



DEVELOPMENTAL COORDINATION DISORDER (DCD)

AN EVIDENCE-BASED INTRODUCTION

What is DCD?

Developmental Coordination Disorder (DCD), sometimes referred to as dyspraxia, is a neurodevelopmental condition which affects a person's ability to **learn, plan, coordinate and execute motor skills**.

DCD impacts a person's ability to perform daily life activities. For example, this could include doing up buttons, writing, catching/kicking a ball, riding a bike or participating in team sports.



DCD does not affect intelligence but impacts movement abilities.



It is estimated that around 6% of children have DCD, with up to 70% continuing to have motor difficulties into adolescence and adulthood.

(DCD Australia, 2024; Blank et al., 2019)

INDICATORS OF POSSIBLE DCD

1 GROSS MOTOR SKILLS



- **Balance difficulties** – Wobbling, tripping, difficulty standing on one leg



- **Coordination challenges** – Running, jumping, skipping



- **Difficulties with ball skills** – Catching, throwing, kicking



- **Challenges navigating playgrounds** – Climbing, timing movements



A child with DCD may avoid the playground because climbing ladders or stepping across uneven surfaces feels unpredictable and unsafe. During **Physical Education**, they may struggle to keep up with running games, often appearing "slow" or "off-balance" compared to peers. When playing catch, they may misjudge timing or distance, leading to missed catches or dropped balls.

2 FINE MOTOR SKILLS



- **Handwriting difficulties** – Slow, messy, tiring quickly



- **Difficulty using scissors**



- **Trouble with fasteners** – buttons, zippers, shoelaces



- **Difficulty using cutlery**



- **Difficulty with fine motor play** – threading, beading, Lego



A child might take significantly longer to complete written work, becoming tired or frustrated because their hand fatigues quickly. They may struggle to zip their jackets or tie their shoes, often needing support from adults. At mealtimes, they may spill food or switch hands frequently because cutlery feels awkward. These difficulties can affect independence and confidence.

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3 MOTOR PLANNING (PRAXIS) CHALLENGES



Difficulty learning new movements



Trouble sequencing steps



Getting "stuck" or being unsure how to start



Difficulty adapting when things change



A child may know they need to pack their school bag but struggle to work out the order of steps, leading to forgotten items or disorganisation. When learning a new movement, such as hopping or skipping, they may freeze or repeat the same incorrect pattern because they can't figure out how to adjust their body. If a game changes suddenly, they may become overwhelmed or stop participating.

These challenges reflect difficulty turning an idea into an organised action.

4 DAILY LIVING SKILLS DIFFICULTIES



Difficulty dressing independently



Messy or slow mealtime routines



Trouble organising belongings



Difficulty following multi-step routines



A child may take a long time to get dressed because they struggle to orient clothing or coordinate both hands. Their desk or bag may appear messy because organising materials feels overwhelming. At home, they may forget steps in routines like brushing teeth or packing lunch.

These challenges can make daily routines stressful and reduce independence.

SOCIAL AND EMOTIONAL IMPACTS OF DCD



Reduced confidence



Avoidance of physical tasks



Peer difficulties



Anxiety or frustration



A child may avoid joining games at school because they feel "too slow" or worry about making mistakes. Repeated challenges can impact self-esteem, leading to reluctance to try new activities.

This emotional load of DCD can be just as significant as the motor difficulties.

(Cleveland Clinic, 2022)

DIAGNOSIS



DCD is usually diagnosed by a paediatrician or multidisciplinary team.

Assessment includes:

- Standardised motor assessments (e.g. Movement ABC or Bruininks-Oseretsky Test of Motor Proficiency)
- DCD specific questionnaires

THE IMPACT OF DCD



Physical and motor challenges –

Difficulties with handwriting, balance, coordination and everyday tasks.



Cognitive and Executive functioning challenges –

Difficulties with memory, planning, organisation, and learning new routines. This can affect schoolwork, assignments, time management, and new responsibilities.



Social challenges and feeling "different" –

Some children feel like they "stand out" or are "left out".



Avoidance and reduced participation –

May avoid physical activity, social connection and confidence-building experiences.



Despite these challenges, children with DCD demonstrate high levels of resilience, creativity and determination. With the right strategies, understanding and support they can build confidence, participate in meaningful activities and develop a strong sense of identity. (Khairati et al., 2024)

BEST-PRACTICE STRATEGIES FOR DCD

Evidence-informed approaches that support movement, learning and participation



1. TASK-ORIENTED INTERVENTION

Focus on meaningful, everyday tasks that are relevant to the child's goals and daily life participation.



2. CO-OP (GOAL-PLAN-DO-CHECK)

A problem-solving approach that helps children set goals, plan actions, try the plan and reflect on what worked.



3. CONSISTENT APPROACHES ACROSS HOME AND SCHOOL

Working together to use the same strategies and language helps children feel supported and builds confidence.



4. MOTOR PLANNING & COORDINATION ACTIVITIES

Provide regular, enjoyable opportunities to practice movements in different ways and environments.



5. ENVIRONMENTAL SUPPORTS AND ADAPTATIONS

Adjust the environment, tools and expectations to reduce barriers and support independence.



6. EMOTIONAL AND SOCIAL SUPPORT

Build self-esteem, provide encouragement and create opportunities for connection and success.

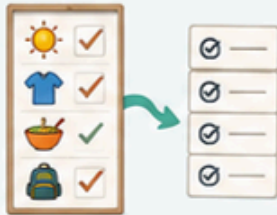


Using these strategies consistently helps children with DCD build **skills**, **confidence** and a positive sense of **achievement**.

PRACTICAL TIPS FOR HOME

Simple ways to support children with DCD in everyday life

1 VISUAL SUPPORTS AND TASK BREAKDOWNS



- Use visual schedules, checklists and step-by-step pictures.
- Break tasks into small, manageable steps.

2 PRACTICE ONE SKILL AT A TIME



- Focus on one goal or task.
- Repetition and consistency builds learning and confidence.

3 MOVEMENT GAMES



- Make movement fun with games like obstacle courses, ball skills and relay races.
- Keep it playful and pressure-free!

4 HEAVY-WORK ACTIVITIES



- Activities like pushing, pulling, carrying, climbing or digging help build strength, coordination and body awareness.
- Examples: wheelbarrow walks, carrying groceries, climbing play equipment.

5 FINE MOTOR PLAY IDEAS



- Playdough, threading beads, building with Lego, puzzles, drawing and cutting.
- Short, fun sessions are best!

6 EXTRA TIME, PRAISE AND PREDICTABLE ROUTINES



- Allow extra time to complete tasks.
- Praise effort and progress.
- Keep routines predictable to reduce stress and build independence.



Every child with DCD is unique. What works best is consistent support, understanding and celebrating small successes every day.



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