

# Nordic Visual Impairment Network

## NOVIR Newsletter 2019

### NOVIR newsletter 2019

---

Welcome to the NOVIR newsletter 2019.

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.

Using English will of course require that we use the time to translate the materials, stories and news, we each want to share.

The newsletter 2019 contains a short description about 'the on-going and completed projects in each organization/country and a short description about 'what is going on' in each organization/country.

I thank you for all the contributions made by the Nordic visual staff.

The information's in this newsletter is compiled by Lea Johanne Sarfelt, editor of the NOVIR newsletter.

Read more about NOVIR on [www.novir.net](http://www.novir.net)

This newsletter is printed on the Institute for Blind and Partially Sighted (IBOS), October 2019. [www.ibos.dk](http://www.ibos.dk)

### Content

Iceland.....	3
The on-going and completed projects in Iceland.....	3
Project Viva .....	3
Norway .....	4
The on-going and completed projects in Norway .....	4
Digitalisation and service development.....	4
A Sami version of the Norwegian reading test called PVles.....	5
What is going on in Norway?.....	6
Statped’s work is based on the following three main objectives.....	6
Renewal of the curricula.....	7
Parliamentary report: Early effort and inclusive community.....	8
Tactile Reading – conference in 2021 .....	8
Sweden .....	9
The on-going and completed projects in Sweden.....	9
Support materials in mathematics education.....	9
Master projects .....	10
“I wish it could have been so much better” - Assistive technology for students with visual impairment in grade 1-5. A field study.....	10
”Print-reading pupils in primary school with severe visual impairment” .....	11
What is going on in Sweden?.....	11
The International Mobility Conference IMC17 .....	11
Denmark.....	12
The on-going and completed projects in Denmark.....	12
Using LaTeX as a tool in STEM-subjects.....	12
Further development of Pre-employment Programme (PEP).....	14
The potential of electronic glasses in vision rehabilitation for people with Stargardt disease .....	14
BlindTech – The use of AI by blind people .....	15
Master projects .....	15
What matters most in the experience of learning in school for children with blindness.....	16
The Meaning of Meeting Others with Visual Impairment. A Lifeworld Phenomenological Study among People with Visual Impairment .....	17
What is going on in Denmark?.....	18
Conference: Vision and inclusion.....	18
The Nordic Congress in Low Vision (Nordisk Kongres i Synspædagogik) .....	18

## Iceland

---

### **The on-going and completed projects in Iceland**

#### **Project Viva**

Viva is co-funded by the Erasmus + programme of the European Union. The project takes place from May 2019 to November 2020. The participating countries are Iceland, Bulgaria, Romania, Belgium, Italy, Greece.

The name of the project is: **Innovative social entrepreneurship training programme (SETP) for VI Youths (Visually Impaired youths).**

The main objectives of the project are to:

- improve self-knowledge and awareness
- improve confidence and motivation for personal growth;
- better understanding available resources
- identify opportunities for professional development with accompanying practical skills
- the main types of learning experiences to be embedded in the whole program are experiential learning and peer supported learning

It is our hope that in the end of the project we will have a validated tool kit to help institutions like ours work with VI youths in the future.

For more information or input, please contact:

Eyþór Þrastarson, [eythor.kamban@midstod.is](mailto:eythor.kamban@midstod.is)

Margrét María Sigurðardóttir, [Margret.Maria.Sigurdardottir@midstod.is](mailto:Margret.Maria.Sigurdardottir@midstod.is)

## Norway

---

### The on-going and completed projects in Norway

#### Digitalisation and service development

At the turn of the year, Statped completes a digitalisation project that has been ongoing for the past two years. Employees have been trained in digital tools and digital working methods and have completed e-learning programs in basic digital competence under the auspices of the University of Agder.

One of the aims is to utilise digital services and tools to become more efficient in both external and internal interactions. Digitalisation will also help to increase the scope and quality of statped.no. Statped has increased the use of Skype and video conference in our services.

The development of digital learning arenas and learning resources has been emphasised. Knowledge dissemination in Statped will primarily take place on digital platforms with statped.no as the main channel.

