

Sigrid Klerke, Denmark
Chief Data Scientist, EyeJustRead.com
sk@eyejustread.com

Seeing struggling readers' eye movements: Experiences from developing new technology for the teaching of reading

Co-author 1: Janus Askø Madsen, CEO, EyeJustRead.com,
jam@eyejustread.com

Co-author 2: Emil Juul Jacobsen, CTO, EyeJustRead.com,
ejj@eyejustread.com

We developed and built an eye-tracking tool for struggling readers and their specialist teachers (eyejustread.com). Our research aims to discover ways to help teachers to spend more time working directly with children by helping them identify and target the specific stumbling blocks that are preventing each child from becoming a fluent reader.

Eye-tracking of real reading is like an always-on, automated and extra-sensitive stopwatch which has unlimited replays. Specific questions can be addressed, such as: "Is this consonant cluster fluent yet? Or: "Is this a challenging vowel?" Furthermore, at any time of an intervention, any previous recording can be re-analysed in the light of new hypotheses about a student's reading struggles.

The challenging question is how to build digital tools that can shape new teaching habits informed by and interacting with "blind" data while meeting the goal of affording more time to the core task of supporting each child's reading development.

Early results highlight new conversation types. Teachers gain insights faster and take on new perspectives when discussing gaze recordings with students, peers, and parents. This encourages both professional growth and improved support for the student.