

Lohkanlihkk

Lohkanlihkku (“Joy of Reading”):

Co-developing a Digital Sámi Literacy Game for Five Sámi
Languages through Indigenous Game Design and
Endangered Language-in-Education Planning

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Funders and project partners

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Background

- Interreg Aurora development project from March 2025 to February 2028
- The project aims to
 - (1) enhance children's early reading skills
 - (2) support teachers' pedagogical competencies in literacy instruction, and
 - (3) provide a motivating, freely accessible digital learning tool usable both in classrooms and at home.
- *Lohkanlihkkku* –game in five Sámi languages: Inari, North, Julev, Skolt and South Sámi



Lohkanlihkk

Culturally and Linguistically
tailed Educational Solutions
for the Sami Language



Special Features
of Sámi Language /
Language
Sociological Aspects
of Sámi Language

Pupils-centered
Individual
Progress

Creating a Joint
Arena for Idea
Sharing with the
Sámi Community
in three countries

LEARNING TO READ AND WRITE THROUGH JOY

Mapping the Needs of
Sámi Language Teaching –
Interviews and Discussions
with Teachers

Wide Collaboration
with Sámi Schools
and Stakeholders

CASE:
Creating a Digital
Learning Environment

Phonological
Awareness

Supporting
Pupils' Individual
Needs

Decoding

What is the *GraphoLearn* -game? (Finnish: *Lukukupla*)

- Digital learning game
- Evidence-based learning game, developed at the University of Jyväskylä
- Basics of reading and writing
- Basics of reading comprehension
- So far only in used in research, but will be published soon
- Positive feedback from both teachers and pupils from the research use (Luokanopettaja 4/2022)

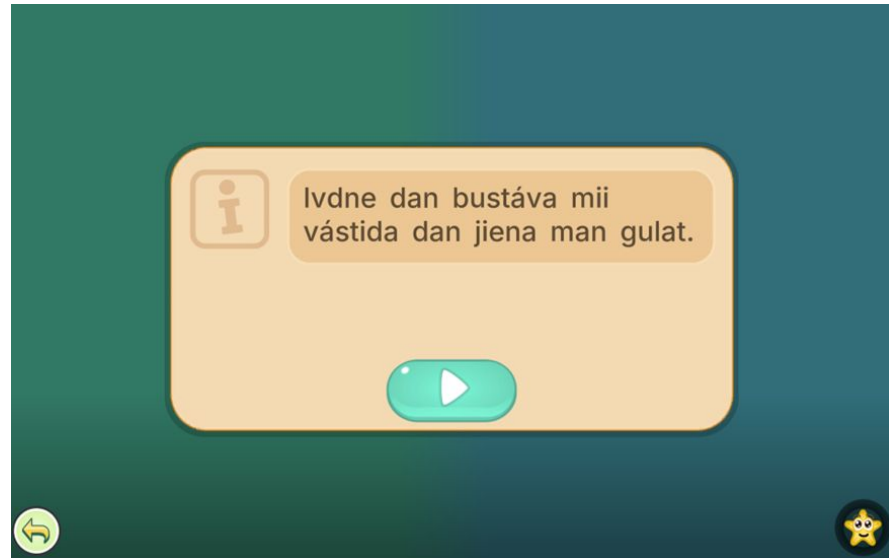
Opettajat innoissaan taitoihin mukautuvasta Lukukupla-pelistä

Täsmäjuttu. Monipuolinen ja motivoiva. Hirveen tehokas ja hyvä. Ihan loistojuttu. Näin 11 keskisuomalaista opettajaa luonnehti uutta digitaalista Professori Pörröpää ja Lukukupla - lukemaanoppimispeliä.

LUOKANOPETTAJA
LEHTI 4/2022

Lohkanlihkku -games

- *GraphoLearn* platform and evidence-based task types
- Language-specific learning content is developed based on its linguistic structure and orthography
- The game is not translated from Finnish; instead, each language version is developed from the language's own linguistic and pedagogical foundations
- The development process draws on research and existing knowledge about:
 - early literacy acquisition (learning to read and write)
 - literacy development in multilingual children
 - language-specific challenges identified in literacy learning
- Cultural appropriateness is a key guiding principle throughout the development process



Challenges

- Sámi languages are Indigenous minority languages with limited visibility
- Lack of high-quality up-to-date learning materials
- Varied linguistic backgrounds of pupils
- Sámi language pupils literacy skills need to be researched more
- Juuso 2024
- Special features of the Sámi languages proven challenging to learn

→ The game wants to address these challenges



Considerations

- Dialectal variation of the Sámi languages
 - How to ensure inclusion?
- Varied linguistic backgrounds of pupils
 - teachers have expressed concern of learning materials having too difficult vocabulary
- Inclusion of Sámi culture in the game
 - Teachers and community members wish for a balance of traditional topics and modern interests of pupils



What are we working with right now?

- Teacher interviews, analysis of existing learning materials, collaboration with language experts and experienced teachers: an open dialogue throughout the development process
- Designing and developing the linguistic and pedagogical content of the game
 - Sequencing, phoneme–grapheme correspondences, pacing, assessment and support exercises
- Game UI translation: addressing dialectal variation and ensuring clear, accessible language
- Graphics: collaborating with Sámi knowledge holders and graphic designers to determine how Sámi culture is represented in the game
- Music: collaborating with Sámi musicians to create familiar and culturally meaningful soundscapes
- Story-based game modules incorporating Sámi storytelling traditions

Stakeholder and community cooperation

Active dissemination, cooperation and communication

- Stakeholder board
- Pilot testing in schools
- Webinars, workshops, presentations
- Active presence in social media
- Teacher and language expert interviews
- Testing of cultural content and collecting feedback

→ Cooperation with the community has a central role in the project

→ Schools, children and youth, parents, policy makers, experts



Research & Publications

The project will produce scientific publications and reports, and all project activities will be documented and disseminated through the Dieđut publication series.

- The current state of Sámi children's literacy skills
- Literacy acquisition processes in Sámi languages
- The pedagogical approach and learning methodology of the *Lohkanlihkkku* game
- Children's learning outcomes and progress in the Lohkanlihkkku game
- The organisation and implementation of community stakeholder collaboration
- Developing the game's cultural content and ensuring its alignment with Sámi culture
- Pedagogical guides for use of the *Lohkanlihkkku* game



Our Objectives

- The game will become a linguistically sustainable learning resource that genuinely meets the literacy learning needs of Sámi-speaking children
- The game will serve as a support tool for teachers, enabling them to monitor each pupil's individual literacy development
- The game will become an established part of Sámi language education and can continue to be developed and expanded in the future
- *Lohkanlihkkku* will demonstrate how research, technology, and Indigenous education can work together to support language revitalisation
- Learning tools such as *Lohkanlihkkku* are essential to ensuring that Sámi languages have an equal place in society.



More information about the project

Interreg Aurora project page:

<https://www.interregaurora.eu/approved-projects/lohkanlihkkku/>



University of Lapland homepage

<https://ulapland.fi/hanke/lohkanlihkkku/>



Facebook & LinkedIn: Lohkanlihkkku



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Gütu!

Questions?



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