



# Information pack for parents/carers and professionals on Developmental Coordination Difficulties

Prepared by  
Highland Developmental Coordination  
Disorder Group

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## QUESTIONS FREQUENTLY ASKED

### **Q. What is DCD?**

Developmental Coordination Disorder (DCD) is an impairment, immaturity, or disorganisation of movement. Associated with this, there may be problems with language, thought, behaviour, eye movements, perception, specific learning difficulty, and variability.

DCD is not a disease. We cannot catch it.

There is no single cause for DCD.

There is no single cure.

### **Q. Are there other names for DCD?**

The term DCD is now replacing “Clumsy Child Syndrome” and motor learning difficulties often referred to as “Dyspraxia.” Other terms that may have been used are sensory integration dysfunction, perceptual-motor function, minimal brain dysfunction, and visual-motor difficulty with movement and with specific aspects of learning.

### **Q. What is the underlying cause of DCD?**

It is unlikely that there is a simple gene for DCD and it is likely to have a number of causes. In addition, there is likely to be a gene/environment interplay. There is evidence that lead ingestion and other substances may have an effect on coordination.

Coordination difficulties are more often seen in very prematurely born babies.

### **Q. Are there any special tests to diagnose DCD?**

At present, there are no special tests to diagnose DCD.

### **Q. Is there a cure for DCD?**

At present, there is no cure for DCD, but given the right help and support, an individual with DCD can lead a life to reach their full potential.

### **Q. Is DCD a childhood condition?**

DCD is a lifelong developmental disability and children with DCD grow up through their teenage years into adult years with this disorder. It maybe by adulthood that people may have changed and developed a use of strategies of their own to enhance their lives.

### **Q. How can your child be identified?**

A parent is usually the one who shows concern about her child or by a teacher when they go to school. There are many checklists, including the DCD Questions for Parents and the Early Year Check List.

