



## **SASC Guidance on the assessment and identification of Developmental Coordination Disorder (DCD) / Dyspraxia March 2020**

### **Introduction**

This guidance has been updated by SASC in consultation with:

**Professor Amanda Kirby, Professor of Developmental Disorders at the University of South Wales, Newport**, who founded the Dyscovery Centre. Since 1997, she has run the Dyscovery Centre, an interdisciplinary centre providing assessment and intervention for children and adults with a range of developmental disorders including DCD (also known as dyspraxia), ADHD, dyslexia, Specific Language Impairment, Autism Spectrum Disorders and behavioural issues. Her background as a GP and in community paediatrics and psychiatry has provided a good understanding of developmental disorders in both child and adulthood. She is Medical Advisor to the Dyspraxia Foundation in the UK.

**Professor Anna Barnett, Professor of Psychology at Oxford Brookes University**. Most of her research is concerned with DCD and the development of assessment tools for children and adults.

**Professor Elisabeth Hill, Professor of Neurodevelopmental Disorders at Goldsmiths, University of London**. Her research focuses primarily on DCD and the relationship between social and motor development in typical and atypical populations.

**Katherine Kindersley, Director, Dyslexia Assessment & Consultancy. SASC Board member.**

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Since 2013, SASC has been working closely with Professor Amanda Kirby and other colleagues from *Movement Matters*; the UK umbrella organisation representing the major national groups concerned with children and adults with coordination difficulties i.e. DCD / dyspraxia. In 2013 Professor Kirby convened DCD consensus meetings for *Movement Matters* to provide a forum for discussing the European Academy of Childhood Disability (EACD) guidelines on DCD and adapting them, where appropriate, to the UK health and education systems. The meetings were attended by a wide range of professionals, including occupational therapists, educational psychologists, doctors and assessors and tutors working in the field of specific learning difficulties (SpLDs). The outcomes of this work have been published by Barnett et al (2014) and a working definition for DCD / dyspraxia formulated by the *Movement Matters* group – see page 3 below.

From 2013 Professor Kirby and her colleagues have been working to develop guidelines, screening materials and diagnostic guidance for the identification of DCD in children **and** adults. In 2018 Professors Kirby, Barnett and Hill produced the first version of a **Diagnostic Interview for DCD in Adults** (DIDA, 2018).

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## **A1. Definition of DCD**

The *Diagnostic and Statistical Manual of Mental Disorders* (5th ed.; *DSM-5*; American Psychiatric Association [APA], 2013) is widely used by clinicians and researchers for the classification of mental and developmental disorders. ICD-11, the *International classification of diseases for mortality and morbidity statistics* (11th Revision), represents the diagnostic classification standard for all clinical and research purposes. **Developmental Coordination Disorder (DCD)** is included in both the DSM-5 (APA, 2013) and ICD-11 (World Health Organization, 2018; as developmental motor coordination disorder) classifications.

International consensus statements, giving recommendations on assessment, diagnosis and intervention have also been published in peer-reviewed journals. These were updated in 2019 and are based on extensive reviews of the literature and consultation with an international expert panel (Blank et al., 2012: 2019).

### **The formal DSM-315.4 (F82) (APA, 2013) diagnostic criteria for DCD are:**

- The acquisition and execution of coordinated motor skills is substantially below expected given chronological age and opportunity for skill learning and use.
- The motor skills deficit significantly and persistently interferes with activities of daily living and impacts on academic/school productivity, prevocational and vocational activities, leisure and play.
- There is an onset of symptoms in the early developmental period.
- The motor skills deficits are not better explained by intellectual disability or visual impairment and are not attributable to a neurological condition affecting movement.

*Movement Matters* Working Definition agreed by consensus and recognised by the NHS

**Developmental Coordination Disorder (DCD)**, also known, in the UK, as **dyspraxia**, is a common but serious disorder affecting movement and coordination in children, young people and adults, with symptoms present since childhood.

DCD is distinct from other motor disorders such as cerebral palsy and stroke and occurs across the range of intellectual abilities. This lifelong condition is formally recognised by international organisations including the World Health Organisation.