#### Examples of digital learning resources

**Reading:** With the Office Lens app, you can take pictures of text and have it read out loud with the Engaging Reader features.

<https://www.statped.no/laringsressurs/sprak-og-tale/office-lens/>

#### Programming and coding - code tools and accessibility for students with visual impairments

1. Assessing accessibility for visually impaired people in various code tools and how they function with the screen reader and the screen magnifiers.

<https://www.statped.no/laringsressurs/syn/kodeverktoy-og-tilgjengelighet/>

2. With LEGO WeDo, students learn collaboration and problem solving. It is well suited for multidisciplinary projects.

<https://www.statped.no/laringsressurs/teknologitema/lego-wedo/>

3. Learn about programming through a play-based method with the Dash robot

<https://www.statped.no/laringsressurs/sammensatte-larevansker/dash/>

4. Learn about programming through collaboration, play and problem solving with the robot Bee Bee-bot.

<https://www.statped.no/laringsressurs/sammensatte-larevansker/bee-bot/>

### **Smart technology**

Training in using iPhone and iPad for the visually impaired. Instructional videos and exercises on how to use VoiceOver and Zoom.

<https://www.statped.no/laringsressurs/syn/opplaring-i-iphone-og-ipad-for-synshemmede/>

**Vision and visual function in an educational context:** This video series will better prepare schools to accommodate for students with visual impairments <https://www.statped.no/laringsressurs/syn/synsfunksjon/pedagogisk/>

### **A Sami version of the Norwegian reading test called PVles**

As of today, there are no mapping tools for vision problems in any of the Sami languages. Statped have therefore developed a Sami version of the Norwegian reading test called PVles (PVreading). To ensure that the Sami versions of PVles meet the criteria for PVles, special (Sami)educators started a collaboration with the developers of PVles.

Sami languages are very different from the Norwegian language, as well as there are cultural differences between the Norwegian and the Sami population. Although most of the Sami population in Norway also speak Norwegian, Norwegian is not their first language. We therefore think that everyone should have the opportunity to meet and use their first language, also in mapping situations.

PVles is meant to be used as a regular standardized reading test but can also be used in aid testing and in research. PVles is made on a logarithmic scale and is therefore more accurate than many other reading tests. It is strongly recommended that all tests used for distance and near vision testing, as well as the reading test, should be logarithmically constructed. Comparison of distance and near vision as well as results from such a reading test, provides valuable information about the vision and how the person uses their vision.

Early on, the project group discovered that a direct translation of the test from Norwegian to each of the three main Sami languages would not be possible. Not just because of the difference between Norwegian and the Sami languages, but also because of the difference between the three Sami languages. They are three completely different languages. When the sentences were made, typical words from the Sami language and culture were included. There were about twenty test readers in each of the three Sami languages. Through this process, the project group got valuable feedback, and was able to make necessary changes in order to make PVlohkan better.

At this point, the only part of the job remaining is the printing of PVlohkan. To do this, there is a collaboration with a publisher in the US.

### **What is going on in Norway?**

Statped is a national service for special needs education made up of four regions and a main office located in Oslo. Statped's social mandate is to contribute so that children, youth and adults with special education needs in the best possible way can master their own lives and participate actively in education, work and society.

The regions are organized identically in terms of the professional and administrative functions. All regions have experts available within Statped's six defined core areas:

- Acquired Brain Injury
- Complex Learning Disabilities
- Dual Visual and Hearing Impairment and Deafblindness
- Hearing Impairment
- Speech and Language Impairment
- Visual Impairment

The number and size of the departments that are responsible for the specialisation fields will vary from region to region. Statped North has a separate department for nationwide assignments related to Sami Special Needs Education Support (SEAD).

### **Statped's work is based on the following three main objectives**

#### Objective one

To be a distinctive and accessible provider of special needs services to municipalities and county authorities. All municipalities and county authorities shall have equal access to services from Statped.

