Dyspraxia/ DCD in Early Years

Developmental coordination disorder (DCD), also known as Dyspraxia in the UK, is a common disorder affecting fine and/or gross motor coordination in children and adults. It can also affect speech. DCD is a lifelong condition, formally recognised by international organisations including the World Health Organisation. DCD is distinct from other motor disorders such as cerebral palsy and stroke, and occurs across the range of intellectual abilities. Individuals may vary in how their difficulties present: these may change over time depending on environmental demands and life experiences. (*movementmatters,uk, 2013*)

Whilst dyspraxia/DCD is primarily a motor disorder, in many cases individuals may experience difficulties with memory, perception and processing along with poor planning, organisation and sequencing skills which can have a significant negative impact on everyday activities. Although, the condition may occur in isolation, it frequently coexists with other conditions such as ADHD (attention deficit hyperactive disorder), dyslexia, language disorders and social, emotional and behavioural impairments. (*Dyspraxia Foundation, 2015*)

The condition affects 5% of the population with a ratio of two boys to every one girl (Langham, 2009). This equates to at least one child in every classroom. Findings from a Dyspraxia Foundation survey (2015), suggests that girls are likely to be diagnosed later than boys, often not until adolescence or adulthood.

Dyspraxia/DCD is a medical condition with educational implications. Young people should be referred to their GP who may then refer on to a paediatrician, occupational therapist, physiotherapist and/or speech and language therapist, depending on the child's needs and the way that services are managed locally. For further information, please download the information sheet from the Dyspraxia Foundation website at:

http://dyspraxiafoundation.org.uk/wp-content/uploads/2014/10/Guidance-for-parents-seeking-a-diagnosis.pdf

The exact causes of dyspraxia/DCD remain unknown – in fact it is likely that there is more than one cause. While dyspraxia/DCD is not the result of brain damage, it may have a neurological basis *(: Zwicker et al 2010).* Genetic factors may play a part in some cases *(Sugden et al 2008)* while other risk factors include low birthweight and prematurity *(Langham, 2009)*.

Diagnosis of DCD/dyspraxia is unusual before five years of age because children vary widely in their movement opportunities and the rate of their development. It is important that a diagnosis is not given too early as poor motor coordination could be an early indicator of another condition, (e.g. Cerebral palsy, muscular dystrophy or an attention disorder) which will require different intervention approaches.

When youngsters enter the education system (whether it is at the age of three in nursery class or at the age of four into reception class) parents may be already aware that their child's development is not the same as their peers. It may be the first time that parents

have been able to compare their child's performance against children of a similar age. The teacher or support assistant will be able to confirm that in relation to other youngsters of the same age, a particular child is finding certain tasks difficult. Parents know their children better than any one else and will have seen evidence in the home environment of the problems the child is facing in school. If, as a teacher, you are concerned about a child's development or ability to carry out motor tasks, speak to the parent as soon as possible and obtain relevant information about the child's achievements of early milestones.

Although dyspraxia/DCD affects each individual differently some of the common difficulties are listed below.

Motor difficulties

- Was slow to achieve motor milestones such as sitting (often after the age of 8 months), crawling (some never crawl), walking, hopping, jumping, walking up and down stairs
- In early years was poor at feeding and sleeping (may be continuing difficulty)
- Unable to sit still
- Knocks into objects
- Awkward running gait
- Constantly tripping and falling over
- Knocks into objects/people
- Knocks items over
- Difficulty walking up and down stairs
- Difficulty pedalling a tricycle
- Lack of sense of danger e.g. jumping from a high wall or from top of a climbing frame
- Difficulty with ball skills
- Poor fine motor skills e.g. pencil skills, using scissors, dressing such as with buttons, zips

Non motor difficulties

- Easily distressed & prone to tantrums
- Lack of imaginative play
- Poor ability to play with peers/social skills
- Messy eating – poor ability to use cutlery
- Poor concentration and is easily distracted
- Delayed acquisition of language
- Poor listening skills
- Poor development of perceptual skills
- Laterality is late to be established

How this may be observed in the classroom:

- *Games lessons/music and movement classes* - often difficult. The child has difficulty with ball skills, throwing and catching and kicking a ball. Difficulty with climbing on and off apparatus, creeping through tunnels, walking along a straight line, following sequences

- *Under sided hand dominance* - uses either hand to hold a pencil or carry out a fine motor task. The child may use the right hand to complete tasks on the right side of the body and the left hand to complete tasks on the left side

- *Poor pencil skills* - difficulty learning to form letters and write. Lack of hand strength and difficulty maintaining grip (may have an awkward pencil grip), art work immature

- *Difficulty using classroom equipment* - difficulty with cutting paper and using scissors

- *Slow at dressing/undressing* – particularly with putting shoes on and off, doing up buttons, putting on coats

- *Difficulty sitting still* - often moves around the classroom, fidgets and has difficulty focusing on an activity

- *Falls and trips over* (more so than other children)

- *Takes time or has difficulty to learn now motor tasks* – such as hopping, jumping. swimming. Appears not to be able to learn anything instinctively but must be taught skills.

- *Has difficulty with spatial awareness* - may stand very close to another person or not know how to move around a games hall and stays in one area. Knocks into objects in the classroom, knocks over items on the table or into bumps into people

- *Messy eater* - has difficulty using cutlery and prefers finger feeding. May dislike some food textures

- *Poor perceptual skills* - finds form boards, shape sorters and constructional toys difficult to assemble

- *Poor listening skills* - appears not to listen and has difficulty following simple instructions

- *Poor stamina* - gets easily tired and frustrated with themselves

- *Poor social skills* - does not easily make or keep friends. Has poor empathy of others

- *Poor language skills* - may have delayed speech and language development. Takes things literally

The Dyspraxia Foundation's Early Year classroom guidelines gives excellent helpful strategies and activities to assist the child in the classroom and may be downloaded from the Dyspraxia Foundation website at: http://dyspraxiafoundation.org.uk/wp-content/uploads/2014/12/Early-Years-Guidelines.pdf

KEY POINTS TO REMEMBER

- The child may need supervision and encouragement to stay on a task
- Seating should allow the child to rest both feet flat on the floor and the child be encouraged to sit with upright posture
- Never give the child more than 2 instructions at one time and ensure that they are prepared for the instructions before they are given
- Give us much encouragement and positive feedback as possible. It is vital that the child does not lose their self-esteem.
- Allow extra time for the completion of a task
- Liaise with the relevant medical professionals for further advice in the classroom and P.E. setting

References:

Dyspraxia Foundation (2015) – Dyspraxia at a glance www.dyspraxiafoundation.org.uk

Movement Matters UK (2012) **http://www.movementmattersuk.org**

LINGHAM R et al (2009) Prevalence of developmental coordination disorder using the DSM-IV at 7 years of age: a UK population-based study Pediatrics. 2009 Apr;123(4):e693-700

Sugden et al (2008) Issues Surrounding Children with Developmental Coordination Disorder, International Journal of Disability, Development and Education ,Volume 55, 2008 - Issue 2

Zwicker J et al (2010) Brain Activation of Children With Developmental Coordination Disorder is Different Than Peers. Pediatrics 2010;126(3) e678-686

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