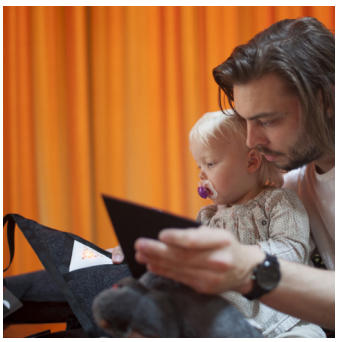



RHYME

RHYME





Future perspectives

During the project we have developed 5 generations of **multisensorial and intelligent technology**.
We are now in possession of a unique proven platform for further development for new users and uses, such as dementia care, elderly care, mental health care, special education and rehabilitation.
This new technology represents possibilities to develop **new health-promoting paradigms**, (vitalising welfare technology), within **care**, **treatment** and **learning**. New paradigms where we bring together knowledge from health disciplines, technology and cultural qualities and expressions.
Through participation in the Cultural Rucksack program within **special education**, and in a Post-Doctoral study and a master course using RHYME technology in **dementia care**, we have already done some work for new uses and user groups.
Further we continue to work on developing **washable sensorially stimulating e-textiles** and surfaces, were we face great possibilities and challenges.

AHO
Arkitektur- og designhøgskolen i Oslo
The Oslo School of Architecture and Design

The Research Council of Norway

NORGESMUSIKKHØGSKOLE
Norwegian Academy of Music

UNIVERSITAS OSLOENSIS MDCCCXI

www.RHYME.no

What is RHYME ?

RHYME is a five year research project (2011-2016) financed by *The Research Council of Norway* through the VERDIKT (IKTPLUSS) programme. The project is a unique collaboration between leading institutions in the fields of Interaction Design, Tangible Interaction, Industrial Design, Universal Design and Music and Health at *Institute of Design* at *Oslo School of Architecture and Design*, *Institute of Informatics* at *University of Oslo* and, *Centre for Music and Health* at *Norwegian Academy of Music*. The project goal has been to **improve health** and life quality for persons with severe disabilities, through use of "**co-creative tangibles**". These are ICT based, mobile, networked and multimodal things (IoT), which communicate following musical, narrative and communicative principles. They are interactive, social, intelligent things that motivate people to play, communicate and co-create, and thereby reduce passivity and isolation, and strengthen vitality, health and well-being. In the project we have carried out 4 action-based empirical studies and developed knowledge by design of 5 new generations of co-creative tangibles in collaboration with *Haug School and Resource Centre*, users, care givers and families. More details and publication list at **www.RHYME.no**

Our results and findings

During 4 user studies and development of 5 generations of **multisensorial Internet of Things,** we have found that the things should have 4 qualities to be empowering and health improving:
- Evoke interest and **positive emotions** relevant to diverse persons' interpretation of the interactive things and the situation.
- Dynamically offer **many roles** the user can take, many actions and action sequences to make and many ways of **self-expression and mastery**.
- Offer aesthetically **consistent** response and build relevant **cross-media expectations** and challenges over time and space, consistent with their character.
- Offer **many relations** to make: to people, things, experiences, events and places.

Further, the technology should give **direct response** at the interaction point, and **cross-media response** to drive the interaction and **mastering experiences** . The health promoting possibilities increase by offering:
- Many **easy accessible**, **parallel** non-hierarchical ways to interact and gain positive experiences, for diverse users in the **same** environment, with no wrongs/failings.
- Many ways to experience self-regulation and control over the music, sensory stimulation interaction form.
- Dynamic microphone and voice modulation possibilities, and **embodied own voice experience**.
- Dynamic hand-held camera recording and projection possibilities for **developing self-expression**, awareness.

By modulating the technology as «intelligent» **actors**, not as passive tools, we found that the technology could **take an active role** in the vitalising health improving activities (play, participation and sharing (SOC)).