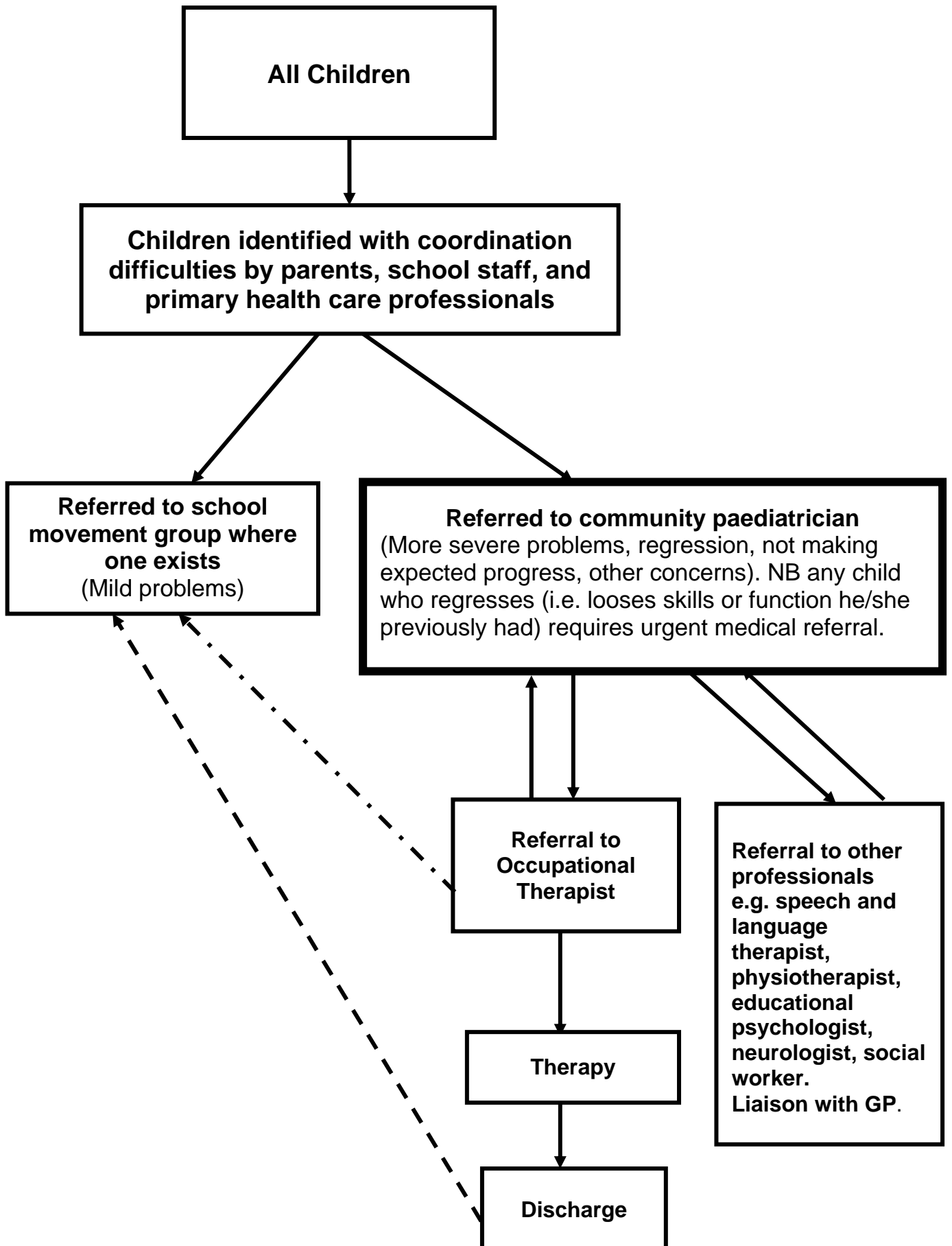
### **Q. How are children assessed?**

Children with DCD are assessed in a variety of ways, but currently there is no standard assessment instrument that goes from childhood to adulthood that is appropriate.

### **Q. Where do children go to be assessed?**

Some children with motor difficulties may be referred to therapists depending on their needs. Psychiatrists are less aware of DCD even though a large percentage of children presenting to them with ADHD (Attention Deficit Hyperactive Disorder) clinics will have motor difficulties that may affect their daily lives. Some children may present with behaviour, emotional, or learning difficulties. It is therefore important that all professionals working with children are aware of DCD. Research has shown that the presence of a comorbid condition (overlapping) is the rule rather than the exception and services for developmental disorders should consider this.

# Pathway of Care for Children with DCD



**Q. Is there an overlap with other conditions?**

Yes. Overlap with other specific learning difficulties is common.

**Q. What is the prevalence of DCD?**

It is estimated that around 6% for the age range of 5–11 years. Gender differences have been examined on numerous occasions and the consensus is that the condition is more prevalent in boys than girls, with estimates varying from a small difference to three or four boys to one girl.

## **DYSPRAXIA/DEVELOPMENTAL COORDINATION DISORDER (DCD)**

The Highland Developmental Coordination Disorders group defines Dyspraxia/Developmental Coordination Disorder as “an impairment or immaturity of the organisation of movement and, in many individuals, there may be associated problems with language, perception, thought, specific learning difficulty, personality, and behaviour.” The term normally used is Developmental Dyspraxia or Developmental Coordination Disorder. The condition is thought to affect up to 10 percent of the population in varying degrees. It is probable that there is at least one dyspraxic child in every classroom requiring access to a specific treatment programme.

Symptoms are evident from an early age. Youngsters are generally irritable from birth and may exhibit significant feeding problems. They are slow to achieve expected developmental milestones such as, often not sitting independently by the age of eight months. Many fail to go through crawling stages as babies, preferring to “bottom shuffle” and then walk. Children with Dyspraxia/Developmental Coordination Disorder usually avoid tasks that require good manual dexterity and depend upon well-developed perceptual skills. Inset puzzles, Lego, and jigsaws are difficult.