The person's coordination difficulties will affect their functioning in everyday activities, including in the classroom, at work and in leisure activities. Difficulties may vary in their presentation and will also change depending on environmental demands, life experience, and the support provided.

There can be a range of co-occurring non-motor difficulties which can have a substantial adverse impact on daily life. These may include social and emotional difficulties as well as problems with time management, planning and personal organisation, and these may also affect a person's education or employment experiences.

Many of the movement and coordination difficulties will continue into adolescence and adulthood. Although the motor difficulties persist throughout life, non-motor difficulties may become more prominent as expectations and demands change over time.

With appropriate recognition, reasonable adjustments and support, people with DCD can be very successful in their lives.

DCD can co-occur with other developmental and specific difficulties.

### **A1.1 Labels and terminology: key issues**

In the formal classification systems (DSM-5 and ICD-11) the umbrella term 'neurodevelopmental disorders' is used. However, in the United Kingdom, the term generally used in educational contexts is *specific learning difficulties*, or *specific learning differences*.

**Dyspraxia** is a term used by some in the United Kingdom to describe problems with motor coordination that are not caused by other medical conditions or illnesses. Internationally, however, the term **Developmental Coordination Disorder (DCD)** is much more commonly used as it gives clear reference to the formal DSM-5 diagnostic criteria. Inclusion of the word 'coordination' emphasises the main feature of the condition as movement and coordination difficulties, although a range of commonly co-occurring non-motor difficulties are also acknowledged. The Dyspraxia Foundation, in the UK, now uses the term *Dyspraxia / DCD*, an acknowledgement that, internationally, the majority of research, health and education professionals and clinicians use the term DCD and are not familiar with the term 'dyspraxia', which seems to have use only in the UK.

The international recommendations (Blank et al, 2019) do not recommend use of the term 'dyspraxia'. However, it should be noted that individuals with the condition may have a personal preference to use one term over another. Some prefer to use 'dyspraxia' as they feel uncomfortable with a term that includes the word 'disorder' or that emphasises 'motor coordination' in a way which they feel does not adequately capture/describe the full range of difficulties that they experience.

Professionals working in this field may also have personal preferences. Some respect and choose to use the term most valued by or familiar to the clients with whom they work. Some particularly value the formality and international recognition of the term 'DCD'. Nevertheless, there is concern by some professionals that the term 'dyspraxia' is used too broadly to describe a wide range of difficulties that may not be captured by or fall under any other SpLD label. The danger of this is that unless specific diagnostic criteria can be applied there will be no consensus for assessment, identification or support for individuals.

Over the past 20 years there has been a considerable increase in research into the possible underlying causes of DCD, including many studies of the nature and causes of motor coordination difficulties and possible overlap with other SpLDs and / or developmental conditions such as Autism Spectrum Disorder (ASD). The emerging evidence suggests that causal factors may include early environmental experiences, specifically pre and peri-natal influences (e.g. lower gestation and lower birthweight) and atypical motor connections in the brain.

There is also a useful body of research which has facilitated the international consensus on the key characteristics of a profile of DCD (Blank et al, 2019).

Some individuals with DCD experience significant associated problems with time management, forward planning, prioritisation, and personal organisation. They may experience difficulties in *executive functions*, i.e. in the cognitive processes that are necessary for mental control and self-regulation. However, individuals who experience such characteristics but *no significant motor coordination difficulties* will require a differential diagnosis and the possibility of ADHD or ASD should also be considered, with appropriate onward referral for further assessment recommended if necessary.

There remain concerns that problems arising from DCD / dyspraxia are less well understood than co-occurring SpLDs such as dyslexia. Certainly, there has been more research into dyslexia (and in particular, the effect of dyslexia upon literacy) than into other SpLDs such as DCD.

The aim of this SASC guidance on DCD / dyspraxia is, nevertheless, to provide assessors with up-to-date, evidence-based, operationally effective definitions and procedures which incorporate the latest developments in research. The definition given above is in line with the current international consensus regarding DCD / dyspraxia and should be used as the reference point for any assessment exploring possible DCD.

