

Læring i øjnehøjde

"Learning at eye level"

4 inclusive elementary school teaching courses



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Synscenter Refsnæs

- National center for children with blindness and low vision
- Various ability dependant school offers and educational opportunities
- Nationwide counselling of students, professionals and families
- "Sister" organization to IBOS – Institute for blindness and low vision



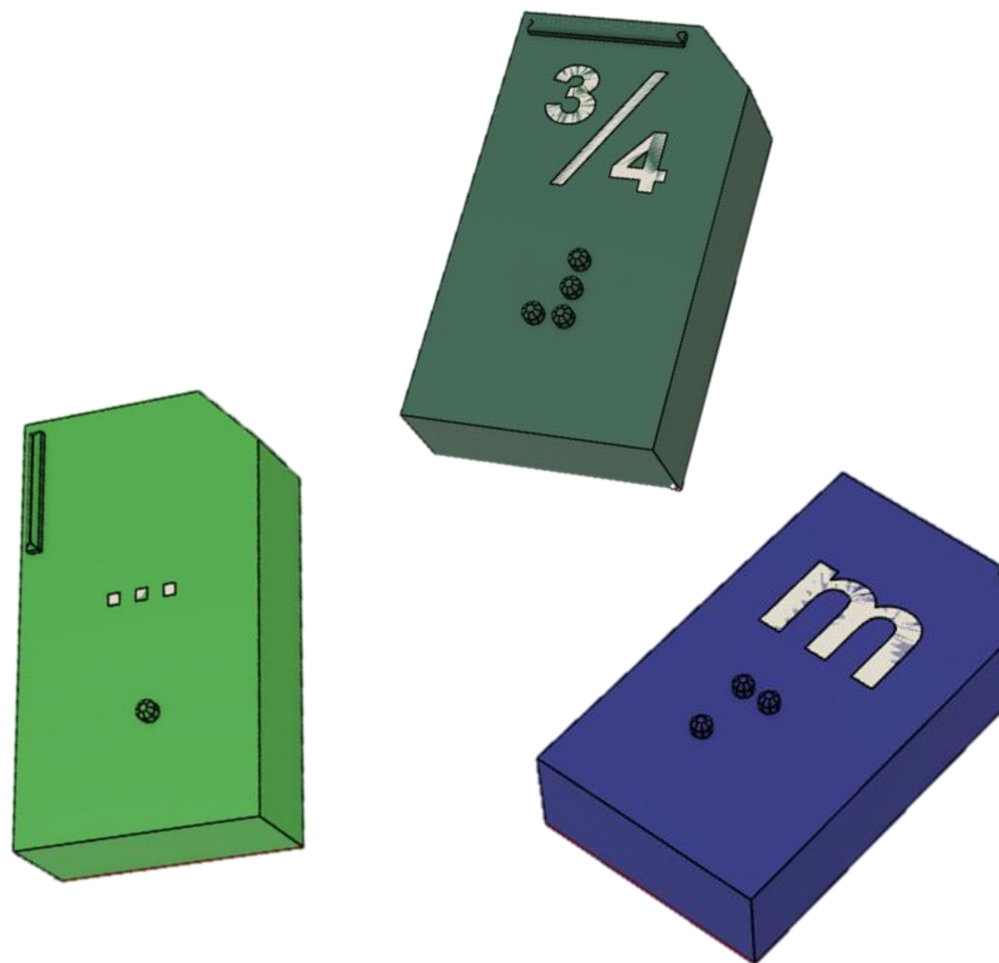
Læring i øjenhøjde – *“Learning at eye level”*

- A project funded by the Danish Ministry of Children and Education in collaboration with multiple experts and practitioners.
- The aim of the project is to provide inspiration and guidelines for teachers in the elementary school, on how best to secure optimal possibilities for students with visual impairment, to be a part of the learning environment in their classes.
- The adopted approach is a series of general guidelines on how to organize your teaching, including podcasts and instruction videos, followed by 4 exemplary teaching courses.
- Guidelines and courses are freely available at our website



Inclusive Teaching Course

Danish - Braille



Target Group, Purpose and Approach - Danish Braille

- An inclusive teaching course that support students with blindness in mainstream primary schools, in developing early literacy skills (grade 0.-2.)
- Magnetic Braille/letter bricks developed at Synscenter Refsnæs
- Supports both full and contracted Braille
- Theme-based approach - key vocabulary is explored through a variety of activities to enable the development of concepts, language, and early literacy skills