Between the ages of 3 and 5, children with Dyspraxia/Developmental Coordination Disorder may demonstrate the following types of behaviour:

- Very high levels of motor activity, including feet swinging and tapping when seated, hand clapping or twisting and an inability to stay in one place for more than 5 minutes.
- High levels of excitability, with loud/shrill voice. Children may be easily distressed and prone to temper tantrums.
- Awkward movement. Children may constantly bump into objects and fall over. Associated mirror movements, hands flap when running.
- Difficulty pedalling a tricycle or similar toy.
- Poor figure and ground awareness. Children may lack any sense of danger, illustrated for example, by jumping from an appropriate height.
- Continued messy eating. Children may spill liquid from drinking cups and prefer to eat with their fingers.
- Avoidance of constructional toys, such as jigsaws or building blocks.
- Poor fine motor skills, demonstrated by difficulty in holding a pencil or using scissors, drawings may appear immature.
- Lack of imaginative play. Children may show little interest in “dressing up” or playing appropriately in a House Corner or Wendy house.
- Limited creative play.
- Isolation within peer group. Rejected by peers, children may prefer adult company.
- Laterality still not established. Problems crossing the midline.
- Persistent language difficulties. Children are often referred to a speech therapist.
- Sensitivity to sensory stimulation, including high levels of noise, being touched, or wearing new clothes.
- Limited response to verbal instruction. Children may exhibit a slower response time and problems with comprehension.
- Limited concentration. Tasks are often left unfinished.

If the condition is not identified, problems can persist throughout school life causing increasing frustration and lowering self-esteem.

Between the ages of 5 and 7, behaviour may include the following traits:

- Problems adapting to a more structured school routine.
- Difficulties with P.E. (Physical Education).
- Slow at dressing and inability to tie shoelaces.
- Barely legible handwriting.
- Immature copying and drawing skills.
- Limited concentration and listening skills.
- Literal use of language.
- Inability to remember more than 2–3 instructions.
- Slow completion of class work.
- Continued high levels of motor activity.
- Motor stereotypes, hand flapping, or clapping when excited.
- Tendency to become easily distressed and emotional.
- Problems coordinating a knife or fork.
- Inability to form relationships with other youngsters, isolation in class.
- Sleeping difficulties, including wakefulness at night and nightmares.
- Reporting of physical symptoms, such as migraine, headaches, or feeling sick.

Poor handwriting is one of the most common symptoms of dyspraxia and, as the child progresses through the educational system, requirement for written work increases. By the age of 8 or 9 the children have become disaffected and poor school attendance is in much evidence in secondary education.

With access to appropriate treatment, the majority of dyspraxic youngsters could have their needs accommodated within mainstream setting.

Parents concerned about their children should refer to their GP or Health Visitor if the child is aged under five or the Learning Support Teacher if in full time schooling. A referral may then be made to outside professionals, for example a Paediatrician, Educational Psychologist, Physiotherapist, Occupational Therapist, or Speech Therapist, for assessment.

When an appointment has been made, write down all your concerns. In an unfamiliar setting, your child may not behave in the expected manner or give sufficient attention to the tasks set. Assessment usually involves giving a detailed account of your child's developmental history, examination of gross and fine motor skills and a test of intellectual ability.

Treatment is available from specialists in health and education when the disorder has been identified and diagnosed. Movement programmes may be offered by therapists and additional support can be made available in school.

Further information available from  
Arlene Maxtone, Development Officer  
Highland Developmental Disorders Group  
Unit 6, 15 Lotland Street, Inverness IV1 1ST  
Tel: 01463 709907 (Helpline)  
Tel: 07749265912 (Mobile)  
E-mail: [hdcd.org@tiscali.co.uk](mailto:hdcd.org@tiscali.co.uk)  
Web: [www.hdcd.org.uk](http://www.hdcd.org.uk)

## **DYSPARAXIA/DEVELOPMENTAL COORDINATION DISORDER (DCD) IN PRIMARY SCHOOL**

The Highland Developmental Coordination Disorders Group defines Dyspraxia/Developmental Coordination Disorder as “an impairment or immaturity of the organisation of movement and, in many individuals, there may be associated problems with language, perception, thought, specific learning difficulty, personality, and behaviour.” The term normally used is Developmental Dyspraxia or Developmental Coordination Disorder. The condition is thought to affect up to 10 percent of the population in varying degrees. It is possible that there is at least one dyspraxic child in every classroom requiring access to a specific treatment programme.