Assessors may be concerned that definitions of SpLDs can appear to over-emphasise difficulties and underplay the personal resources, achievements and strengths an individual possesses. While there is **no clear pattern of specific cognitive or other strengths that can be attributed to most or all individuals with DCD / dyspraxia**, it is vitally important to explore and acknowledge, within the assessment process, the individual strengths and

strategies individuals with DCD may use to overcome or manage their difficulties, alongside their achievements and other qualities.

## **A2. DCD / dyspraxia in children (5-15 years)**

**Assessors should not attempt to identify DCD / dyspraxia in children under the age of 16.**

Rather, any child with suspected movement difficulties should be referred in the first instance to a medical practitioner for the following two reasons:

- 1. To rule out the possibility of other illnesses and diseases with similar symptoms e.g. diseases of the nervous system, diseases of the musculoskeletal system or connective tissue, or other sensory impairments.** Examples of *associated* medical diagnoses could include benign epilepsy of childhood with centrotemporal spikes (BECCTS) and joint hypermobility syndrome – these can occur with DCD. Examples of *differential* medical diagnoses could include cerebral palsy, muscular dystrophy, Neurofibromatosis type 1 (NF1), Cerebrovascular accident (CVA) i.e. ‘stroke’, or Klinefelter’s, Fragile X and Williams Syndrome – these would rule out a diagnosis of DCD.
- 2. For referral for a full assessment of the motor coordination difficulties.** Ideally this would involve an inter- or multi-disciplinary assessment by appropriately qualified practitioners such as a paediatrician and occupational therapist and/or physiotherapist.

To increase the chances of a referral being taken seriously and acted upon, assessors are encouraged to use a template referral letter (see **A7** below for a suggested template that can be adapted as required).

DCD in children is identified on the basis of motor difficulties as described in DSM-5 (APA, 2013) and ICD-11 (World Health Organisation, 2018). A diagnosis **cannot be made without a motor assessment**. Motor coordination difficulties will be unexpected i.e. out of keeping with the child’s age.

While SpLD assessors may legitimately use **rating scales** and other **screening materials** to establish the possibility of an underlying condition such as DCD / dyspraxia in children, full clinical assessment of DCD / dyspraxia in children will utilise standardised tests of motor skill such as the Movement ABC-2 Test (Henderson, Sugden & Barnett, 2007) and the Bruininks-Osteretsky Test of Motor Proficiency 2nd Edition (Bruininks & Bruininks, 2005) not available to SpLD teacher-assessors or psychologists without clinical training. Standardised tests such as these are based on an understanding of typical developmental norms and can provide evidence for motor coordination performance that falls below the expected level. Coordinated motor skills will be **substantially below expected developmental levels** given the individual's chronological age and opportunity for skill learning, as evidenced by difficulties with everyday activities that require motor skills.

However, SpLD assessors / psychologists may, in any assessment carried out prior to onward referral, **describe** features of possible motor coordination difficulty observed or reported by the child assessed, and / or their parents, carers and teachers. There may be **significant delay** in the acquisition of gross and fine motor skills and impairment in the execution of coordinated motor skills that manifest in clumsiness, slowness, or inaccuracy of motor performance.

To recognise potential indicators of DCD / dyspraxia, it is helpful if assessors have a detailed knowledge of typical trajectories in motor skills development and the extent of variation that exists within the relevant age ranges, especially when screening young children. When considering performance against developmental norms for motor coordination and specific motor skills, these norms should be culturally relevant and up to date. Assessors will also need to bear in mind how the **opportunity for practice and the environment a child is in** may affect typical developmental norms in motor development.

In DCD / dyspraxia in children there are likely to be **substantial** difficulties with:

- **Fine and / or gross motor coordination skills** i.e. difficulties achieving developmental milestones in postural control and balance (e.g. jumping, hopping), hand-eye coordination (e.g. ball skills) and / or actions requiring sequencing such as running or riding a bike. This will impact on participation in activities at home and school, such as physical education lessons, games and sports. There may also be difficulties in fine motor skills such as object manipulation and tool use. This includes difficulties with pen / pencil skills such as drawing and handwriting, typing and using scissors. Difficulty with precision / fiddly tasks may also impact on self-care activities such as dressing and eating. In childhood, an individual's motor coordination difficulties will affect participation in everyday activities at home and at school.

