# NOVIR newsletter 2016

Welcome to the NOVIR newsletter 2016.

For the second time the newsletter is produced in English to make sure that we all have access to the same information. The decision to make NOVIR network's common language English was taken on the NOVIR seminar in Stockholm in 2014.

The transition to using English will of course require that we use the time to translate the materials, stories and news, we each want to share. Until this is completely incorporated, we will of course accept contributions in the national language. This due to the motto, that it is better that we share some information than none.

In this newsletter is thus only contributions made in English. I thank you for all the contributions made by the Nordic visual staff.

The information in this newsletter is compiled by Marie Fasmer, NOVIR coordinator.

Read more about NOVIR on www.novir.net

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www.ibos.dk

# Iceland

## Program for Cerebral Visual Impairment in Iceland

Since September 2015, The National Institute for the Blind, Visually Impaired and Deaf-blind in Iceland has been running a new Cerebral Visual Impairment (CVI) program. The focus is to set up a database with children with neurological disorders, brain damages with a risk for CVI from year 0-12. The CVI program has the following objectives:

- Set up and implement the visual functions and functional vision assessment programs in children with neurological disorders and risk of cerebral visual impairment.
- Set up and implement the rehabilitation programs of children with cerebral visual impairment and support children into the school.
- Develop a screening program and tools for following up children with risk of cerebral visual impairment at very early stages – early intervention
- Set up and implement of training course for teachers / staff / professionals in charged with children with cerebral visual impairment.

The children are assessed on an individual basis since they need their own habilitation program according to the outcome of the assessment. Based on each child assessment results the recommendations will be used for the individual education plan.
The tests used in the assessment are standardized and observational tools according with the child chronological and psychological age. The additional examination results are included as a part of the assessment since the child needs to be seen holistically and the variable of each child is different. The program has a transdisciplinary approach including different stakeholders in charge of supporting the children with CVI. This includes: parents, teachers, doctors, teacher advisors and other relevant professionals.
With this CVI program, we hope to develop a knowledge base and resources for supporting children that did not have sufficient support and focus on their functional CVI needs.

## Collaboration with the National hospital

A collaboration with the National hospital –the Opthalmology department has emerged. The collaboration has been ongoing since the fall of 2015 and is going well. The optometrist of the Institute is based two mornings each week at the ophthalmology department at the hospital while people who are being treated for ADM injections are seen. This has led to a better understanding of the way each organization works and referrals have increased and the clients that are being referred have not gone as far in their progress of visual impairment as we had seen before. We are able to intervene sooner and start rehabilitation before the client has lost his vision.

## Sound of Vision

The National Institute for the Blind, Visually Impaired and Deafblind and currently involved in a Horizon project, Sound of Vision. The main objectives of Sound of Vision is to design, implement and validate an original non-invasive hardware and software system to assist visually impaired people by creating and conveying an auditory representation of the surrounding environment. This representation will be created, updated and delivered to a blind person continuously and in real time. This system will help visually impaired people in any kind of environment (indoor/outdoor), without the need for predefined tags/sensors located in the surroundings.

For further information go to: http://www.soundofvision.net/

## TEACH CVI

TeachCVI is a two-year European Erasmus + project. The aim of the partnership is to create collaborative tools for teachers and health care professionals. To build a bridge between the teacher/educator and a health care professionals so they can work together to benefit the target group; children with cerebral visual impairment, herby referred to as CVI.

This is done by:

- making a tool for health care professionals and educators to screen for CVI,
- to create a common database of tools for CVI detection,
- to produce resources for teachers to support their work in the assessment of CVI
- making teaching methodologies to enable the child's access to literacy, this includes training and teaching materials for teachers/educators of children with cerebral visual impairment.

In this project, we are adopting an action research approach including an action where teachers will be taught about how to enhance the literacy attainments of children in each of these three broad categories. This project will harness the cross culture, multi-professional talents of partners to design, assess and deliver a comprehensive, cohesive training package for teachers, social pedagogues, parents and others available for every teacher in Europe that is struggling in teaching a child with CVI.
The project is nearly half way through and our pilot list of screening for CVI are in the testing process. In spring next year a training will be offered to teachers. They will be able to attend a two-day seminar on how to work with students with CVI and understanding what CVI involves.

