

# The use of digital technologies to monitor students' progress in early literacy achievement

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## ABSTRACT

This presentation describes the use of online digital technologies to monitor students' response to evidence-based early literacy instruction. During the last 4-year period over 7,000 junior school teachers and literacy specialists in New Zealand received professional learning and development in structured literacy teaching and assessment practices (referred to as **The Better Start Literacy Approach** or BSLA). Teachers accessed online tasks through a bespoke assessment website. They administered baseline assessments and then re-assessed the children following 10 weeks and 30 weeks of class teaching. The tasks evaluated children's phonic, phoneme awareness, word decoding, and oral narrative skills. The online assessments ensured consistent presentation of task items to all children. Automatic scoring, speech recognition with automatic transcription, and automatic reporting of individual children's data were features embedded within the assessment website. Paired samples *t*-tests using data from 20,000 students who were aged 5y0m to 5y3m at the Baseline assessment and who were re-assessed after ten weeks of BSLA teaching indicated significant change (with large effect sizes). Quantitative data examined after 30 weeks of teaching indicated that children who received BSLA teaching in their first year at school were significantly stronger in their early literacy skills compared to children who received other types of literacy instruction. The benefits of using online assessment tasks for large scale monitoring of children's early literacy growth are discussed.

**Keywords:** Digital technologies, assessment, structured literacy, phoneme awareness