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**Speech perception in classroom noise and reverberation by**  
**children with typical and impaired hearing - Preliminary results**

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A child's ability to perceive speech in the classroom influences academic progress. In this study, students with a various degrees of hearing loss perceive spoken words in sentences in a classroom. The room contains multiple noise levels and reverberation times (RTs). Classroom reverberation is measured using standardized procedures (with slight modifications to ASTM C423-02a: X2). RTs are controlled by quantities of acoustic panels in the room. Using the BKB-SIN Test, the speech-to-noise ratio at which the students perceive 50% words correctly (i.e., SNR-50) are measured in three reverberant conditions. Data collected to date indicate that students with severe-to-profound hearing loss (n=15; ages 8-16 years) demonstrated average SNR-50s of +12 dB (SD = 4), +13 dB (SD = 4), and +17 dB (SD = 4) for conditions of 0.3s, 0.6s and 0.9s RT, respectively. Students with typical hearing (n = 14; ages 8-16 years) had SNR-50s that averaged -4 dB (SD = 2), -3 dB (SD = 2) and -2 dB (SD = 2), respectively. Performance/intensity curves are also calculated in order to estimate minimal optimal listening conditions for each RT. This is an ongoing study. The session presentation will include emerging data on children with other degrees of hearing loss.