

**BETTER LEARNING AND COMMUNICATION IN THE CLASSROOM.
A STUDY OF THE EFFECTS OF A TEACHER TRAINING PROGRAM IN
STUDENTS' AND TEACHERS' MUTUAL EVERY DAY SOUND AND
LIGHT ENVIRONMENTS**

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This is an early report from an ongoing study of the effects of a teacher-intervention program. The school is the largest workplace in Sweden, including students and staff. Frequent media reports describe the school as noisy. Due to changes in classroom activity and the technical development the background noise has increased. The classroom noise affects both students and teachers. Students are distracted by noise, especially irrelevant speech, affecting their performance in the classroom. Earlier studies have also shown negative effects of dysphonic voices on students' performance, effort and attitudes. The effects of noise and a deviant voice quality on children depends heavily on the child's cognitive capacity, language- and hearing skills. Poor voice health is a growing problem among teachers. Teachers are poorly prepared for the increasing demands the sound environment puts on voice and communication. To our knowledge there have not been any controlled studies on the effect of a teacher training program targeting voice, non-verbal communication and strategies for enhanced language acquisition.

The purpose of this study is to explore the effects of an intervention program for primary school teachers and to study the effects in relation to the teachers' different sound environments. The study is carried out in a cross-over design. The intervention program targets training of voice, non-verbal communication and strategies for enhanced language acquisition. 25 teachers from seven schools undergo the program in groups and are either subjected to intervention condition or wait-condition. The teacher intervention program consists of 5 weeks of training, 1,5 hours per week. Tests are performed at four/five measuring points: pre/post intervention and follow up at five weeks and three months. Daily voice use is tracked with a voice dosimeter (VoxLog) and vocal health is rated with a Swedish version of the VHI-10. At all measuring points questionnaires on self-efficacy, burnout and coping are completed by the teachers. The effect of the program is followed up by a questionnaire to the students (app. 450 students from school year 3-6). The students' questionnaire targets sound environment, teacher activity, teacher communication, noise levels and more and is answered at all measuring points. In addition, academic results will be collected from the schools as well as results of a questionnaire provided on a regular basis targeting wellbeing, social relations and work environment in school. This study is of importance since it takes on a holistic approach regarding both teachers and their students in their current environment.