

Serious games and services for wellbeing and health

Marie Sjölander, PhD, senior researcher
RISE – Research Institutes of Sweden

marie.sjolinder@ri.se



Marie Sjölinder

Marie Sjölinder is a senior researcher at RISE. She has a PhD in psychology with a focus on age differences and the use of technology. Marie is managing national and international R&D projects within e-health and welfare technology .



Design of interfaces for people with blindness and low vision - Designing the complete learning environment for Braille users studying mathematics

School of Innovation, Design and Engineering, division of Information Design

Mälardalen university: **Yvonne Eriksson**

School of Innovation, Design and Engineering, division of Information Design

Mälardalen university / Swedish Agency for Accessible Media: **Björn Westling**

This paper focuses on complex content such as mathematics
and how it could be accessible for Braille readers

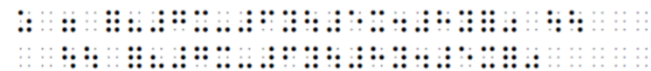
a	b	c
⠁	⠃	⠉
1	2	3
⠠⠠	⠠⠠	⠠⠠

Design of interfaces for people with blindness and low vision - Designing the complete learning environment for Braille users studying mathematics

The aim of the paper is to:

- Highlight and to discuss what is required from digital platforms to support mathematic Braille
- Identify the functionality and the technical infrastructure needed to make the design of a truly usable learning environment possible

$$z = \frac{\frac{7x - 6y}{5x + 8y}}{\frac{7x - 6y}{8y + 5x}}$$



The COSMO@Home Application – Iterative Development and Implementation of the Learning Goals

RISE: **Marie Sjölander, Olov Ståhl, Erik Einebrant, László Sall Vesselényi, Niels Stor Swinkels**

KU Leuven: **Barbara Weyn, Marjolein Verly, Marlies Treunen**

UZ Leuven: **Sam Geuens, Jessia Nijs**

RWTH Aachen University: **Anas Abdelrazeq, Samira Khodaei Dolouei, Kathrin Hohlbaum**

Philips: **Sanne Nauts, Privender Saini, Ozgur Tasar, Annerieke Heuvelink**

This paper describes the design journey in the development of an edutainment application for children

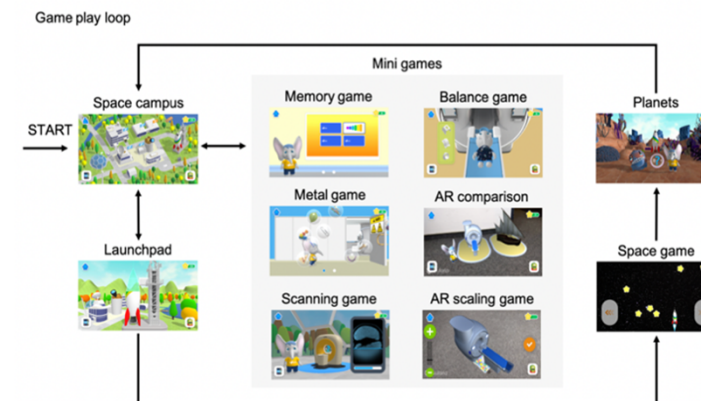


The COSMO@Home Application – Iterative Development and Implementation of the Learning Goals

The application consists of a set of mini-games, and the aim was to teach and prepare children for the magnetic resonance imaging (MRI) scanning procedure

The paper describes the three phases of the development:

- 1) Initial tests with children outside the hospital to explore the general concept
- 2) Tests with children at the hospital with more complete versions of the prototype
- 3) Tests in the home environment where the application was tested in a real context



Future challenges

- Deeper understanding the learning context in relationship to needs within specific user groups
- Mapping between successful learning techniques and the intended digital environment
- Further adaptation of the content with respect to kind of content and intended learning goals
- Individual needs withing the target groups