

Dealing with particular difficulties in reading and spelling as well as doing arithmetic

1. Criteria when preparing an expert opinion on dyslexia / dyscalculia

The prerequisite for acknowledging dyslexia / dyscalculia is a medical or clinical expert report prepared by a child or adolescent psychiatrist, clinical psychologist or school psychologist who is recognised in the German-speaking region. This expert report may not be older than one year when the pupil starts attending the school. Submitted expert reports are to be submitted again every three years and in any case when the pupil starts class 10.

The following diagnostic test procedure should be carried out to determine dyslexia or dyscalculia:

1. **General intelligence test** on speech comprehension, on perception-related logical thinking, on working memory, on attentiveness, on processing speed and on auditory processing
 - In the case of **dyslexia** an age-appropriate and standardised test procedure should also be carried out to check reading, reading accuracy, reading comprehension and spelling.
 - In the case of **dyscalculia** a standardised test procedure should also be carried out to check numeracy skills.

(The performances of the child must be clearly below the level to be expected on the basis of the age of the child, the general intelligence of the school class and the school grading.)
2. It is also recommended to carry out a diagnosis of the **visual processing** that excludes possible anomalies in the pursuit eye movement.

2. Particular difficulties in the written language acquisition process

2.1 Definition dyslexia

According to the international classification of mental disorders (ICD-10) dyslexia is defined as a delay in the reading and spelling development without any bearing on intelligence. The spelling and/or reading performance must be clearly below the level to be expected based on age and the school class and this must be the case for a longer period. This will be assessed on the basis of an individually applied, standardised test procedure (generally by school psychological advisory centres). Children with dyslexia have often experienced a developmental disorder in the past in terms of speaking and language. Other reasons could be:

- Difficulties in processing information of acoustic stimulus (e.g. difficulties in recognising rhymes)
- Difficulties in visual information processing (differentiating between letters)
- Difficulties in acoustic differentiation

It could be the case of combined dyslexia (as in most cases) as well as an isolated spelling disorder resp. reading disorder.

A **reading disorder** is described as an impairment of the development of reading skills that cannot be explained solely by the developmental age, by visual problems or inadequate education. Reading comprehension, the ability to recognise read words, to read them out loud as well as understanding tasks could be affected. Dyslexia is frequently accompanied by spelling weaknesses.

The main characteristic of an **isolated spelling disorder** comprises an impairment in the development of spelling skills without a previous history of a reading disorder. In addition the writing disorder must not be attributed predominantly to a too low intelligence age, to inadequate education or directly to deficits in seeing, hearing or neurological disorders.

The following can be frequently observed when reading:

- low reading speed
- frequent faltering
- reading without understanding
- mixing up, omitting or adding words to the sentence or syllables resp. letters to the words
- replacing words with a word similar in meaning
- restricted merging of letter sounds / letters are read as single sounds

The difficulties in spelling are characterised by:

- inaccurate copying
- frequent errors in dictations and essays
- mixing up letters of a similar shape
- mixing up sounds that sound similar (in written letters)
- mixing up letter sequences
- omitting and mixing up letters, syllables and words
- adding letters
- inaccurate elongating, doubling and shortening

2.2 Performance assessment

Pupils with particular and long lasting difficulties in reading and spelling are also generally subject to performance assessment measures that are valid all pupils. Compensation for disadvantages or deviating from the general principles of performance assessment is considered when a pupil learns to read and write in an **individual case** while observing the personality of the pupil.

Upon a written application by the parent or guardian of the child the class conference together with the school psychologist or special needs teacher may decide on measures for pupils that are to make the assessment of the performances possible taking dyslexia into account.

The prerequisite for this is the confirmation of existing dyslexia by a recognised, independent body in Germany (see criteria preparation of an expert opinion under Point 1). The objective of these measures is to support the pupil in his or her academic career until no more compensation for disadvantages is necessary as far as possible in the upper sixth of the grammar school and in the final examination. The application for compensation for disadvantages is to be repeated by the parents/guardians annually **by 15th April**.

In the report conference at the end of the 2nd school half-year the class conference shall make a decision as to whether the application of the parents will be granted for the subsequent school year. The decision is to be informed to the parents/guardians by the end of the school year. If the parents/guardians do not acknowledge this they are obliged to submit a current expert opinion that supports their rejection. The criteria determined under Point 1 thereby apply. When joining the secondary level or starting the school for the first time the class conference is to be held **by 31st October**.

2.3 Measures in the framework of compensation for disadvantages

The teacher for the subject of German (resp. English and/or French) is to be involved in the determination of the prerequisites for granting compensation for disadvantages. By providing aid in terms of compensation for disadvantages, pupils with particular difficulties in reading and writing are expected to produce **the same performance** as all other pupils. They are merely given **support** in order to prove their performances.

The following measures may be granted by DISD:

- **Organisational measures in school for regular lessons**
 - Selection of a suitable classroom (size, ambient noise, lighting conditions, etc.)
 - Naming a responsible contact person.
 - Informing and advising the class teacher.
 - Informing and advising the parents/guardians resp. the fellow pupils.

