



## REAL-WORLD INCLUSIVITY CHALLENGE

# Active leisure life for children with disabilities

### The problem

Children and adolescents with disabilities often need adapted solutions to actively participate in leisure activities, that are essential for their quality of life.

### The challenge

Enable an active leisure life for a wide group of children and adolescents with physical and cognitive impairments.

The project can be centered around one of the 3 activities:

#### 1. Choosing music with impaired senses

Create accessibility and independence in the world of music for students with visual impairments, where voice control based on a general Danish spoken language is not possible. How can a music library/jukebox become accessible using other senses?

#### 2. Gamer life for all

How do children and young people with physical disabilities play on equal terms when their physical conditions are not the same?

Create a gaming environment with the widest possible audience of options with a focus on alternative input controls.

#### 3. Virtual Reality with sensory feedback

Virtual reality creates many opportunities for experience in a school day. However, when you rely on alternative complementary communication and may not have verbal language, it is difficult to provide feedback on your experience while doing the activity.

How can the use of VR glasses for children and adolescents with disabilities be supported with feedback to staff who do not communicate verbally or are limited in their expressions?

### Target audience

The target group is children and young adults who have mixed physical and cognitive challenges, which range from vision and hearing loss, reduced mobility, executive functions in relation to, for example, planning and pronounced difficulty concentrating.

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### Partners

The project is carried out in collaboration with Geelsgårdskolen in Virum. Geelsgårdskolen is a regional special school with 110 pupils aged 6-21 and a highly specialized staff group of approx. 350 employees.

### Interested?

If you would like to work with this challenge, please contact Ingrid Haug, Innovation Consultant at DTU Skylab on [ingha@dtu.dk](mailto:ingha@dtu.dk) or +45 3145 0500

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