

## 1. Facts & figures

- Developmental coordination disorder (DCD) is a developmental disorder characterized by a persistent problem in **learning and/or executing coordinated motor skills** in a fluent manner. In the past the disorder was often referred to as **dyspraxia**.
- The **prevalence** of DCD in children is between **5 to 7%**. DCD is **more common in boys than girls**. For every girl with DCD there are 3 to 4 boys with the disorder.
- In higher education, students experience difficulties with:
  - **learning complex motor actions** such as driving a car
  - **quickly and accurately** executing coordinated movements such as manipulating tools in a lab
  - **handwriting** characterized with slower writing speed and less fluent handwriting movements. This can be at the expense of the readability
  - Other **associated problems** are reported such as:
    - **Motor** articulation problems.
    - Problems with **spatial awareness** and **spatial orientation**.
    - Difficulties with **structuring texts**.
    - Problems with **executive functions** such as organization and planning, problem solving, multi-tasking, and prioritizing. This is reflected in problems with **study skills**.
    - **Visual problems** and difficulties **concentrating**.
    - Less participation in **social activities in student life**.
    - More chance of developing **emotional and behavioral problems** such as fear of failure, anger, depression, low self-esteem, frustration, social seclusion.

## 2. Focus points, tips & tricks

### Attending classes

#### Focus points

- o Taking readable, complete and well-structured **notes** is difficult
- o Due to difficulties with time management and spatial awareness **being on time for classes** is not always successful.

#### Tips and tricks

- o PowerPoint presentations with adequate structure, delivered before classes, enhances the process of taking structured and complete notes. **Visualization** by means of schemes or diagrams provides structure.
- o Using a **laptop** can contribute to taking readable and complete notes, which facilitates the processing of information.
- o **Copies of notes** of fellow students can have substantial added value in addition to one's own notes.
- o **Lecture recordings** that are made available online after classes, offer the opportunity to review difficult passages and complete notes.
- o A **prospection of the campus** and in the classrooms are valuable. Providing a campus plan and putting up signalization are supportive.

### Planning and organizing study-related activities

#### Focus points

- o Due to difficulties getting an **overview on study activities**, making a **study plan and managing time** (such as prioritizing) can be difficult.

## Tips and tricks

- Providing an **overview** of all assignments and tasks helps to create an overview and make up an efficient study plan.
- **Study coaching** can be useful to help make up a realistic plan and help determine which tasks are proprietary, how much time can be spent on specific tasks , ...
- Working with a **diary with an embedded alarm system** can be supportive.

## Processing and rehearsing study materials

### Focus points

- Due to difficulties with concentration, applying structure, and problem solving, the **processing and studying** of course materials is hampered.

### Tips and tricks

- Offering **sample questions and model answers** can be useful to help process the course content and enhance self-testing strategies.
- Offering **study coaching** where the focus lies on developing techniques to help structure the course material, discriminate key issues from side issues, and make connections can be helpful.

## Assignments

### Focus points

- Reproducing spatial information and interpreting numerical information is difficult. Additionally, reading and interpreting **charts and figures** is not easy.

- It is difficult to finish tasks with the required **precision** or at a sufficiently high **speed**.
- Learning new, complex motor skills is not easy.

## Tips and tricks

- Assignments with numerical information are best transmitted well **in advance**. Tables and figures are best provided with sufficient **explanation**.
- If this is not in contradiction with the learning goals, small **deviations with regard to the required precision** should be allowed. An **alternative assignment** and/or **oral explanation** can be considered if necessary.
- Certain **materials** can be useful such as graph paper, a calculator, a drafting compass, a ruler, scrap paper, ....
- Besides elaborating on the assignment **in class**, the instructions are also best given **in writing**.
- Changing **deadlines** can be advisable in specific situations.
- By providing **more time for training**, complex motor skills can be taught.
- **Working in group** can help compensate for slow or less precise motor execution.
- For specific complex motor skills **a growth pad** can be provided where skills can be assimilated gradually. It is helpful to **break apart the motor skills and verbalize these separate steps**, and practice them under supervision.
- Large assignments are best split up in **partial assignments** where progress is monitored and intermediate feedback is given.

## Exams

### Focus points

- **Writing readable and fast** can be challenging. It can be difficult to deliver an answer with the necessary **structure**.

- Reproducing **spatial information** and interpreting numerical information is difficult. Additionally, reading and interpreting **charts and figures** is not easy.

## Tips and tricks

- **Extra preparation time** at an oral or written exam allows to compensate for the slow writing speed and the difficulties providing a structured answer.
- There should be **sufficient room** to formulate an answer on exam forms. It is also advisable that charts and figures are provided with the necessary **explanation**.
- An **oral elaboration** at a written exam can help eliminate ambiguities. Providing an **alternative exam form** is also an option.
- Making exams on a **laptop** can be supportive.
- An optimal **spread of exams** within an exam period is sometimes advisable.

## Internships

### Focus points

- Reproducing spatial information and interpreting **numerical information** is difficult.
- It is difficult to finish tasks with the necessary **precision** or with sufficient **speed**.
- **Learning** new and **complex motor skills** is not easy.
- **Orientation** at the internship location and locating rooms can be difficult.

## Tips and tricks

- A **prospection** at the internship location can be useful to enhance localization.
- Specific **materials** can be helpful such as graph paper, a calculator, a drafting compass, a ruler, scrap paper, ....
- **Deviations in precision** can be allowed provided this is not in contradiction with the learning goals. **Alternative assignments** can be considered.
- By providing **more time for training** and more **learning opportunities**, complex motor skills can be taught. It is helpful to **break apart the motor skills**, **verbalize these individual steps**, and practice them under supervision.
- For specific complex motor skills a **growth pad** can be provided where skills can be assimilated gradually.
- Large assignments are best split up in **partial assignments** where progress is monitored and intermediate feedback is given.
- It is useful to **monitor** the progress **at a regular base** and provide clear feedback. Working points that are formulated very concretely create learning opportunities.
- **Spreading an internship** over a longer period of time can be useful.

## Student life

### Focus points

- **Participating in sports activities** and the associated **social contacts**, are often challenging.
- **Living independently** can be challenging (cooking, studying, time management, ...)

## Tips and tricks

- Support in the development of structure, planning and specific manipulations in daily activities while living in a student dorm can make a great difference. It is helpful to make a **step-by-step** plan for important manipulations.
- Next to sports activities, participations in **other student activities** are best stimulated so there is sufficient opportunity for social interaction.
- Staff members of student facilities provide **coaching** in case of psychosocial problems.