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The child with Dyspraxia/Developmental Coordination Disorder may have displayed many of the symptoms listed below and some would have been evident before age 3.

- Irritability at birth.
- Poor feeding.
- Poor sleeping.
- Engages in high levels of motor activity. Waving arms and legs.
- Slow to achieve milestones e.g. sitting, crawling, or walking.
- Constantly tripping or falling over even bumping into objects.
- Attention span is poor and the child reacts to all stimuli without discrimination.
- Unaware of dangers, e.g. how fast a car is going, how deep is the puddle.
- Often afraid and will not climb on apparatus.
- Delayed speech.

Classroom observation will enable the teacher to determine whether there are certain activities in which that child finds it difficult or avoids. These could be:

- Development of perceptual skills e.g. shape sorting toys, Lego, jigsaw puzzles.
- The child is not clearly right- or left-handed i.e. reaches with whatever hand is nearer.
- Games are avoided. The child has poor ball skills and other hand and eye coordination problems.
- Poor listening skills.

The following behaviours can be observed by the age of seven:

All the problems of the pre-school child may still be present with little or no improvement.

- P.E. is avoided.
- Dressing (often look untidy). Not able to tie laces in shoes/trainers.
- Immature drawings.
- Writing is laborious and poor.
- Difficulty in using a ruler or scissors.
- Literal use of language.
- Unable to remember and/or follow instructions.
- May have trouble with maths or reading.

- Great difficulty may be experienced in copying from a black/whiteboard.
- Generally poorly organised.
- Messy eaters. Prefer eating finger foods. Problems using cutlery.
- Class work is rarely completed.
- They are loners. Find difficulty making friends.

Remember:

- The child will require some supervision to complete tasks.
- When sitting on a chair allow the child to rest both feet flat on the ground and to be encouraged to sit upright.
- Their desk should be at elbow height and use of a sloping surface for reading or other activities (if required).
- The child should sit where they are able to see the teacher without having to turn their heads.
- Sit away from distractions e.g. windows or doors.
- Make prepared recording/worksheets available.
- Use of lined paper.
- Break down their daily tasks into small parts.
- Give short clear instructions and try not to give more than two at a time.
- Allow extra time for their completed work.
- Give lots of encouragement and praise.
- Remember that the child will vary from day to day, hour to hour on their work.
- BE PATIENT and DO NOT SHOUT.

For further information please read:

*Developmental Dyspraxia: A Practical Manual for Parents and Professionals* by Madeline Portwood.

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 Web: [www.hdcd.org.uk](http://www.hdcd.org.uk)

# **DYSPRAXIA/DEVELOPMENTAL COORDINATION DISORDER (DCD) IN SECONDARY SCHOOLS**

The Highland Development Coordination Disorder group defines Dyspraxia/Developmental Coordination Disorder as “an immaturity of the organisation of movement and, in many individuals, there may be associated problems with language, perception, thought, specific learning difficulty, personality, and behaviour.” The term normally used is Developmental Dyspraxia or Developmental Coordination Disorder. The condition is thought to affect up to 10 percent of the population in varying degrees. It is probable that there is at least one dyspraxic child in every classroom requiring access to a specific treatment programme.

In some cases, DCD/Dyspraxia will not have been identified until the child reaches secondary school. They may have coped in primary school with minor difficulties, however the structure of secondary schools could prove to be difficult for the child, and it is at this point that problems manifest themselves especially in view of the organisational skills that are required by the time the child reaches secondary education. If DCD/Dyspraxia is not identified by the time the child enters secondary education there may be a problem of low self-esteem and disaffection that behavioural difficulties are evident.

