

## Call for papers: EDA Dyslexia Conference, Athens, 2024

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### Titel:

Speech-to-text for students with dyslexia – results and implications from three research approaches

### Authors:

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### Purpose:

The two presenting researchers both investigated in their PhD projects the Speech-to-text technology (STT) for learners with dyslexia. Both projects, situated in Sweden and Switzerland, examined the impact of the tool on lower-level and higher-level processes of text production, writing motivation and students' experiences of using the tool in school. This presentation aims to bring together the complementary findings, to show what can be learnt from them for practical use and to identify areas for further research.

### Methods:

Gunilla conducted a Single-Case multiple-baseline study using a praxis-based intervention including eight participants. An interview study of nine students' experiences from a 5-year follow-up using assistive technology complements aspects of the technology implementation in school. Silvana conducted a quasi-experimental study with mixed methods with 109 fifth-grade students with dyslexia. The EC received an introduction to a tool and used STT in writing classes. Silvana investigated the effects on writing competence and writing motivation and conducted interviews with teachers and specialists.

### Results/conclusions:

Results indicate mixed findings on the effectiveness of STT. While it is a helpful tool for some students with dyslexia to overcome barriers, it is challenging for others. Co-morbidities, such as AD(H)D or specific language impairment, make it more challenging to use STT successfully, but conditions at the school environment level also need to be met. Monitoring student progress is crucial to tailor interventions and enhance STT effectiveness, considering individual needs.