Inclusive Design of the Magnetic Bricks – Danish Braille



Each brick includes:

- Natural-sized Braille
- A cut corner for orientation
- Tactile marks: vowels, consonants, contractions, basic character, and capital sign
- Color-codes and visual text to support inclusion



Theme-Based Teaching for Concept and Language Development – Danish Braille

Focus on key vocabulary through:

- Reading, writing, speaking, listening activities
- Games and physical play
- Promotes deep understanding and meaningful use of words
- Helps teachers structure inclusive lessons for all learners



Show and Tell - Toolkit and Future Expansions

- Danish Braille

- A teachers guide and lesson plan
 - Illustrated Braille alphabet, Braille contraction overviews
 - Ideas for theme-based physical play and outside activities (connected to the theme and key vocabulary)
 - Reading, writing, speaking and listening activities (connected to the theme and key vocabulary)
 - Tactile books, poems, and games (connected to the theme and key vocabulary)
 - Supporting objects (connected to the theme and key vocabulary)
 - A toolbox with magnetic bricks and magnetic boards
 - QR codes linking to instructional videos (for the teacher)
 - Podcast: *Teaching Danish Language and Inclusion of Pupils with Severe Visual Impairment* (for the teacher)
- Link to the teaching course – Danish Braille:

<https://www.synref.dk/viden-og-udvikling/laering-i-oejenhoejde/dansk-punktskrift>



Inclusive Teaching Course Danish – Low vision

Background of the teaching course

- Based on CFU's teaching course about reading and writing motivation
- Inspired by Karla's Fantalastic Class – an animated series aired on DR's Ramasjang:

https://www.dr.dk/drtv/serie/karla-s-fantalastiske-klasse_373997



Target group, Purpose and Approach

- Danish low vision

- Course for students with visual impairments (with the ability to read visually)
- Focus on strengthening reading and writing skills in grades 0–2
- Showing how to digitize and making materials accessible primary using tablets
- Using audio as a compensatory strategy for students with low vision
 - Audio strategies also benefit:*
 - *students with written language difficulties*
 - *students with typical reading and writing development*
- All students work with digital texts and strategies in this course
 - ➡ promotes inclusion and prevents stigmatization



Show and Tell - Digital Materials and Videos

- Materials available as PDFs and writable e-books
- Short videos demonstrate:
 - *How to digitize materials*
 - *Accessibility features in iOS and Android*
 - *How to provide visual descriptions for films and images*
 - *Examples of using audio strategies and visual adaptation on tablets in early primary education*



Link to the teaching course – Danish low vision:

<https://www.synref.dk/viden-og-udvikling/laering-i-oejenhoejde/dansk-synsnaedsaettelse>



Inclusive Teaching Course

Maths – Low vision and blindness

- An inclusive geometry course in maths (6-8 lessons)
- A learning environment everyone can be part of regardless of visual impairments
- Every lesson is followed by a comprehensive guide and explanation that emphasizes special considerations in regards to the student with a visual impairment



Target group, Purpose and Approach

- Maths

- The course is intended for 4th grade but could be used in the 3rd or 5th grade aswell - depending on level
- The aim is to provide an exemplary course of a typical topic in geometry – in this case The Circle
- Both students with low vision and blindness can perform the exercises with minor adaptations
- The premise of this particular course is to make use of readily available tactile items and reduce the need for special custom made aids
- The student with blindness will be needing special tools for measuring and construction though
- Advocating an investigative approach



The materials – an overview

- A comprehensive introduction to the method adopted
- Downloadable resources that enables a teacher to apply the method to his/her own courses
- 6 instructional videos on how to apply special aids for measuring and constructing circles
- 3 podcasts containing general considerations and attentions when you have a maths student with a visual impairment
- A short “to-do list” containing key considerations for quick referencing
- Digital materials available in different formats suiting magnification users and screenreader users
- Link to the maths course:
[Matematik - Synscenter Refsnæs](#)



Inclusive Teaching Course Physical Education - Low vision

- A course in floorball for PE in primary school grades 4-6.
- Based on didactic models for adapting and adjusting physical education.
- Focus on inclusion and participation in PE for students with visual impairment.