## **WHAT TO LOOK FOR:**

- The child may have difficulty in eye, hand and foot coordination with ball skills, running or using equipment in P.E.
- Poor body awareness and awkward movements.
- Poor short-term memory for visual and verbal e.g. copying from black/whiteboard, following instructions and dictation.
- Writing difficulties that include speed and style. This could be because of a poor pen grip.
- Problems with time. Will need constant reminders.
- Limited social skills and are often loners.
- Lack of awareness of potential dangers, especially in practical and science subjects.
- Poor organisational skills.
- Difficulty in planning and writing essays.

## **IS THERE A DYSPRAXIC CHILD IN YOUR CLASS?**

Remember:

- To give the child plenty of encouragement to make sure they do not feel a failure.
- Be aware of their difficulties. Give strategies to help reduce their frustrations especially when asked to complete written work.
- Break down activities to smaller components.
- Use of photocopied worksheets to save the child having to copy from the black/whiteboard.
- Provide assistance so that they may find their way around the school.
- I.T. support so that the child may have access to a laptop, alpha smart, Dictaphone or any other aids they may require.
- Make sure that instructions are given clearly and that they are precise.
- Make sure you explain yourself fully even if this means stating the obvious as the child may not understand sarcasm or irony.
- Remember to work with the parents, as they know the child better than anyone else does.
- In P.E., allow the child to have another activity if they do not want to play in team games.
- Remember to give the child breaks through out the day.
- Please have patience with this child as their work varies from minute to minute, hour to hour and day to day.
- If possible, encourage a buddy who can act as a helper/guide especially for the first few months that they are in secondary school.

WITH THE RIGHT SUPPORT, ENCOURAGEMENT AND HELP DYSPRAXIC CHILDREN DO WELL IN SCHOOL.

For further information please read:

- *Praxis makes Perfect* by the Dyspraxia Foundation
- *Developmental Dyspraxia, A Practical Manual for Parents and Professionals* by Madeline Portwood

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# RESOURCES

## HELPFUL ADDRESSES

### **Highland Developmental Coordination Disorder Group**

Unit 6  
15 Lotland Street  
Inverness  
IV1 1ST  
Telephone: 01463 709907  
E-mail: [hdcd.org@tiscali.co.uk](mailto:hdcd.org@tiscali.co.uk)

### **Dyspraxia Foundation**

8 West Alley  
Hitchin  
Herts  
SE5 1EG  
Telephone: 01462 454986  
E-mail: [dyspraxia@dyspraxiafoundation.org.uk](mailto:dyspraxia@dyspraxiafoundation.org.uk)

### **The Dyscovery Centre**

University of Wales, Newport  
Allt-Yr-Yn Campus  
Newport  
NP20 5DA  
Telephone: 01633 432330  
E-mail: [dyscoverycentre@newport.ac.uk](mailto:dyscoverycentre@newport.ac.uk)

### **Dyslexia Scotland**

Stirling Business Centre  
Wellgreen  
Stirling  
FK8 2DZ  
Telephone: 01786 446650  
E-mail: [info@dyslexia-in-scotland.org](mailto:info@dyslexia-in-scotland.org)

### **CHIP+**

Birnie Child Development Unit  
Raigmore Hospital  
Inverness  
IV1 1UJ  
Telephone: 01463 711189  
E-mail: [info@chipplus.org.uk](mailto:info@chipplus.org.uk)

## **USEFUL WEBSITES**

### **Highland Developmental Coordination Disorder Group**

[www.hdcd.org.uk](http://www.hdcd.org.uk)

Highland Developmental Coordination Disorder Group is a local support group for children, young people, and families affected by Developmental Coordination Disorder (DCD)/Dyspraxia. User friendly and gives a lot of information.

### **Dyspraxia Foundation**

[www.dyspraxiafoundation.org](http://www.dyspraxiafoundation.org)

UK parent organisation site for Dyspraxia/Developmental Coordination Disorder. User friendly and has an online shop.

### **The Dyscovery Centre**

[www.dyscovery.co.uk](http://www.dyscovery.co.uk)

Leading website with lots of information about Developmental Coordination Disorder and other developmental disorders including a message board and online shopping facilities.