Our webpage has recently launched and the address is: www.teachcvi.net
The National Institute for the Blind, Visually Impaired and Deafblind in Iceland is the project leader.

The project partners are:
The National Institute for the Blind and Visually Impaired, Iceland (coordinator)
Child Vision, Ireland
Positive Eye, UK
State Diagnostic Centre, Iceland
The Royal Blind, Uk
KU Leuven, Belgium
Agency for special needs education and schools, Sweden

# Finland

## ” Education for Blind” celebrated its 150- year anniversary in October 2015, in Finland

The celebration took place in Helsinki and was organised by The Finnish Federation of the Visually Impaired (FFVI) http://www.nkl.fi/7/english. In combination with the celebration the one-day seminar of important theme “Motivating Braille Literacy in Digital Age” was organized. Both seminars were streamed also through web-radio in order to make possible to participate from all over the country. The Braille-theme is in the specific focus of the FFVI -work, and its representatives specially pointed out their concern of the Braille-skills in the time of digitalization during compulsory and further education.

## Project of tactile pictures and maps

Tactile pictures and maps has been conducted in last years in co-operation with Onerva and learning material designers by Celia, a national center for accessible literature and publishing in Finland. Main idea was to support the pupils to use tactile pictures and to help the mainstreamed schools to handle the tactile pictures and maps. The mainstreamed schools had expressed their concern about being unable to make priorities of the relevant pictures among excessive amount of tactile pictures in study books. There was a common understanding of the need to modify the schoolbooks and a need for a generic set of tactile pictures. As the result of this project, the amount of delivered tactile pictures decreased in study books but the quality increased and gave space to the specified embossed pictures and maps, which follow the national curriculum. These choices helped especially the pupils in mainstreamed schools to follow the education in inclusive settings. In addition, the same set of tactile pictures could be used both with braille book and with e-book. More information: https://www.celia.fi/eng/

## Nordic and Baltic countries – shared concerns and goals

The ICEVI Nordic and Baltic sub-region meeting took place in October at Estonia with participating contact persons from Iceland, Latvia, Norway, Sweden and Estonia and Finland (chaired by the new head of sub-region Tarja Hännikäinen, Finland). Even though, the situations are different in Nordic and Baltic countries, our main goals and concerns are similar.

The participants highlighted that in addition to working for equal educational opportunities for blind and visually impaired, it is more and more important to ensure the high quality of that education.

Our Nordic-Baltic team expressed our common concern about the lack of trained professionals for persons with visual impairment. Often there are no possibilities to get specialization in visual impairment at university level, so the cooperation among all partners – e.g. ICEVI and NOVIR is crucial. The other topics discussed were employment/ unemployment among persons with visual impairment and situation with services for persons with MDVI.

### A New Innovative Learning and Working Environment at Onerva, Jyväskylä, Finland

Onerva - unit by Valteri Center for Learning and Consulting – moved to a new building in January 2016. A new kind of learning and working environment that enables functionality, activeness and the application of new technology. All premises and furniture can be adapted to different purposes. Accessibility and multi-sensory impact in the environment refers to the suitability of the premises for everyone, irrespective of the nature of support needed. The spaces and routes have good portable lights and clear contracts, fine acoustics and they are barrier-free and safe. Further information: http://www.onerva.fi/en/

### Welcome to Onerva, Jyväskylä, Finland on September 2016

Next NOVIR meeting will take place in September 2016 at Valteri – Onerva, Centre for Learning and Consulting, Jyväskylä, Finland. Onerva has the great pleasure to host this meeting and to use this unique possibility to share the meeting days partly among ICEVI Nordic- Baltic team and the NOVIR team. Here the preliminary schedule:
Wednesday 21st of September 2016: ICEVI Nordic-Baltic - team meeting and the joint evening program for ICEVI and NOVIR participants. Thursday 22nd of September: A collegial day for all participants and a functional tour at Onerva. Friday 23rd of September: NOVIR – meeting.
More information: tarja.hannikainen@valteri.fi

## Norway

### Newsletter from Statped, Norway

Statped is a national state agency that offers special education services within the educational sector. The municipalities and county municipalities are obligated to meet children, young people and adults in an adequate manner according to their rights within an inclusive learning environment. Statped intends to contribute actively to achieving this objective. Statped's services are voluntary and offered as supplementary support.