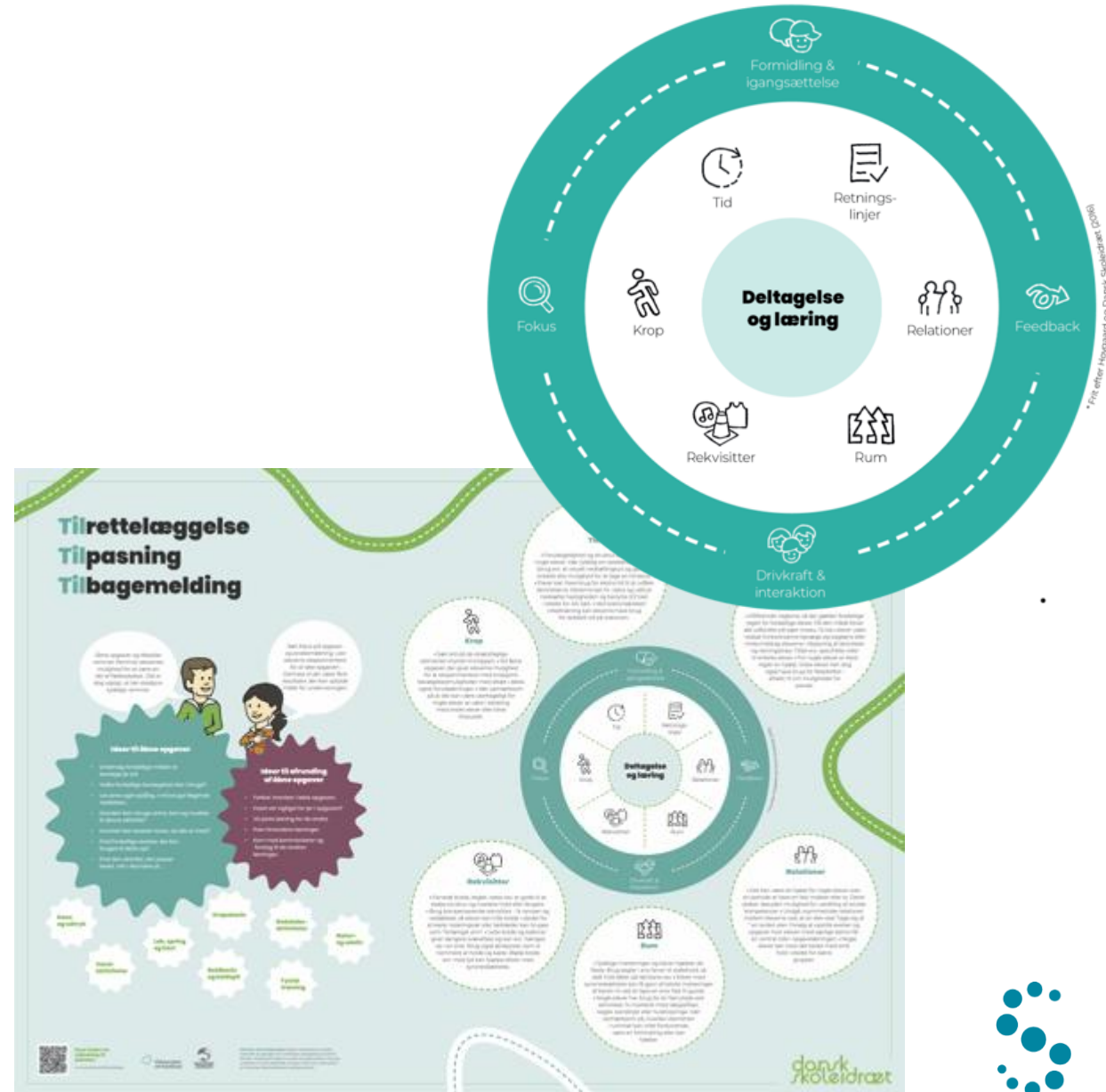
Teacher's Guide and Instructional Focus

- Highlights key considerations when teaching a student with severe visual impairment in PE.
- Outlines essential framework elements such as preparation, planning, physical environment, instruction, and lesson structure.
- Guidance on how various instructional approaches can support the student's understanding and participation.
- Focus on how the assistant can support participation in a way that promotes independence and inclusion in PE.
- Detailed lesson plan with adapted, exemplary activities and exercises.
- Didactic models.
- Links to a video on instructional methods and a podcast