### **International Society for Research into DCD**

[www.isr-dcd.org.uk](http://www.isr-dcd.org.uk)

Contains references for further research.

### **DCD Physician Allied Health Collaboration Kit**

[www.dcdpack.ca](http://www.dcdpack.ca)

Canadian site and contains useful information for training Health Professionals.

Username: dcdpack

Password: dcdchild

### **CHIP+**

[www.chiplus.org.uk](http://www.chiplus.org.uk)

Local website that covers a range of special needs. User-friendly and appropriate for transitions.

### **Enquire**

[www.enquire.org.uk](http://www.enquire.org.uk)

Excellent information and materials. Not specific for Autistic Spectrum Disorders (ASD), but user-friendly and colourful leaflets aimed at secondary pupils, parents and professionals. Leaflets can be downloaded or be sent.

## **COMPUTER SOFTWARE – ORGANISATION**

### **BlueSuitMom**

[www.bluesuitmom.com/family/education/organization.html](http://www.bluesuitmom.com/family/education/organization.html)

This site contains useful tips on how to teach organisational skills to children.

### **Dyslexia the Gift**

[www.dyslexia.com](http://www.dyslexia.com)

This company provides a range of software and equipment including concept-mapping software such as Inspiration, Kidspiration, Mind Genius, and Mindfull to help with planning and organising both at school and at home. In addition, they also stock study skills packages such as Timely Reminders, and Wordsworks.

**Claro Software**

[www.clarosoftware.co.uk](http://www.clarosoftware.co.uk)

This company offers free trial downloads of concept mapping and text-to-speech software programs. These allow children to hear what they have written, spoken back to them on computer. This helps the child hear any errors they have made in sentence construction for example, or listen to what they have written to see if it makes sense to them or others.

**MyCorkboard**

[www.mycorkboard.com](http://www.mycorkboard.com)

This is free downloadable software. It is a personal organisation screensaver where "Post It" notes can be written as reminders. It also has a to-do list and a digital or analogue clock.

## **COMPUTER SOFTWARE – GAMES**

### **The Happy Puzzle Company**

[www.happypuzzle.co.uk](http://www.happypuzzle.co.uk)

This company has a large selection of puzzles, games, and toys that help with logical thinking, sequencing, and planning. It also offers games to help with Maths.

### **Amazon UK**

[www.amazon.co.uk](http://www.amazon.co.uk)

Many games available to help with step-by-step thinking (such as Cluedo), planning (such as Jenga), following instruction (such as Lego), turn-taking (such as Snakes and Ladders), and sequencing and matching (such as Bingo).

## **COMPUTER SOFTWARE – FOR TEENAGERS**

### **Matts Hideout**

[www.matts-hideout.co.uk](http://www.matts-hideout.co.uk)

One of the best dyspraxic sites around. Matthew offers good advice on everything from how not to fall over on an escalator to home education.

### **Dyspraxic Teens**

[www.dyspraxicteens.org.uk](http://www.dyspraxicteens.org.uk)

Internet Forum for teenagers with Dyspraxia/ Developmental Coordination Disorder (DCD). Run by teens for teens.

### **Transition Information Network**

[www.after16.org.uk](http://www.after16.org.uk)

It is for teenagers and young people who have an impairment or disability and are wondering what opportunities there are when they leave school. Looks at your future, money, housing, transport, law, leisure, health, and learning. Well presented information.

## **BOOKS**

### **Developmental Coordination Disorder. Hints and Tips for the Activities of Daily Living**

**By Morven F. Ball**

Easy to read booklet that answers commonly-asked questions about DCD and presents all the necessary information to aid parents, carers and professionals in selecting the best options for their child. In clearly laid out chapters, the author describes the features of DCD and provides practical solutions from maintaining posture and personal care through to the more complex tasks of learning. Practical exercises to help improve the DCD child's motor and sensory skills.

### **The Adolescent with Developmental Coordination Disorder (DCD)**

**By Amanda Kirby**

Adolescence is a difficult time in which children experience great changes in their social environment and self-perception together with physical developments, which is further, complicated in young people with coordination difficulties. This book provides practical ideas on how individuals can tackle their difficulties. Excellent resource for adolescents with DCD, parents, teachers, and health professionals.