- Taking into account the timetable.
- Performance assessment in a separate room
- Creating individual workplaces
- **Temporal modification**
 - Extending the working hours for written tests by up to 50%
- **Technical and didactic aids**
 - Providing or permitting special work equipment (PC, laptop, audio aids, use of spelling software). Digital reference guides may not be used.
 - Providing a dictionary.
- **Didactic – methodical measures**
 - Clearly articulated language at a normal sound level
 - Enhanced visualisation resp. verbalisation of the lesson contents
 - Taking into account an increased time requirement
 - Permitting audio books as a supplement to the reading matter
 - Provision of suitable lesson materials (e.g. scripts, copies, enlargements).
 - Reduce amount of homework and if need be restrict it time-wise, possibly in favour of targeted spelling support.
- **Modification of the task format**
 - Reading out loud set written tasks
 - Task on a separate work sheet
 - Use of larger letters (at least letter size 12, line spacing 1.5)
 - Multiple choice tasks
 - Setting differentiated class tests, e.g. gap text with practice words instead of a dictation
 - Restricting error corrections in terms of quantity and selecting them according to support focuses, not marking orthographic errors in examinations as errors
 - Converting a text from reading to hearing (through software)
 - Shorter tasks
- **Support from teachers or assistants with special needs training**
 - Dictation by a separate person
 - Clarification of word meanings
 - Possibility of being reassured should the task not have been understood

2.4 Compensation for disadvantages when assessing performances

Giving a pupil grades to assess the performance can be waived for educational reasons in individual cases; the decision is made upon the resolution passed by

the class conference in consultation with the school psychologist or special needs teacher.

DISD may grant compensation for disadvantages in performance assessments:

- Setting tasks in written form as well as orally.
- Using suitable task templates (e.g. enlargement)
- Extending the time of the test by up to 50%.
- Taking into account the ability to cope in examinations (e.g. allowing breaks, providing additional rooms and supervisions).
- Using technical aids (e.g. computer, reading device).
- Replacement for examination types: if pupils are only able to fulfil oral and written tests to increase performance in a very restricted way (e.g. comprehension test with the hearing impaired, graphic illustrations with the visually impaired), suitable equivalent individual tasks are to be set).

During final examinations and in the sixth form of the grammar school, there are no plans to deviate from the general principles of performance assessment.

In the primary school the general principles of performance assessment can be deviated from by written and oral performances being classified under the aspect of the achieved individual learning status with educational appraisal of efforts and learning progress.

2.5 Reports and examinations

2.5.1 Reports

The assessment of the performance in reading and writing can be waived in reports. The grade in the field of spelling (e.g. in dictations) can achieve the **maximum** grade of "**satisfactory**" with error-free performances.

In such cases the following will be noted on the report:

"Due to a temporary reduced performance in the field of reading / writing the general principles of performance assessment were deviated from when assessing the performances in the subject (e.g. German)."

2.5.2 Examinations

Upon a written application by the guardian/parent a compensation for disadvantages in terms of adjusting the external framework conditions can be granted in final examinations **in the individual case**. The responsible Conference of Ministers Conference representative shall decide whether to grant this on the basis of a substantiated application by the school and the Conference

of Ministers Conference agreement in the respectively valid version. All available documents on the diagnosis and support are to be submitted for the application.

3 Special difficulties in arithmetic/ dyscalculia

3.1 Definition

According to the international classification of mental disorders (ICD-10) dyscalculia is defined as an impairment of numeracy skills which cannot be attributed to a general reduction in intelligence, to clearly inadequate education, to deficits in hearing, seeing or to neurological injuries. The deficit refers to mastering basic numeracy skills such as addition, subtraction, and multiplication; less the higher mathematical skills such as algebra, trigonometry, geometry, differential as well as integral calculus.

The numeracy skills of the child must thereby be clearly below the level to be expected based on age, general intelligence and the school class. This will be assessed on the basis of standardised tests (generally by school psychological advisory centres) for numeracy skills.

The following difficulties could exist:

- Arithmetic operations and their underlying concepts are not sufficiently understood (e.g. more-less, a multiple, part-whole).
- The size of a quantity can only be insufficiently grasped and put in relation to another quantity (comparison).
- Setting up a structured number series or number range concept is impaired and with this the ability to estimate and evaluate quantities and calculation results.
- Linguistic number processing such as acquiring the numerical phrase sequence and counting skills as well as storing factual knowledge (multiplication table) has not been sufficiently consolidated.
- Acquiring the Arabic denominational number system and its syntactic rules as well as calculation procedures building on them is impaired.
- Difficulties in transferring numbers from one coding to the other (numeral - Arabic numeral - analogue quantity presentation).

3.2 Performance assessment

Upon a written application by the parent or guardian of the child, the class conference together with the school psychologist or special needs teacher can decide on measures for pupils that are to make the assessment of the performance possible taking dyscalculia into account.