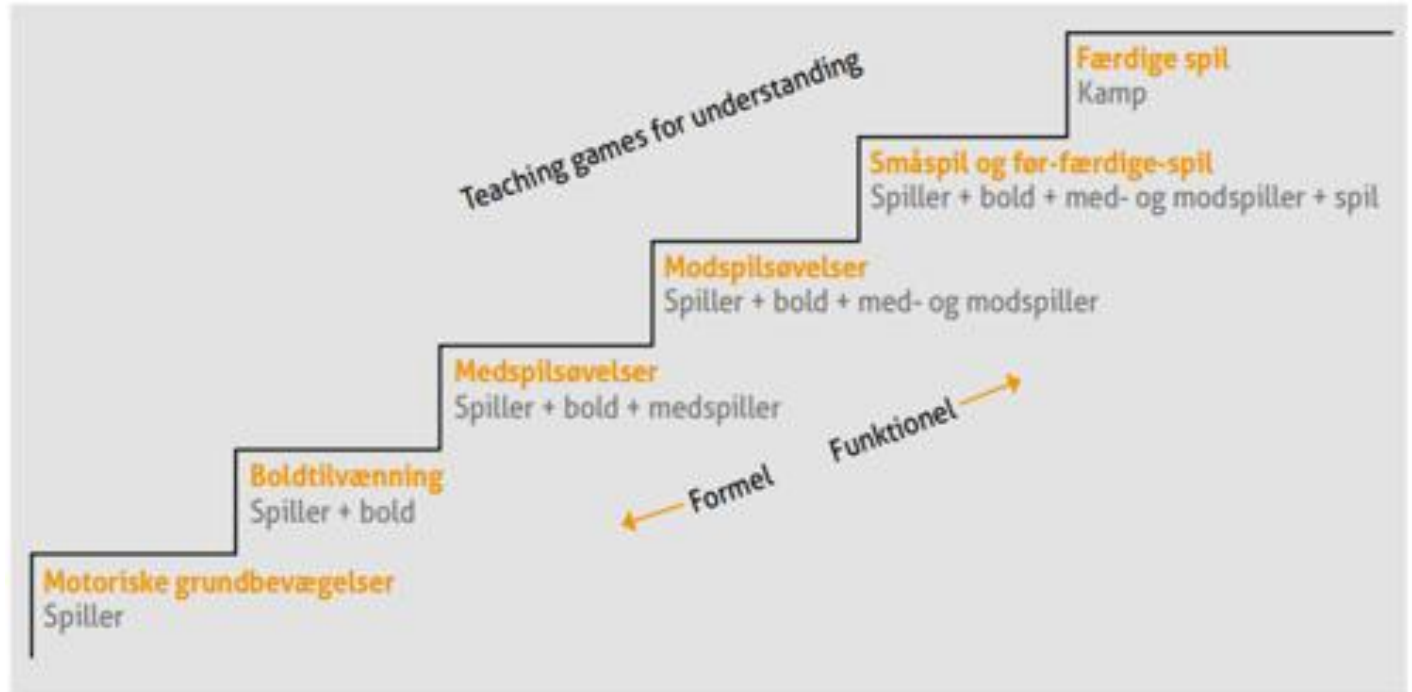
Didactic Models

- "Aktivitetshjulet"/ "The Activity Wheel" (My translation).
- Aktivitetshjulet from *Alle børn med i idrætsfaget* by Dansk Skoleidræt, Videnscenter for handicap and Parasport Danmark ([Dansk Skoleidræt, 2024a](#))
- The poster from *Alle børn med i idrætsfaget* in *Vejledning til plakaten, Tilrettelæggelse, Tilpasning og Tilbage melding* ([Dansk Skoleidræt, 2024b](#)).



Didactic models

- "Den dynamiske boldspilstrappe" / "The Dynamic Ball Game Ladder" (My translation).
- Boldspiltrappen fra *Den dynamiske boldspilstrappe* af E. Juul, udgivet af Dansk Skoleidræt ([Juul, 2024](#))



Overall Approach

- Seeing possibilities rather than limitations.
- Podcast: *Inclusive Physical Education for Students with Severe Visual Impairment:*
https://app-rsjdxcms-prod-001.azurewebsites.net/media/zxel5bjo/podcast_idraet_jylland_29-11-2024_v5_med_trailer.mp3



Links

- [Læring i øjenhøjde - Synscenter Refsnæs](#)
- [Den nationale vejledning - Synscenter Refsnæs](#)



Presentation by teachers and advisors from Synscenter Refsnæs

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