

Children with Motor Difficulties in Junior and Senior Kindergarten: A Resource for Educators



Hayley is 5 years old and enjoys many of the activities in her kindergarten program. She likes circle-time, sharing stories and playing with her friends at the sand and water centres and in dramatic plays. She doesn't like craft activities, has trouble using scissors, drawing and printing her letters. Hayley needs help with her shoes and coat to get ready for outdoor play and at the end of the morning. She is an eager student and follows classroom routines very well. Hayley is quite sociable and has developed some friendships. In outdoor play, she seems very cautious and frequently spends time sitting and talking with other children and the teachers.

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, getting dressed, feeding him/herself, opening lunch materials, and managing in the bathroom.

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 *match* the activity to the child.

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

Modify 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.

Alter 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.

Teaching 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.

Change 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.

Help 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.

Junior/Senior Kindergarten

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?
<p>Avoids colouring or pre-printing activities</p>	Provide thin markers or thicker pencils.
	Try a rubber pencil grip to assist with grasp.
	If letter recognition is the focus, allow children to identify by pointing, or to use magnetic letters or pictures of letters.
	Use alternate media (e.g., chalkboard, sand, Magnadoodle).
	Reduce the amount of coloring required.
	Create a quiet workspace with minimal novel/auditory distractions for your “writing center”.
	Encourage/reinforce any pencil and paper work.
<p>Avoids arts/crafts (cutting, pasting)</p>	Encourage the child to complete a small section of a larger task.
	Provide glue sticks.
	Provide good quality or adapted scissors.
	Encourage creativity and individuality rather than end-products.
	Partner with another child who can help during gluing/cutting.
	Pre-cut/paste parts for them.
<p>Has difficulty handling puzzle pieces</p>	If the goal is to develop perceptual abilities, allow the child to point to pieces and indicate where to place them/have someone put the piece in place.
	Use puzzles with knobs on them for easier grasp. Provide larger foam floor puzzles (e.g., alphabet, shapes, numbers) that are easier to manipulate.

(continued) What you might see...	(continued) How can <u>you</u> MATCH?
Last to get ready for recess and home, has a messy/untidy appearance	Suggest to parents to place a toggle on zipper of jacket or coat.
	Suggest Velcro shoes and fasteners, or clothes such as T-shirts and sweat pants.
	Allow more time to get dressed, or send the child out earlier than classmates.
	Teach all children order of dressing/undressing (e.g., "snow-pants-first" song).
	Pair with an older student to help.
	Label or provide visual cues for front/back/right/left.
	Ensure child has enough space to dress- may want to have child in an end cubby or have a few children get ready on the carpet.
	Enable success by helping child with most steps except the one or two that they can do.
Takes a long time to eat a snack	Suggest easy containers (e.g., Ziploc bags instead of rigid plastic, plastic juice container with pull up straw).
	Suggest lunch box or bag with Velcro not zippers.
	Ensure proper seating (feet flat on floor, chair pulled up to table), not eating on the carpet.
Avoids playground equipment and games; plays alone at recess	Teach how to use equipment (both the rules of games and the movements required).
	Be patient if the child needs multiple attempts to master a task.
	Practice using the equipment in off hours.
Clumsy; hesitates to participate in gym class	Use 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.
	Use a fun and consistent warm up and cool down routine that the child can master and participate in fully.
Trips and stumbles frequently; has difficulty with uneven surfaces	Remove any unnecessary items from floor.
	Highlight stairs and level changes with yellow tape.
	Use gym floor rather than outside for learning new tasks.
	Observe patterns of classroom flow and clear wider spaces in these zones.

(continued) What you might see...	(continued) How can <u>you</u> MATCH?
Leans on people or objects, especially during circle time	Break up longer circle times with little songs and low-skill movement opportunities.
	Allow frequent altering of position (e.g., sit instead of stand, lie on stomach instead of sit).
	Provide appropriate opportunities for leaning (e.g., wall, furniture) and allow child to do so.
Easily frustrated/low tolerance for motor tasks; decreased self-esteem & motivation to perform, resists new activities	Think about and reduce the amount of movement that is required to perform the activity.
	Break the activity into small parts and teach in sequence.
	Be available to assist/intervene when the child has difficulty.
	Use backward chaining where the child completes only last part(s) of task successfully.
	Provide lots of positive reinforcement for child's attempts to try new activities.
Rushes through tasks or is unusually slow; gives up easily	Reassure the child when he or she has difficulty.
	Allow more time to complete an activity.
	If the goal is to promote speed, accept less accurate product.
	Have child complete less, but within the time frame.
	Ensure child is aware of expectations for the task.
Encourage self-evaluation.	

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 (balance, low strength, 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 under 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 the booklet "Children with Developmental Coordination Disorder: At home and in the classroom" located on the CanChild web site.

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

www.fhs.mcmaster.ca/canchild

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