#### Objective two

To further develop top competence in the specified areas within special pedagogics and contribute actively to the dissemination of knowledge and expertise about equal, adapted and inclusive education in these areas.

#### Objective three

To work on the basis of a comprehensive R&D strategy prioritising areas of R&D work within special pedagogics, based on a collaboration with universities and university colleges.

### **Management**

Statped is managed by the Norwegian Directorate for Education and Training, which is the executive agency for the Ministry of Education and Research.

### **Renewal of the curricula**

The Norwegian Directorate for Education and Training (Udir) is working to renew all the curricula in primary and secondary education. The new curricula will be implemented from 2020.

The curricula shall facilitate in-depth learning and interdisciplinary topics. Critical thinking and reflection will be an important part of what students will learn in school.

### **Why do we renew the subjects?**

- What pupils and apprentices learn should be relevant. Society and working life are changing with new technology, new knowledge and new challenges. We need children and young people who reflect, are critical, explorative and creative.
- Students should be given more time for in-depth learning. Many of the curricula have been too comprehensive. In order to set a good framework for in-depth learning, we cannot just refill with new content. We must make clear priorities.
- There will be better coherence in and between the subjects, and the different parts of the curriculum will be better connected.

### **Interdisciplinary themes**

Three interdisciplinary themes will be prioritised:

- democracy and citizenship
- sustainable development
- public health and life management

<https://www.udir.no/laring-og-trivsel/lareplanverket/fagfornyelsen/nye-lareplaner-i-skolen/>

Statped are now working to ensure that the renewal of the curriculum has a central place and real significance in Statped's services. We need to understand how the sector works with the implementation so that we can provide appropriate support. Statped will probably need to develop new knowledge and expertise.

### **Some of the issues are:**

- What position does special education have in the renewal of the curriculum?

- In what way does the renewal of the curriculum affect Statped's mandate, our cooperation with other agencies and our direct contact with the users?
- What will the concepts of competence and in-depth learning mean for students with special needs?

### **Parliamentary report: Early effort and inclusive community**

The Ministry of Education and Research is working on a parliamentary report on early efforts and inclusive community. The report will be presented to the Norwegian parliament in the fall of 2019.

The aim is to strengthen early efforts and inclusive community in kindergartens and schools and give all children the opportunity to succeed regardless of social, cultural and linguistic background, gender, cognitive and physical differences.

The parliamentary report should also outline the goals, principles and overall approach that should serve to improve the provision in kindergartens and schools.

<https://www.regjeringen.no/no/tema/utdanning/innsikt/ny-stortingsmelding-om-tidlig-innsats-og-inkluderende-felleskap/id2612213/>

The government states that they will improve the special education support system, and that there must be more expertise close to the children who need it. The government will focus on what is needed to develop an inclusive practice and ensure that the child's experiences are recognised and respected as an important part of the community. The parliamentary report should also look at how the state and local support system should be organised to bring the competence as close to the child as possible.

<https://www.statped.no/statpedmagasinet/statpedmagasinet-1-2019/en-skole-og-barnehage-med-muligheter-for-alle/>

In Statped we assume that the upcoming parliamentary report will affect our mandate.

### **Tactile Reading – conference in 2021**

Reserve the 29th and 30th of April in 2021, and come to The HUB Hotel in Oslo, Norway, to share ideas, find inspiration, and enhance your knowledge within the field of tactile reading.

We are pleased to announce a follow-up to the very successful international conference, Tactile Reading, held in Stockholm in 2017.

The Tactile Reading conference in 2021 will focus on braille and graphics, including digital aid for braille reading and the use of 3D-printed material. The aim of the program is to concentrate on early intervention and education for children, youth and adults within the field of tactile reading. We also hope to include topics related to current and future braille users at various levels of literacy, e.g. children with additional impairments and minority language speakers.

This conference is a collaboration between Statped, The Norwegian Association of the Blind and Partially Sighted, The Norwegian Braille Authority and The Norwegian Library of Talking Books and Braille. The programme committee has been set up and is composed of members from both Norway and Sweden.

