

Fostering grammatical gender agreement in German children with DLD: a strategy-based intervention using StrateGe

Why: Children with Developmental Language Disorder (DLD) often show difficulties in grammatical gender agreement. Research indicates that Language Learning Strategies (LLS) have the potential to improve their language learning (Motsch & Ulrich, 2012). The StrateGe approach by Riehemann (2025) focuses on strategies that may facilitate children's autonomous and long-term acquisition of gender agreement.

What material: Different materials were used, including picture cards, trick cards, worksheets, a positive reinforcement chart, a sorting machine, learning diaries and certificates. All materials were derived from Riehemann (2021) and subject only to minor adaptations. The story "Good Night, Gorilla" (Rathmann, 1994) served as the source material and thematic framework. An example for a worksheet is shown in Figure 1. The strategies were illustrated using the picture cards in Table 1. The trained article noun assignments are depicted in Table 2.

Figure 1: labyrinth game

The children use a pen to connect the article to the noun by following the line.

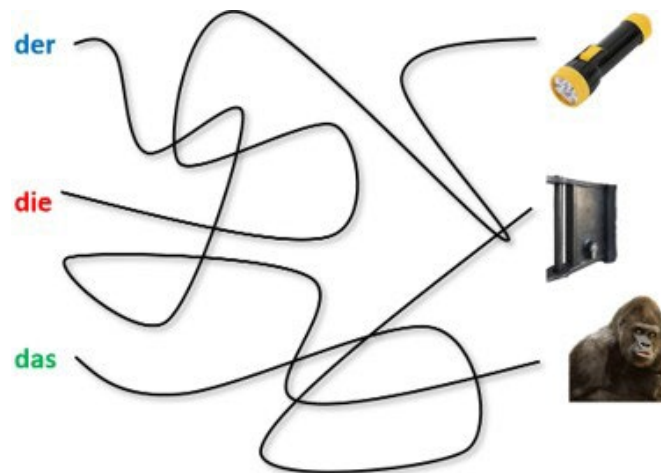


Table 1: tricks cards

The children are given visual representations of the strategies they have learned.

Stop trick	Question trick	Sort tricks	Cheat trick

Table 2: Trained article noun assignments with English translation.

Article [the]	Noun (in German)	Noun (in English)
der	Kaefer	Beetle
der	Adler	Eagle
der	Salamander	Salamander
der	Hummer	Lobster

der	Loewe	Lion
die	Kuh	Cow
die	Eule	Owl
die	Spinne	Spider
die	Schildkroete	Turtle
die	Giraffe	Giraffe
das	Erdmaennchen	Meerkat
das	Seepferdchen	Seahorse
das	Frettchen	Ferret
das	Kaenguru	Kangaroo
das	Nashorn	Rhinoceros

As part of the community outreach efforts, informational letters were distributed to teachers and parents on several occasions.

What procedures:

The intervention comprised a total of eight sessions. It was divided into three phases: the motivation phase (two sessions), the discovery phase (four sessions) and the transfer phase (two sessions). The aims and activities of each phase are shown in Table 3.

Table 3: Overview of the aims and activities of each intervention phase

Phase	Aim	Activities
Motivation phase	Perception of all definite articles in the therapist's verbal input	<ul style="list-style-type: none"> - Interactive input stories (dialogic reading) - Input games and exercises (see Figure 1) - Kick off game - Familiar routines with a high-frequency input The children listened closely to the therapist's input. Definite articles were highlighted, either verbally (through intonation) or visually (e.g. through colours or gestures).
Discovery phase	Self-guided exploration and practice of new gender learning strategies (gender tricks)	<ul style="list-style-type: none"> - Discovery of gender tricks using picture cards - Stop games, question games, sorting games - Experimentation with the sorting machine - Learning diaries First, the children learned to pause to avoid guessing ('stop trick'). They learned to ask for clarification ('question trick') and tried out exemplary gender patterns ('sort tricks'). They tested memorisation techniques, such as mnemonic notes ('cheat trick') and reflected on their learning progress ('control trick').
Transfer phase	Independent use of new gender learning strategies with self-selected nouns	<ul style="list-style-type: none"> - Cooperative detective tasks - Repetition tasks and joint word collection - Reflective exercises (e.g. language comparison) The children used gender tricks on 'stop words' - nouns they knew but whose articles they were unsure of. They used dictionaries or searched online. The word combinations were retained, for example through adaptive repetition. They reflected on the benefits of the strategies, e.g. 'Which trick worked best?'.

Who provided:

The intervention was provided by three project staff members:

- the project coordinator (M. Lenzen)
- one student of special educational needs with a specialisation in language support
- one student of speech therapy

- How, when and how much:** All participants were divided into small learning groups with four to six children. Each group participated in eight face-to-face sessions. The intervention proceeded twice a week over a four-week period. All sessions lasted approximately 40 minutes and were provided during regular school hours in close agreement with the teachers. The intervention was planned and prepared by M. Lenzen (project coordinator). The procedure, games and exercises as well as all media were identical across the learning groups.
- Where:** The intervention took place in special needs schools for Speech, Language and Communication Needs [Foerderschulen mit dem Foerderschwerpunkt Sprache] in North Rhine Westfalia (Germany). The children received therapy in their own schools, in a separate classroom or a therapy room.
- Tailoring and modification:** No tailoring has taken place.
The intervention was not modified.
- How well (planned and actual):** The providers of the intervention were trained. They were given structured protocols outlining the implementation of the intervention, including specific instructions, recommended strategies for managing potential difficulties and guidance on providing feedback.
After each session, they completed observation checklists to document any notable deviations from the prescribed procedure.
No deviations from the intervention protocol were recorded.

Literature:

- Motsch, H.-J., & Ulrich, T. (2012). Effects of the Strategy Therapy „Lexicon Pirate“ on Lexical Deficits in Preschool age: a Randomized Controlled Trial. *Child Language Teaching and Therapy*, 28(2), 159–175.
- Rathmann, P. (1994). *Good Night, Gorilla*. G.P. Putnam's Sons Books for Young Readers.
- Riehemann, S. (2025). *StrateGe – Strategien zum Genuslernen (Strategies for Gender Learning)*. 2nd updated edition. Reinhardt.
- Riehemann, S. (2021) *StrateGe – Strategien zum Genuslernen (Strategies for Gender Learning)*. 1st edition. Reinhardt.