Difficulties with **some or all** of the following may also be evident. These are not core to DCD and may also be associated with other SpLDs or developmental conditions:

- **Organisational skills** e.g. organising belongings, packing bag.
- **Lowered self-esteem.**
- **Difficulties in social communication and interaction.**
- **Visual perception and visual-spatial awareness** e.g. difficulties with orientation and following directions.
- **Temporal awareness** e.g. difficulties with sense of time, telling the time from an analogue clock-face, 'forward planning' and time-management.
- **Sensory sensitivities** e.g. sound, touch, textures of food.
- **Sleep problems, reduced levels of physical activity, fatigue.**

### **A3. DCD / dyspraxia in adults (16+ years)**

In adulthood, an individual's coordination difficulties may affect participation and functioning in education, work and employment. Difficulties seen in childhood may continue and may manifest themselves when learning new skills such as driving a car or attempting home maintenance tasks (e.g. replacing a fuse in a plug, drilling holes to fix a shelf).

It is vital to ensure that alternative medical explanations for difficulties experienced have been ruled out, particularly in young adults.

### **'RED FLAGS'**

If motor coordination difficulties are reported as worsening or deteriorating, or if there has been recent functional loss of abilities, there should be a referral to a G.P. to rule out alternative medical explanations for the symptoms reported. This must be made prior to reaching any SpLD assessment decision.

Other 'red flags' meriting immediate referral to a G.P. would be reported asymmetry of movement, loss of muscle mass, tremor, pain in joints, headaches, increased changes in mood and memory loss. Symptoms such as these which are reported as *new* problems with no previous childhood history are more likely to have another (differential) explanation. In adults, examples of differential diagnoses could include multiple sclerosis, cerebral tumours, Parkinson's disease, Motor Neurone Disease, genetic conditions that emerge in adulthood such as Huntington's chorea or Cerebral Vascular Accident (CVA). These would all rule out a diagnosis of DCD.

Arthropathies, Joint Hypermobility Syndrome (JHS) and Hypermobile Ehlers-Danlos syndrome (HEDs) can be present with DCD / dyspraxia but the presentation may vary a little from people who do not have JHS/HEDs.

After possible alternative explanations for difficulties experienced have been ruled out through careful questioning and / or referral to a G.P., assessors need to take account of both the impact of persisting motor coordination difficulties and other associated features and impacts of DCD / dyspraxia.

In adults, the impact of poor motor coordination on educational achievement or performance in work may, at first sight, tend not to appear as strong as in childhood. However, poor motor coordination may still have a significant impact on aspects of daily life. Adults with DCD / dyspraxia may have developed effective strategies for managing their motor coordination difficulties, especially if there has been a history of intervention and support, such as the routine use of a computer at school, or deliberate, long-term practice in a sport or exercise activity designed to help overcome the motor coordination problems. However, the impact of motor coordination difficulties will still require careful and sensitive investigation and there may also be associated and co-occurring social and emotional difficulties, as well as problems with time management, planning and personal organisation, that can have serious negative impacts on daily life and affect an adult's education or employment experiences. These may all present as important issues for the person being assessed.

### **A3.1 Establishing sufficient evidence to identify DCD / dyspraxia (adults)**

Assessors should have adequate knowledge and expertise to be able to gather and evaluate a range of qualitative and quantitative data so that sufficient evidence for the identification of DCD / dyspraxia is established.

**Most importantly**, DCD / dyspraxia **cannot** be established based on performance in a cognitive domain or comparative performance across cognitive domains. However, to support recommended strategies for management of difficulties, it is helpful to identify strengths and weaknesses within the cognitive profile. Difficulties in planning and spatial ability may be observed in performance in non-verbal reasoning tests / tests of executive function (Sumner et al, 2016).