Statped is divided into four regional sections and provide services within six different disciplines or fields:

- Acquired Brain Injury
- Complex Learning Disabilities
- Deaf-blindness / Dual Visual and Hearing Impairment
- Hearing Impairment
- Speech and Language Impairment
- Visual Impairment

We also have a department dedicated specifically to the development of learning resources and new educational technology. Statped has a total of 748 FTEs (full time equivalents). Read Statped's Annual Report for 2015: http://www.statped.no/Stottemeny/Om-Statped/ (not published yet)

## Learning resources and technology

Statped intends to be a driving force behind the development of learning resources and technology within the field of special needs education. We produce special learning aids, teaching materials and media for adapted education such as audio books, books in braille and other tactile teaching materials. During the school year 2014 /2015, Statped has produced approximately 80 textbooks in braille, audio books, or e-books intended for braille display. In addition, Statped has delivered approximately 300 different adapted textbooks in braille or as e-books (reproductions). To make adapted books in braille easily accessible to the schools, Statped has this year developed a searchable overview and a simpler booking system on statped.no.

## Research and Development work (R&D)

Statped works strategically to develop new knowledge based on research and practical experience. Our agency has developed its own R&D strategy for this kind of work. To coordinate, promote and unify Statped's research in the field of special education, a section for R&D was established in 2015. Statped's research is in collaboration with universities, health care institutions and others.
In 2015, Gro Elisabeth Aasen defended her doctoral dissertation for the degree of Ph.d. (Faculty of Educational Sciences, University of Oslo): *Language and activity among children and adolescents with congenital blindness. An observation-based study*. This thesis is written within the field of special needs education regarding children and adolescents with congenital blindness and varying degrees of additional difficulties such as autism spectrum disorders (ASD). Focusing particularly on echolalia, the thesis is concerned with how unconventional utterances expressed by children and adolescents with congenital blindness and ASD can be understood, and the effect augmentative and alternative communication (AAC) – using tactile symbols and schedules – can have for children with blindness in a heterogeneous sample.

### Publications

Commands for the screen reader VoiceOver for iOS
http://www.statped.no/Laringsressurs/Fag/Syn/Kommandoer-i-VoiceOver-for-IOS/
Learn how to read braille:
http://www.statped.no/Laringsressurs/Fag/Syn/Lar-a-lese-punktskrift/Filmsnutter-om-a-lare-a-lese-punktskrift/
See also learning resources at statped.no: http://www.statped.no/Laringsressurs/Fag/Syn/#l

### Parent training

During 2016, we will continue the project “Parent training”. The aim is to develop, strengthen and coordinate the parent training in Statped. The training program is initiated with an aim to take care of parent’s needs so that they can take part in their children’s education more actively. Parent training will be offered to all of Statped’s target groups in all regions.

### Networks in Statped

In 2015, internal professional networks were established in all our areas of specialization. The purpose is to coordinate, build and develop competence within and between regions and professional disciplines. Four networks in the field of visual impairment were established last year. These networks are Network for braille, Network for mobility and orientation, Network for ICT and Network for evaluation and assessments of visual functions.

## Sweden

### Conference - Tactile Reading

The conference **Tactile Reading** will take place in Stockholm **April 5–7 2017**, bringing together people working with children and youth with visual impairments and blindness, from all over the world. Academics in various research areas, teachers, specialists, commercial companies, developers and innovators in the field of tactile reading are invited.
The conference is arranged by Swedish Agency for Accessible Media (MTM) and National Agency for Special Needs Education and Schools (SPSM).

This will be a chance to share experiences and research in the field of tactile reading. The conference will promote best practices and inspire to new ideas for research, and will bring people together for future collaboration. This is the first time this conference is arranged, with the ambition to create a recurrent international event.