<https://www.statped.no/kurs-konferanser-studier/konferanser/andre-konferanser/tactile-reading/>

## Sweden

---

First, I want to introduce myself as the new contact person for NOVIR after Anders Rönnbäck. My name is Annika Södergren and I work as a low vision therapist at Resource Centre Vision, National Agency for Special Needs Education and Schools, SPSM in Sweden.

### **The on-going and completed projects in Sweden**

#### **Support materials in mathematics education**

SPSM have produced three support materials in mathematics education:

*Räkna med mig- Count with me* is a guide which gives support and guidance in teaching mathematics to pupils with blindness, primarily for elementary school use. The guide is based on the latest Swedish curriculum from 2011 and it provides knowledge and information for both unexperienced and skilled teachers. The guide describes how a teacher can create an accessible learning environment; work with adapted books, and how to guide the pupils to abstract mathematical thinking with a basis in concrete experiences. A downloadable PDF can be found at: <https://webbutiken.spsm.se/globalassets/egenproduktion/filer/rakna-med-mig-tillganglig-version.pdf/>

More information about the guide in Swedish can be found at: <https://webbutiken.spsm.se/rakna-med-mig-pdf/>

*Räkna med abakus- Count with abacus* is a guide addressed to teachers who teach pupils with severe visual impairment or blindness. The instruction provides useful methods for introducing the abacus. It shows the four arithmetic operations addition, subtraction, multiplication and division, and contains exercises and examples that can be used individually and in groups.

This guide is based on the method of the abacus being turned, with one ball above the bar, and four balls below the bar, which is the most common way to use the abacus internationally. The guide can be ordered from: <https://webbutiken.spsm.se/rakna-med-abakus-handledning/>

Räkna med abakus, övningsbok- *Count with abacus, exercise book* is designed for pupils with severe visual impairment or blindness, but is suitable for anyone who wants to do math with an abacus. The exercise book can be used in parallel with the regular mathematics book. It is also available in a print version, and is therefore usable for joint exercises with sighted peers. The Braille book can be ordered from: <https://webbutiken.spsm.se/rakna-med-abakus-ovningsbok-med-punktskrift-och-svartskrift/>.

The book in print can be ordered from: <https://webbutiken.spsm.se/rakna-med-abakus-ovningsbok-med-svartskrift/>

## Master projects

We have two new essays written by Liselott Ljunggren and Jenny Nygren, advisors at Resource Centre Vision, SPSM.

### **“I wish it could have been so much better” - Assistive technology for students with visual impairment in grade 1-5. A field study**

Author: Liselott Ljunggren

#### **Abstract:**

What opportunities do pupils with moderate visual impairment have to learn independently and with others? The aim of the study is to investigate how pupils with moderate visual impairment in school years 1-5 use assistive technology which means digital tools and technical aids, to support the learning situation. The study focuses on the activities in the classroom and how teachers work on developing their teaching practice with assistive technology. The study has a qualitative ethnographic approach and the method is field studies with participatory observations and interviews. In total, four schools and classrooms have been visited for field studies. Eleven teachers have been interviewed in four interview situations.

The study shows that there is uncertainty about teaching pupils with visual impairment as it is a heterogeneous group and visual impairment is a rarely occurring disability. The schools' possibilities of obtaining proven experience or getting education in the area have therefore been limited. Furthermore, it appears that the students with visual impairment have enough access to assistive technology but that there is an uncertainty among the teachers about how the technology can be used. The study shows that educators have a strong ambition to create an accessible learning environment for pupils with visual impairment, but need support at several levels in this work. The study clarifies that current support is not sufficient. There is a need for a plan for effective support built up for pupils with visual impairment in relation and in agreement with a plan for digitization, for all pupils. Educators who teach students with visual impairment need an operational and concrete support function that helps them make the

teaching available to the students so that assistive technology is used in an appropriate manner both independently and for collective action. The study's results are useful for those who are to plan and carry out teaching for pupils with visual impairment in compulsory school and for local school authority that will support the school principal in this work.