### **Caged in Chaos**

**By Victoria Briggs**

Written by a teenage Dyspraxic, this inspiring book is a unique practical guide for Dyspraxics and those around them. Victoria talks about both the direct effects of her learning difference, disorganisation, clumsiness, poor short-term memory, difficulties she has encountered, bullying, low self-esteem, and loneliness.

An absolute must read for anyone determined to get to grips with the social, physical, and psychological chaos caused by Dyspraxia/DCD.

### **Guide to Dyspraxia and Developmental Coordination Disorders (DCD)**

**By Amanda Kirby and Sharon Drew**

This book takes a broader view of the difficulties that those with additional needs face. It considers health, education, and social difficulties.

What are the wider implications for the individual? It shows how they manage at home and in the community. It also looks at what changes occur as the child becomes an adolescent and eventually an adult.

### **The Hidden Handicap**

**By Amanda Kirby**

Dr Kirby, whose second son has Dyspraxia, writes from long experiences of the questions parents ask and of what strategies that help the child to overcome their problems. Information about causes, symptoms, diagnostic procedure, and other conditions can all be found in this book.

### **Making Inclusion Work for Children with Dyspraxia**

**By Gill Dixon and Lois Addy**

Drawing on their own considerable experiences of the syndrome, as well as current research findings, the authors help teachers and other educational professionals to genuinely understand the needs of a Dyspraxic child.

### **Praxis Makes Perfect II**

**By Penny Hunt**

This is the definitive multidisciplinary resource on Developmental Dyspraxia. This publication includes identification and assessment of Dyspraxia/DCD, Occupational Therapy, Physiotherapy, classroom management, handwriting, self-esteem, coping strategies for behaviour problems, Verbal Dyspraxia, and parental perceptions of a child with DCD.

## **Life Skill**

### **By Jan Poustie**

This comprehensive book shows how the different conditions affect these life skills and provides practical solutions for some of the problems that arise.

## **Understanding Developmental Dyspraxia: A Text Book for Students and Professionals**

### **By Madeline Portwood**

This manual aims to give parents, teachers, and health professionals the confidence to diagnose and assess Dyspraxia. Most importantly, it offers them an intervention programme, which will significantly improve the cognitive functioning of the Dyspraxic child or teenager.

## **Developmental Coordination Disorders**

### **By Sharon A. Cermak and Dawne Larkin**

A multidisciplinary, multicultural view of Developmental Coordination Disorder, this work presents current advances in theory and practice of this debilitating condition in children. Chapters are authored by specialists from fields such as medicine, occupational therapy, neurology, movement, and psychology

## **Dyspraxia: A Guide for Teachers and Parents**

### **By Kate Ripley, Bob Daines and Jenny Barrett**

The aim of this book is to promote an understanding of Dyspraxia and movement development among professionals who work with children, and to provide a text on this subject, which is accessible to parents.

## **Inclusion for Children with Dyspraxia/DCD: A Handbook for Teachers**

### **By Kate Ripley**

This book is about children with Dyspraxia, Developmental Coordination Disorders (DCD) and shows how teachers and other professionals can promote their learning and social inclusion in a mainstream setting.

## **Stephen Harris in Trouble: A Dyspraxic Drama in Several Clumsy Acts**

### **By Tim Nichol**

An engaging story for the young and old alike. This book provides all the information needed to understand and further appreciate anyone with a Developmental Coordination Disorder.

## **Freaks, Geeks & Asperger Syndrome: A User Guide to Adolescence**

### **By Luke Jackson**

A book for adolescents with Asperger Syndrome, written by a 13 year-old who has a diagnosis of Asperger Syndrome. This book will enhance our understanding, change attitudes, and replace bleak despair with insight and laughter.

## **Professor Amanda Kirby's recommendations on Typing books are (Australian)**

- **Typing Instruction Deluxe**
- **Type Quick – Success with Typing**