To reach a conclusion that there is sufficient evidence to suggest the identification of DCD / dyspraxia in adults (post-16 year olds) the assessor **must** provide:

- 1. Evidence of a developmental history of motor coordination difficulties, with persistence into adulthood.** It is vital therefore that a detailed case history is taken (including difficulties as a child). The assessor should explore this history using an in-depth interview and/or questionnaire. Where possible, and with the consent of the person assessed, it can be helpful if parents/carers can provide details relating to difficulties in childhood. The assessor can build a picture of motor coordination difficulties, based on the client's or student's responses. ***The Adult DCD / dyspraxia Checklist (ADC) for Further and Higher Education***, (Kirby and Rosenblum, 2011) is recommended (Blank et al., 2019) and then, if the ADC indicates the possibility of DCD / dyspraxia, the ***DIDA*** (Kirby et al, 2018) can be used. Difficulties should be **specific** and **persistent** (APA 2013; ICD, 2018). It is important that motor coordination difficulties are an identified part of the profile and that the difficulties are developmental in nature, have begun in childhood and persisted over time despite any appropriately targeted interventions. This concept of persisting difficulties seeks to differentiate between individuals who have temporary difficulties (due to short-term developmental delays or gaps in education, etc.) and those whose difficulties are long-term.

**Notes:**

Persistence does not mean inability to improve or a permanent inability to do something. As with other areas of specific difficulties, appropriately targeted interventions can improve performance. A systematic review and meta-analysis of studies of interventions in children with DCD (Smits-Engelsman et al, 2018) has shown that intervention produces benefit for the motor performance of children with DCD, over and above no intervention, with intervention approaches designed around a task-oriented perspective, i.e. in the learning of particular motor skills, yielding stronger effects.

It should not be assumed that failure to respond to intervention inevitably indicates a persistent motor coordination difficulty. Well-meant but poorly designed intervention strategies and approaches can exacerbate underachievement by making inappropriate demands on learners. Also, it is evident that interventions are most effective when a child is first learning. It is therefore useful to investigate at what stage the individual received help, and what type of strategies were covered.

While there will be some evidence of early presentation of motor coordination difficulties, in some people these may become significant in adulthood, when there are increased academic, work and day-to-day demands.



- 2. Evidence that difficulties are unexpected in relation to age and opportunity for skill learning i.e. out of keeping with typical developmental norms.** In assessment, the cut-off point used to distinguish typical from non-typical performance will always be contentious and difficult to establish precisely because population estimates for the prevalence of DCD / dyspraxia vary across research studies, depending on the tests and cut-off points used.

**Notes:**

Factors that can negatively impact on the experiences necessary to develop appropriate motor coordination skills may include sedentary lifestyles, reduced levels of physical activity in childhood, gaps in education, poor school attendance; and lack of perseverance and practice. These possible differential explanations for motor difficulties need to be investigated sensitively and considered in weighing evidence and reaching conclusions.

Conversely, evidence of extensive practice due to additional teaching support, or deliberate learning of a motor skill to try to offset or 'correct' the coordination problem can mask underlying difficulties, especially in older students/adults. However, such information can provide evidence of a history of need for support and/or intervention.

Assessors sometimes encounter individuals with no other literacy, cognitive or motor coordination difficulties other than a history of difficulty in acquiring specific fine motor skills, including slow and/or illegible handwriting. As such, this presentation may have been described as 'dysgraphia' – a writing difficulty. While handwriting difficulties alone would not constitute DCD, assessors need to investigate carefully the development of such difficulties, looking for other possible signs of motor coordination problems, before ruling out DCD. Dysgraphia is not included in DSM-5 as a diagnostic category and it is much less well researched than DCD. Writing difficulties do not necessarily reflect poor motor skills, as writing also involves cognitive, orthographic and spelling skills. However, there is strong evidence that handwriting difficulties are extremely common in individuals with DCD (Biotteau et al, 2019).

