

# POSSIBILITIES OF USING DIGITAL SPEECH SOUND ASSESSMENT TOOLS IN THE WORK OF SPEECH THERAPISTS IN LATVIA.

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### **AIM AND METHODS**

Aim of the research. To study the speech therapy methods of speech sound assessment for preschool children in Latvia and to update the necessity of creating a digital platform for speech sound assessment based on theoretical principles.

#### Research methods.

Execution of: a questionnaire survey of practicing speech and language therapists on the techniques and methods used in speech sound assessment and their experiences.

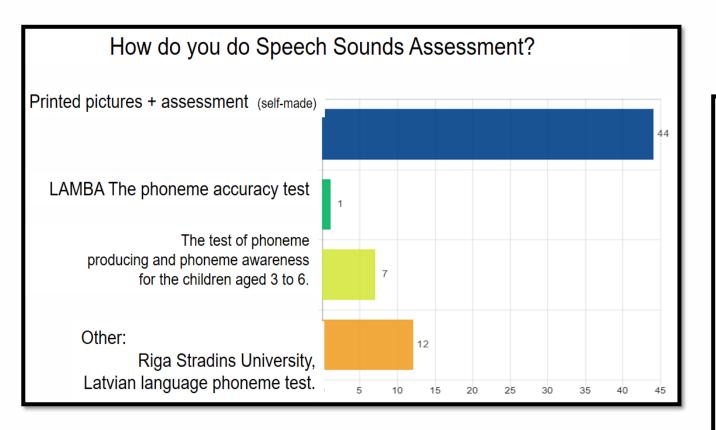
### **SHORT INTRODUCTION**

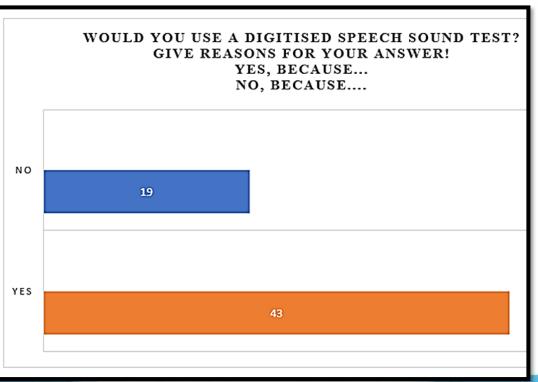
- Accurate assessment of speech and language disorders is very important in both educational and medical practice. Speech sound assessments are designed to show how the child uses each sound in different word positions (at the beginning of a word, in the middle of a word, and at the end) (Toki, Pange & Mikropoulos, 2012).
- Speech therapy and accurate speech sound assessment can be time-consuming. Especially for new speech therapists while they build up experience (Popovici, Buică-Belciu, 2012).
- We live in an era of change technological developments, which means also society habits changes. It also affects speech therapy. In most cases, speech therapists use assistive tools and learning activity platforms. (Drigas & Petrova, 2014). And if in therapy use information and communication technologies (ICT), then assessment also can be computer-based. Computer-based testing includes many advantages as a paperless test, data collection, and effective feedback (Christine Redecker, Øystein Johannessen, 2013).

The research author concluded that in Latvia has no options for validated computer-based assessments.

#### RESULTS

The results showed that there are many assessment options but there is no unity of speech sound disorder measurement. Also, results showed that if speech therapists wanted to use a digital speech sounds assessment tool, they need to create it by themselves.





## **CONCLUSION**

ICT is the 21<sup>st</sup> century one of best achievement. It can offer quicker testing, and more accurate data, interesting for the children being assessed, and therapists can do accurate therapy plans.

Research author in practical action and as part of an internship experience concluded that there are many speech sounds assessment options, but none of them have a validated digital version.

Research data showed that Latvian speech therapists would use digital speech sound assessment.

#### **REFERENCES**

Toki, E., Pange, J., & Mikropoulos, T. (2012). An Online Expert System for Diagnostic Assessment Procedures on Young Children's Oral Speech and Language. *Procedia Computer Science*, *14*, 428–437. https://doi.org/10.1016/j.procs.2012.10.049

Popovici, Doru-Vlad; Buică-Belciu, Christian. (2012). Professional challenges in computer-assisted speech therapy. Procedia - Social and Behavioral Sciences, 33, 518–522. https://doi.org/10.1016/j.sbspro.2012.01.175 Drigas, A., & Petrova, A. (2014). ICTs in Speech and Language Therapy. International Journal of Engineering Pedagogy (iJEP), 4(1), 49. <a href="https://doi.org/10.3991/ijep.v4i1.3280">https://doi.org/10.3991/ijep.v4i1.3280</a>

Redecker, C., & Johannessen, Y. (2013). Changing Assessment - Towards a New Assessment Paradigm Using ICT. *European Journal of Education*, 48(1), 79–96. https://doi.org/10.1111/ejed.12018