**Call for Abstracts** - We are seeking practitioners and academics to give presentations on the following topics:

- Development of tactual understanding
- Tactile reading and the brain
- Braille and literacy
- Tactile graphics
- Universal design and tactile reading

The time for a presentation is either 20 or 40 minutes. All presentations should be in English. Send your contribution to: tactilereading2017@mtm.se Deadline: **May 31th 2016**.

**Present a poster** - If you prefer to present a poster at the conference please submit your proposal and contact us. For more information and details: www.tactilereading.org

## Literature

**Participation – an approach at school [Delaktighet – ett arbetssätt i skolan]**
By Kristina Szönyi and Tove Söderqvist Dunkers
To experience and feel participation is a prerequisite for learning and development. Practice shows that especially pupils with disabilities face barriers to participation in school and that there is a great need to improve opportunities for participation.
The model for participation presented in this book is based on a contextual way to explore, understand and develop the pupils' learning environment. The starting point is six different aspects of participation and three cultures that together form a conceptual understanding. Pupils' perspectives and experiences, together with observations in the learning environment, constitutes a basis for the practical work with the participation model in school.

The learning environment for pupils with disabilities is the focus, but the model of participation is relevant to all pupils. The model is not limited to the school arena, but can as well as be used in other activities, regardless of the individual's age or functional ability. The publication is addressed to everyone who works in school and to professionals in other fields who want to develop ideas and approaches regarding participation. It can be read with great pleasure and interest by all who are interested in participation, as a theoretical concept and right, but above all as a support to the development of equal conditions and participation for students with disabilities.
The book is in Swedish and can be ordered from https://webbshop.spsm.se/delaktighet-ett-arbetssatt-i-skolan/

**With the sound as the world around – About the sound environment and participation for pupils with visual impairment [Med ljudet som omvärld – om ljudmiljön och delaktighet för elever med synnedsättning]**
By Sara Backström Lindeberg
All pupils have the right to participate, and to experience participation in school. But how can you be a part if the sound environment is so noisy that nothing can be distinguished? Or if it is so quiet, so that nothing is heard?

This research and development report is about how students with blindness in primary and secondary schools use sound in different situations during the school day to understand and get access to both social and educational context. The report provides a broader perspective on the importance of the sound environment in the school. We know that the sound environment has a major impact to people in general, but what does the sound environment mean for a person who does not see? And how does it work in various learning environments in school?
This report highlights, perhaps for the first time in educational research, the sound environment's crucial role in the school for students with vision loss from their own perspective.
The report is aimed for teachers, principals and staff in school and kindergarten, for students and researchers in education and special education as well as other related research fields.
The report is in Swedish and can be ordered from https://webbshop.spsm.se/med-ljudet-som-omvarld/
The report is based on Sara's master's thesis titled ”Auditivt fokus - Om ljudmiljö och delaktighet för elever med synnedsättning.” It can be downloaded from https://www.spsm.se/contentassets/956abc84f24448949ed84139694b3953/auditivt-fokus.pdf
This thesis is also available in an English version: Auditory focus - Sound environment and participation for pupils with visual impairment. It can be downloaded from https://www.spsm.se/contentassets/956abc84f24448949ed84139694b3953/auditory_focus_english_slutlig.pdf

# Denmark

## Conferences

IBOS want to do what we can to support the Nordic network and knowledge sharing. Therefore, we have decided that many more of our conferences is to have a Nordic perspective and our aim is to host 1-2 Nordic conferences annually. The themes will be published regularly.

We are happy to receive inputs for topics and interesting speakers. Our ambition is to reach a high professional level and give conference attendees useful and innovative tools for daily practice in working with the target audience.

So far the following conferences in the pipeline:

**Vision & aids - Nordic conference on vision aids, ICT and accessibility.**
This conference will offer professional presentations and workshops on visual compensating aids.

The conference will also feature an innovation corner, which will be presented technological and practical solutions, which are not yet fully developed, and where there is not yet a

commercial project partner. There will be ample opportunity to provide input and suggestions for changes and adjustments before the products hit the market.

