or answers to comprehension questions to the teacher, a volunteer or another child.

12. Provide additional time and/or computer access for tests and exams that require a lot of written output.

In physical education:

1. Break down the activity into smaller parts, ensuring that each part is meaningful and achievable.

2. Choose activities that will ensure success at least 50% of the time.

3. Reward effort, not skill.

4. Incorporate activities which require a coordinated response from arms and/or legs (e.g., skipping.

5. Keep the environment as predictable as possible when teaching a new skill (e.g., place a ball on a T-ball stand). Introduce changes gradually after each step has been mastered.

6. Make participation, not competition, the major goal.

7. Modify equipment to decrease the risk of injury if a new skill is being learned. For example, Nerf balls in graduated sizes can be used to develop catching and throwing skills.

8. When possible, provide hand-over-hand guidance to help the child get the feel of the movement. For example, ask the child to help the teacher demonstrate a new skill to the class.

9. Focus on understanding the rules of various sports or physical activities. When a child understands clearly what she or he needs to do, it is easier to plan the movement.

10. Give positive, encouraging feedback whenever possible.

Consider occupational therapy

In addition to your help, your child may benefit from an occupational therapist (OT) who will help him or her learn to perform daily tasks more successfully. The OT may also make recommendations to teachers regarding the child’s participation at home, in the classroom and in leisure activities in the community.

The good news is that, with early intervention, children with DCD can learn strategies to compensate for their coordination difficulties and feel better about themselves and their future.

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Adapted with permission from Children with Developmental Coordination Disorder: At Home and in the Classroom. For more information, visit www.fhs.mcmaster.ca/canchild.

Does your child...

Trip or bump into things?

Write or print poorly?

Have trouble getting dressed or tying shoes?

Have difficulty sitting still in class?

Avoid sports or other physical activities?

Get the facts and find out how you can help

If this sounds familiar, read on...

and talk to your doctor