The prerequisite for this is the confirmation of existing dyscalculia by a recognised, independent body in Germany (see criteria preparation of an expert opinion under Point 1). The objective of these measures is to support the pupil in his or her academic career until no more compensation for disadvantages is necessary as far as possible in the upper sixth of the grammar school and in the

final examination. The application for compensation for disadvantages is to be repeated by the parents/guardians annually **by 15th April**.

In the report conference at the end of the 2nd school half-year the class conference makes a decision as to whether the application of the parents will be granted for the subsequent school year. The decision is to be informed to the parents/guardians by the end of the school year. If the parents/guardians do not acknowledge this they are obliged to submit a current expert opinion that supports their rejection. The criteria determined under Point 1 thereby apply. When joining the secondary level or starting the school for the first time the class conference is to be held **by 31st October**.

During final examinations and in the sixth form of the grammar school, there are no plans to deviate from the general principles of performance assessment. However, in the individual case, compensation for disadvantages in terms of external framework conditions can be granted (see 3.3). The responsible Conference of Ministers Conference representative shall decide on whether to grant this on the basis of a substantiated application by the school and the Conference of Ministers Conference agreement in the respectively valid version.

3.3 Measures in the framework of compensation for disadvantages

The teacher for the subject of Mathematics (resp. Natural Phenomena and/or Physics) is to be involved in the determination of the prerequisites for granting compensation for disadvantages. By providing aid in terms of compensation for disadvantages, pupils with particular difficulties in reading and writing are expected to produce **the same performance** as all other pupils. They are merely given **support** in order to prove their performances.

The following measures may be granted by DISD:

- **Organisational measures in school for regular lessons**
 - Selection of a suitable classroom (size, ambient noise, lighting conditions, etc.)
 - Naming a responsible contact person.
 - Informing and advising the class teacher.
 - Informing and advising the parents/guardians resp. the fellow pupils.
 - Taking into account the timetable.
 - Performance assessment in a separate room
 - Creating individual workplaces

- **Temporal modification**
 - Extending the working hours for written tests by up to 50%

- **Technical and didactic aids**
 - Providing or permitting special work equipment (PC, laptop, calculator, formula cards)
- **Didactic – methodical measures**
 - Clearly articulated language at a normal sound level
 - Enhanced visualisation resp. verbalisation of the lesson contents
 - Taking into account an increased time requirement
 - Permitting audio books as a supplement to the reading matter
 - Provision of suitable lesson materials (e.g. scripts, copies, enlargements).
 - Reduce amount of homework and if need be restrict it time-wise, possibly in favour of targeted numeracy support.
- **Modification of the task format**
 - Reading out loud set written tasks
 - Task on a separate work sheet
 - Use of larger letters (at least letter size 12, line spacing 1.5)
 - Multiple choice tasks
 - Setting differentiated class tests / task formats, e.g. reducing the complexity of text tasks (if need be only setting one-step tasks)
 - Noting reasonable interim steps as well as permitting the noting down of mental arithmetic tasks
 - Reduce amount of homework and if need be restrict it time-wise, possibly in favour of targeted numeracy support.
 - Shorter tasks
- **Support from teachers or assistants with special needs training**
 - Assessing performance in individual situations
 - Possibility of reassuring the pupil should the task not have been understood

3.4 Compensation for disadvantages when assessing performances

Giving a pupil grades to assess the performance can be waived for educational reasons in individual cases; the decision is made upon the resolution passed by the class conference in consultation with the school psychologist or special needs teacher.

DISD may grant compensation for disadvantages in performance assessments:

- Setting tasks in written form as well as orally.
- Using suitable task templates (e.g. enlargement)

- Extending the time of the test by up to 50%.
- Taking into account the ability to cope in examinations (e.g. granting breaks, providing additional rooms and supervisions).
- Using technical aids (e.g. computer, reading device).
- Replacement for examination types: if pupils are only able to fulfil oral and written tests to increase performance in a very restricted way (e.g. comprehension test with the hearing impaired, graphic illustrations with the visually impaired), suitable equivalent individual tasks are to be set).

When assessing the performance numeracy disorders will not be taken into account in the same way as dyslexia. Waiving the assessment of the numeracy performance in the subject of Mathematics as well as in the natural sciences is not possible.

3.5. Examinations

Upon a written application by the guardian/parent compensation for disadvantages in terms of adjusting the external framework conditions can be granted in final examinations **in the individual case**. The responsible Conference of Ministers Conference representative shall decide on whether to grant this on the basis of a substantiated application by the school and the Conference of Ministers Conference agreement in the respectively valid version. All available documents on the diagnosis and support are to be submitted for the application.

3. Special needs support requirements

Dyslexia as well as dyscalculia do not substantiate any special educational needs. Nevertheless in terms of accessibility measures such as e.g. compensation for disadvantages are to be taken.

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The German text shall prevail in case of ambiguities or in other cases where there is doubt or where there are problems of interpretation.