- 3. Evidence that motor difficulties have an impact on activities of daily living and participation in everyday life.**

**Notes:**

In adults examples might include: difficulties managing household duties (preparing meals, ironing), difficulties writing fast enough to take notes in a lecture, avoidance of sports leading to reduced fitness and fatigue, challenges with packing a bag or belongings, applying make-up or shaving, or reduced confidence socially. There may also be specific impacts in the study or work environments, depending on the demands of those environments.

- 4. Evidence that difficulties have not been caused solely by other factors** such as (i) lack of opportunity to practise skills (ii) significant gaps in motivation regarding the acquisition of motor skills or (iii) general learning difficulties.

## Notes:

Scholastic skills such as handwriting need to be taught and learned: they are not simply a function of biological maturation. Inappropriate teaching, or gaps in education can therefore have a negative effect on the development of specific motor skills.

There will be a difference between, for example, an individual (with no other developmental history of motor coordination difficulty) who processes information very quickly and, *as a preference*, finds it easier and quicker to use a computer than to handwrite texts and a child who has had severe difficulty (even after additional support and instruction) in producing and forming legible handwriting and needs a computer to produce work at a reasonable speed that can be read by others. There may be a case for offering the person in the first category above the use of a computer in examinations, but this is unlikely to be on the basis that the person has DCD / dyspraxia if there is no associated history of motor coordination difficulty.

DSM-5 and ICD-11 both require that difficulties should not be due to intellectual disability (APA 2013) or general mental retardation (WHO 2018) – in both cases defined as IQ scores below 70. However, the 2019 recommendations on the diagnosis of DCD recognise that specific IQ scores do not seem to be helpful in distinguishing between those with DCD and those with coordination problems due to an intellectual impairment. It was therefore agreed that it is a clinical decision whether the motor coordination difficulties can be better explained by cognitive status.

5. **Evidence that questions have been asked and / or a suitable medical referral** has already been made to ensure that difficulties do not arise from another physical, neurological, sensory or mental health condition. Both the DSM-5 and ICD-11 (APA 2013, WHO 2018) require that other neurological, physical or mental health conditions be excluded as the sole cause of learning difficulties before diagnosing a specific learning difficulty, as outlined earlier in this paper.

The diagnostic assessment **will also note and consider:**

- Associated difficulties e.g. difficulties with self-organisation, forward planning and time management.
- Other possible co-occurring SpLDs.
- Indicators of possible ASD, ADHD, speech, communication and language issues, or mental health difficulties.
- Any other developmental, cognitive, medical and environmental factors that may be contributing to difficulties with learning.

## The SASC post 16 SpLD report format / choosing tests

Assessors working with adults should follow the usual process for a SpLD assessment, choosing appropriately from the Post-16 Test List as updated by SASC and its test evaluation sub-committee STEC. Reference to the working definition for DCD / dyspraxia contained in this paper provides diagnostic criteria for DCD / dyspraxia and can be included in an appendix and referred to in the analysis of the evidence from the assessment.

Evidence for motor coordination difficulties will be described in the **Additional Diagnostic Evidence and Information** section of the SASC recommended post 16 report format. When choosing tests, it is important to consider how these will affect the overall length of the assessment and the individual's ability to sustain effort and concentration over a long period of time. Evidence for specific weaknesses in motor coordination may be observed in tests that involve drawing, handwriting, typing or other manual tasks. However, assessors should bear in mind that performance on the very limited range of non-clinical tests currently available to assessors does not in itself constitute sufficient evidence for identifying DCD in adults. The other evidence requirements listed above must also be observed.

In the overview and diagnostic outcome section of a report the assessor will need to choose which phrase is most appropriate to the individual assessed e.g. ***shows significant features consistent with DCD / dyspraxia, shows a profile of DCD / dyspraxia.***

An assessor should also state any combination of DCD / dyspraxia with other identified SpLDs, such as dyslexia. If a co-occurring developmental difficulty such as ASD or ADHD is suspected, the assessor will need to make a judgement at the assessment as to whether it would be appropriate to discuss this possibility with the individual. Additional information and/or referral routes for a further assessment could then be suggested. In considering sensitive areas such as ASD and mental health, assessors should work carefully within professional boundaries, suggesting onward referral as appropriate. Ideally, in these instances, the assessor will have an opportunity to discuss directly what is written in the assessment report with the individual assessed.