Masterprogram 30 hp. Masterprogram i specialpedagogik med inriktning mot synpedagogik (120 hp). Vårterminen 2019. Supervisor: Kerstin Fellenius

### **"Print-reading pupils in primary school with severe visual impairment"**

Author: Jenny Nygren

#### ***Abstract:***

The purpose of the study was to illustrate what adjustments have been made for three pupils with severe visual impairment at three different primary schools in Sweden, after learning media assessments at Resource Centre Vision. The study included observations of the classroom environment at the three schools and interviews with the teachers. They were interviewed about their opportunities to follow the recommendations they received in the learning media assessment. Furthermore, the study focused on the teachers' abilities to adapt the physical environment for the pupils with visual impairment and what education and training they have obtained to make teaching accessible.

The result showed that the teachers have been adequately assisted by the local Vision centre and by The National Agency for Special Needs Education and Schools, SPSM, in implementing and further developing the recommendations given regarding the pupil with visual impairment. The observations showed that the students have accessible learning environments, which enables involvement in class teaching. There was a great awareness of the importance of social inclusion in all three schools. The development of digital learning materials has been beneficial to the three students with visual impairment. The study reflected on the importance of social participation in the group and the need for compensatory tools to successfully include pupils with visual impairment in primary school.

## **What is going on in Sweden?**

### **The International Mobility Conference IMC17**

Next year in June there is a wonderful opportunity to attend an international conference in Scandinavia. The *International Mobility Conference* IMC17 will take place 22–25 June 2020 in Gothenburg, Sweden. The event is hosted by the Department of Education and Special Education, University of Gothenburg. The theme for the conference is *Challenges for an inclusive society*, and includes topics such as learning, activity and participation, and the relation between

the human being and the environment. The call for abstracts is open until 15 November 2019. Please visit the conference website at [www.ips.gu.se/imc17](http://www.ips.gu.se/imc17) for more information.

Warmly welcome, Inger Berndtsson, chair of the local organizing committee.

## Denmark

---

### The on-going and completed projects in Denmark

#### Using LaTeX as a tool in STEM-subjects

By Ole Guldberg, ICT-consultant, IBOS

Reading math involves reading symbols that might be difficult when using a screenreader or using braille. In Denmark the curriculum in math also require the students to use a CAS (Computer Algebra System). The CAS is use to make calculation (numeric and symbolic) and plot graphs and draw geometry. We will describe how we can use LaTeX, which is a typesetting toolchain that is widely used in the academic world, for reading, writing and doing CAS work in the STEM (Science, technology, engineering, and mathematics) subjects.

#### **Problem**

When meeting highschool-students with visual imparements their one main problem seem to be with the subjects in the field of STEM.

#### Reading

The materials and the books the students need to read are generally not accessible. The danish national library for people with print disabilities (Nota) can help the students produce their material to make them accessible for the students. The way that Nota does this, is to write the math expressions using LaTeX. LaTeX is written in a linear way which makes it ideal for people with visual imparements.

An example of a LaTeX math expression could be:

`$$ \frac{\sqrt{13}}{\sqrt{23}} $$`

This is a way to write a fraction and describes the squareroot of 13 divided by the squareroot af 23. As you might have noticed math expression in LaTeX can be mark by using the dollar-sign.

Nota makes a Microsoft Word-file for the students with the contents of their material with the math expressions written using LaTeX-expressions.

### Writing

When the students have to hand in assignments in STEM we recommend that they write the assignment using LaTeX and typeset their LaTeX, which will produce a PDF that the students can hand in to their teacher. The students will be able to read the LaTeX and the teacher will be able to read the produced PDF that will contain the math-symbols that the teacher is used to read.

### CAS

Because the CAS-tools are generally inaccessible we recommend that the students use an integration between a CAS called Maxima and LaTeX. This will enable the student to use a CAS-tool within their LaTeX-editor and when typesetting the LaTeX-code the CAS will calculate and solve the calculations the students writes in their LaTeX.