The conference will also consist of exhibits and product presentations of visual compensating aids - from ICT solutions for everyday devices.

The conference will take place on **April 19-20th 2017**.

**Vision and brain**
Nordic conference on sight and all kinds of brain influences. The items are e.g. Post Commotio, whiplash injuries, stroke, cerebral thrombosis - combined with visual effects.

The conference will consist of professional presentations and workshops, and will take place on **September 6-7 2017**.

**Vision and inclusion**
Nordic conference on inclusion of people with visual impairment at all levels - from kindergarten and education for leisure and work.

The conference is set to **autumn 2018**.

For more information or input, please contact Lea Johanne Sarfelt on mail les@ibos.kk.dk or Annemarie Enevoldsen on mail ahe@ibos.kk.dk

## New technology gives better feel for the surroundings

At IBOS you now can encounter small plastic gizmos the size of a matchbox hung on walls, signs etc. This is beacons, a new and rather unused technology.

IBOS' aid expert and ICT consultant Birgit Christensen has for more than a year worked hard to make the technology an effective help for people with visual impairments. This work breaks new ground for the first time ever that beacons are used for the benefit of the target group in Denmark. "You can call beacons for talking signs. They send signals that are captured by a person's smartphone when she or he uses a particular app that works with the beacons," says Birgit Christensen.

Beacon is English and means guiding star. And that is exactly what IBOS is experimenting with using the little 'gizmos' to: To provide information that makes it easier for people with blindness or low vision to orient and move freely. Preliminary evaluations indicate that the technology is effective. "Our testers say they get braver when receiving this additional information. They express that they dare more when they get more information. This leads us to believe that technology can support people with visual impairment to feel more guided. Others say that they feel welcome when a relevant message is ticking into their

phone, "says Birgit Christensen.

The technology works so that each beacon activates a message on an associated app. The speech function on the iPhone reads the message aloud, and the person holding the phone immediately has received the information. It all happens automatically once the app is installed. In that way beacons differs from, for example, QR-code technology, where the user each time is to scan a given code to get the information it hides. The technological experiment is going on in cooperation with the organization Living IT Lab, who developed the app Blinfo. Blinfo is now used on IBOS and Bredegård (an institution in Denmark).

Beacons though, are already in use in several other places in Denmark with a more commercial purpose. It may be a supermarket or a chamber of commerce that have encoded the small transmitters to tell passersby about special offers. The museums Aros and the Blue Planet also use the technology in their exhibits, but without special consideration to people with impaired vision.

IBOS and Living IT places high demands on technique, because the beacons are only genuinely helpful to people with low vision if they are closely linked to an exact location. "We are pushing the technology because each message must be very precise in terms of the location, it must inform about. We probably have higher requirements than, say, a supermarket, which will surely be content to hit all passers-by within a radius of ten meters with the advertising of an offer, "says Birgit Christensen.

Beacons has a range of one to 70 meters and sends out the information in all directions. Birgit Christensen and her partners are experimenting with making the signals precise, so that a message is neither coming 30 meters too early nor seven meters too late. And so it does not reach the person's smartphone on the wrong floor. Beacons sends through walls, ceilings and floors, but a message about a meeting room three meters further along does not help much if you are on the floor above or below.

Which information is sent depends on the needs, place and situation: Today's menu in a canteen, a description of the device by a local guide to find your way in through a reception at a workplace. "We've had a few funny experiences along the way. A beacon told of an entrance to a workplace, and it was also said that there was free coffee from the vending machine here and there. The tester had been on the site many times but exclaimed, 'What? Free coffee! I have never known, ' "says Birgit Christensen. For her it is important that the technology be used for additional information: Messages, which can make it even easier and safer to move without sight, rather than necessary in-formation. "The technology is still new, and it can be better. But it can already easily provide 'nice' information. It could for example be nice to beacon up the Central Station in Copenhagen, so you get told when you are passing track 7, track 11 or a third track. Of course, it is possible to find the right track without beacons – you just go to one end and count your way forward, while passing one staircase down to the track after the other. But it is undeniably easier if you get a helping hand, "says Birgit Christensen.