#### **A4. Intervention / Recommendations / Reasonable adjustments**

**Recommendations** for interventions and reasonable adjustments should be clearly linked to:

- The individual's difficulties as reported in the background information and evidenced in the assessor's quantitative and/or qualitative analysis of performance in tests.
- The individual's needs within the study environment, course or workplace. Wherever possible recommendations should be developed collaboratively with relevant specialists in the individual's school, further or higher education establishment or workplace, although it is recognised that in some contexts opportunities for this may be limited. For those in employment, detailed and specific recommendations would normally be made in the Workplace Needs Assessment, a discussion with the employee and the management, which could follow on from the diagnostic assessment. Reflexive questions can assist the individual to think through and formulate strategies to manage the impact of difficulties experienced.

Reasonable adjustments should be appropriately targeted to address the need without potentially giving the individual an unfair advantage. Recommendations that are likely to lead to statutory disability entitlements may not be appropriate in every case and suggested interventions will vary, according to the situation of the person assessed. Assessors should bear in mind that adjustments such as the use of a computer in

examinations can sometimes target a need more effectively than additional time. Other reasonable adjustments might include additional time to complete tasks, additional training or support to learn a new skill; coaching support to aid work planning.

#### **A5. Who can assess for difficulties with motor coordination and what training/ qualifications will they need?**

**In children**, motor coordination difficulties may be noted and described in a SpLD assessment, but DCD / dyspraxia **cannot be diagnosed without a motor assessment** and children should always be referred to a G.P. as described on page 6 above. Ideally, an inter- or multi-disciplinary team of medical, allied health and educational /psychological specialists would work together, for example at a clinic, to provide assessment and support recommendations but this situation does not exist everywhere in the UK, although there are models of good NHS practice in various parts of the UK.

To make a diagnostic assessment of DCD / dyspraxia within a **post-16 years setting**, assessors should **evaluate the extent of their own skills, following professional and ethical guidelines, to ascertain whether they have knowledge and training from both categories a) and b) below:**

##### **a) Knowledge of typical and non-typical motor skills development including:**

- Typical and non-typical age-related developmental difficulties seen in children and adults with motor coordination difficulties, including what might count as a normal range of variation of skill.
- Typical difficulties in daily life, education and work for individuals who are struggling with aspects of motor coordination.

This knowledge can be acquired through:

- Experience of teaching students with DCD / dyspraxia (for example: as a Primary Teacher, QTS teacher, SpLD Tutor, Basic/Functional Skills Tutor).
- **And/or** bachelor's degree or postgraduate qualification which explicitly and extensively covers the developmental characteristics of DCD / dyspraxia.
- Subsequent professional practice and CPD.

##### **b) Knowledge and experience of diagnostic assessment.**

- Training in, and knowledge and experience of the process of performing a diagnostic assessment which involves a detailed history-taking, psychometric testing and observation.
- Training in, and/or experience of, applying this knowledge to the assessment of DCD/dyspraxia.

This knowledge and experience can be acquired through:

- A **Level 7 qualification / Assessment Practising Certificate / HCPC registration** which explicitly trains and assesses the assessor in the process of diagnostic assessment, including extensive coverage of identifying DCD / dyspraxia in adults (for example, a Level 7/PG Dip qualification in SpLD Assessment).
- If the assessor's **original Level 7 assessment qualification** did not cover DCD / dyspraxia explicitly and extensively, it is expected that the required skills and knowledge will have been acquired through extensive CPD training, mentoring, personal research and experience. The assessor should feel confident that they can demonstrate competence in applying that knowledge to diagnostic assessments of DCD / dyspraxia in adults.

It is a requirement of the Health Care Professions Council (HCPC) and the British Psychological Society (BPS), and of Assessment Practising Certificates (APCs) held by specialist teacher-assessors and their relevant governing bodies, that assessors should work within their range of expertise (acquired through appropriate qualifications and experience), use appropriate assessment tools, and be fully up to date in their professional development. Any diagnostic decision might, ultimately, need to be defensible in court. Where an individual's difficulties fall beyond the scope of an assessor's professional boundaries, that individual should be referred on for further assessment by a suitably qualified professional.

