

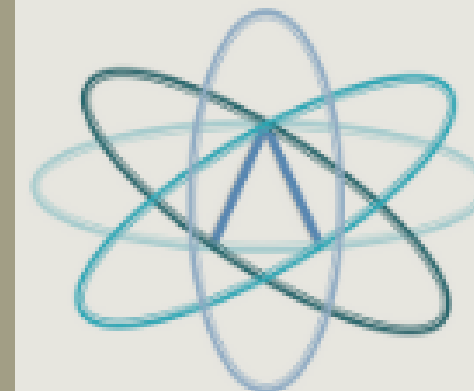
VOICE ERGONOMICS
ONLINE
WORKSHOPS

DEVELOPMENT PROJECT BETWEEN
FINNISH VOICE ERGONOMICS SOCIETY,
THE CITY OF OULU AND
FINNISH WORK ENVIRONMENT FUND

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OULU



Suomen Ääniergonomiaseura
Finlands Röstergonomisällskap
The Finnish Society for Voice Ergonomics



Työsuojelurahasto
Arbetarskyddsfonden
The Finnish Work Environment Fund

How it all started

NEED TO ADDRESS OCCUPATIONAL CONCERN

Recent study showed that 54 % of teachers in basic education have 2/6 voice symptoms weekly (n=350) in the city of Oulu.
(Vertanen-Greis, 2021)

Occupational healthcare in city of Oulu commissioned distance learning workshops on Voice Ergonomics

Finnish Voice Ergonomics Society summoned interprofessional team

Phoniatrics, Occupational health, Terhi Ansamaa
Speech therapy, FM Sirpa Pirilä
Vocology, MSc Jaana Tyrmi, Tampere University
Voice ergonomics, PhD Hanna Vertanen-Greis, Åbo
Academi

02 / 06



TARGETS AND GOALS



01

VIRTUAL

Workshops are held via internet as live workshops and recorded for later use

02

SCALABLE

Workshop can be scaled from small to large groups and target different occupations that use voice as tool

03

RECOGNITION

Employees are coached to recognised factors that form risks for voice health and affect voice ergonomics.

04

ACTIVE ROLE

Employees are helped to take active role in improving their own voice ergonomics, to prevent voice symptoms and advance well-being at work.

METHOD

Baseline

Participants filled validated questionnaire on voice ergonomic risk factors before the 1. workshop and after each workshop

Q&A

Wishes were heard and provided in real time or homeworks as needed

Shearing

Knowledge and ideas where shared on voice ergonomic like dealing with noise and recovery hacks

Customing

Contents of the workshops were customized based on the answers. Voice clinic based on questionnaire results.

Modell for customized yet scalable online workshop on voice ergonomics



SCHEME



1. online workshop

Voice

- a. voice production and structure
- b. working postures and vocal habits
- c. physiological recovery

reminders and homework

2. online workshop

Voice as a tool

- a. mechanics behind voice dysfunctions
- b. indoor environment
- c. personal recovery

reminders and homework

3. online workshop

Working tool

- a. symptoms in voice dysfunctions
- b. stress and environment
- c. social recovery

reminders and homework

4. online workshop

Working voice as working tool

Open workshop for all employees in a city of Oulu, not only basic and early childhood education or administration

+ voice clinic option

+ voice clinic

+ voice clinic option

OUTCOMES

Follow-up

Most of the participants improved at least one ergonomic factor:

- noticing work postures
- small breaks during wd
- voice exercises
- scaling down loud voice
- more lunch walks



Working posture developed to better with more than half of the participants.

Intense and loud voice use got managed better with almost half of the participants.

”

I'm relieved that I now have permission to be silent when I have a weary voice.

Now my voice endures speaking on the phone all day.

I know what I should take account on, these things which I didn't focus on before.

“

Indoor environment was not improved during workshops as it is known to be vast and difficult task, but background noise instead was easier to manage.