**Onward referral to another appropriate professional will occur:**

- For the assessment of motor coordination difficulties in children.
- Where the individual reports 'red flags' that require further investigation.
- Where an assessor has been trained **only** in the assessment of literacy skills / dyslexia and/or where DCD / dyspraxia (as defined in this guidance) is suspected (in adults) and the assessor does not have sufficient experience, training and knowledge to evaluate whether the person assessed has DCD / dyspraxia, e.g. where an identification of DCD / dyspraxia appears uncertain or inconclusive.
- And/or where the motor coordination and/or co-occurring difficulties are having a very major impact upon the individual's ability to perform effectively in education, the workplace and/or daily life and the assessor feels they do not have sufficient experience, training and knowledge to understand or assess that impact or make suitable recommendations.

## **A6. REFERENCES**

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## **OTHER USEFUL INFORMATION**

**Movement Matters group:** <http://www.movementmattersuk.org/>

**DCD / dyspraxia definitions in the NHS:** <https://www.nhs.uk/conditions/developmental-coordination-disorder-dyspraxia/>

**Diagnostic Inventory for DCD Assessment (DIDA), 2018.** Downloadable from the SASC website [www.sasc.org.uk](http://www.sasc.org.uk) or <http://www.movementmattersuk.org/content/documents/DIDA%20August18.pdf>

**The Adult DCD / dyspraxia Checklist (ADC) for Further and Higher Education:** Kirby, A. and Rosenblum, S. (2011) Available from: <http://psychology.research.southwales.ac.uk/research/developmental-psychology/amanda-kirby/>

**The Dyspraxia Foundation:** <https://dyspraxiafoundation.org.uk/>

**Models of good practice. Inter- or multi-disciplinary teams for assessing DCD /dyspraxia.** <https://www.sheffieldchildrens.nhs.uk/services/child-development-and-neurodisability/multidisciplinary-assessments/> and in Wales <http://www.1000livesplus.wales.nhs.uk/sitesplus/documents/1011/T4CYP+ND+Pathway+PDF+final.pdf>

## A7. Referral letter template

Your name, qualifications and contact details

Date

**To** (Whom It May Concern, Name of G.P. if known)

**CC:** Parent(s)/ Carer(s)/Teacher and/or school as relevant

**Re:** Name of child/young person

**DOB:**

On (**give date**) X was referred to me (**give reason as appropriate** e.g. for an assessment to investigate a suspected specific learning difficulty / because of concerns about progress at school / because of concerns about the development of handwriting skills etc....)

A full developmental history was taken at the assessment, including questions about motor coordination difficulties. X's parent(s)/carer(s)/teacher(s) contributed information about achievement of developmental milestones and current difficulties.

**The following motor coordination difficulties, were described by X and parent(s)/carer(s)/teacher(s):** (Briefly list/bullet point difficulties)

**During my assessment X:** (give examples of difficulties noted at assessment, e.g. handwriting difficulties).

Briefly list any **other relevant results of assessment** and **relevant contextual information**

I am making this referral because X would benefit from:

1. A **medical assessment** to rule out the possibility of other illnesses and diseases with similar symptoms e.g. diseases of the nervous system, diseases of the musculoskeletal system or connective tissue, or other sensory impairments.
2. (If the possibilities above are ruled out) **referral for a full assessment of the motor coordination difficulties**. Ideally this would involve an inter- or multi-disciplinary assessment by appropriately qualified practitioners such as a paediatrician and occupational therapist and/or physiotherapist.

In making this referral I am following the **SASC Guidance on the assessment and identification of Developmental Coordination Disorder (DCD) / Dyspraxia** which can be found via the Downloads tab at [www.sasc.org.uk](http://www.sasc.org.uk). There is further information at: <https://www.nhs.uk/conditions/developmental-coordination-disorder-dyspraxia/> and <http://www.movementmattersuk.org/>

Yours etc