To have the CAS (Maxima) solve a second degree-equation the student would write:

```
$$\begin{maxima}
tex(solve(x^2 + 2*x +5 =0,x))
\end{maxima} $$
```

This will output the solution in the resulting PDF and also in an LaTeX solutions-file (for the student to read).

### Plotting

There are numerous ways the students can plot from within LaTeX. One way is to use a LaTeX-package called TikZ.

The students will also be able to plot, for example, the sinus-curve from the LaTeX file using TikZ.

```
\begin{tikzpicture}[domain=0:4]
\draw plot (\x,{sin(\x r)}) node[right] {$f(x) = \sin x$};
\end{tikzpicture}
```

### ***What we have learned***

The teachers in the STEM-field mostly already know LaTeX from university, so the students can get help from their teachers, if the teacher know that LaTeX is a way for the students to read, write and use CAS.

Braille is a required tool - reading LaTeX with a screenreader and speech-synthesis is hard and timeconsuming - using a screenreader with Braille-support makes this easier.

Especially drawing and plotting requires that the students have tactile materials and are used to plot for example using a tactile drawingboard.

It takes time for the students to learn LaTeX, Maxima and the LaTeX packages like TikZ. We need to teach them, and the sooner the better.

For more information or input, please contact:  
Ole Guldberg, [ole.guldberg@kk.dk](mailto:ole.guldberg@kk.dk)

### **Further development of Pre-employment Programme (PEP)**

The Association of Young People with Disabilities (SUMH), with IBOS as a partner, has applied for funding for an employment project based on IBOS' project Pre-employment Programme (PEP), 2017-2020. SUMH and IBOS want to develop and extend PEP to more target groups. PEP has good results in terms of employment, but one challenge is that people with low vision is a small target group why recruiting for a group oriented programme can be a challenge.

You can find further information about PEP here: [www.ibos.dk/pep](http://www.ibos.dk/pep)

### **The potential of electronic glasses in vision rehabilitation for people with Stargardt disease**

In collaboration with the eye clinic Kennedy Center, IBOS is involved in a project about the potential of electronic glasses (EB) in vision rehabilitation for people with Stargardt disease. The aim of the project is to clarify whether EB can improve the visual function and everyday life of a group of people diagnosed with the same eye disease (Stargardt disease) compared to other rehabilitation interventions.

The project is designed as a pilot project in which 10 people with clinically and genetically verified Stargardt disease at working age (18-66) will be included for testing, instruction and lending EB.

Four different EBs have been selected: eSight3, IrisVision, Acesight and Jordy2. The selection of these four EBs is based on covering the various price ranges available on the Danish market. The four selected models have a camera on the front of the glasses and the live image is displayed on screens viewed from the back of the glasses in common. The image that becomes autofocused can be enlarged, changed color and contrast, or frozen. Additional features depending on the model.

Participants are instructed in the use of the electronic glasses and then borrow the glasses home for testing in the home, at work and in other daily activities for two weeks. The effect of the intervention (EB) is primarily measured on the participants' qualitative feedback as well as the effect on the quality of life assessed by the NO VFQ-25 and supplementary questions. Reading ability and activity performance will also be compared.

Through the pilot project, we want to uncover how experienced users of assistive technologies assess EB, and whether EB honors the vision-enhancing effect for various activities and participation which is expected. The effect of EB will be assessed on participants' quality of

life before and after using EB in measurable performance, qualitative interviews and using questionnaires targeted vision-related quality of life.

For more information or input, please contact:

Joaquim Torner Jordana, Kennedy Center, [joaquim.torner.jordana@regionh.dk](mailto:joaquim.torner.jordana@regionh.dk)

Pernille Duelund Højstrup, IBOS, [pernille.duelund.hojstrup@kk.dk](mailto:pernille.duelund.hojstrup@kk.dk)

Bo Schack Larsen, IBOS, [bo.schack.larsen@kk.dk](mailto:bo.schack.larsen@kk.dk)

### **BlindTech – The use of AI by blind people**

By Lea Johanne Sarfelt, Special Consultant, IBOS

In collaboration with the University of Copenhagen, IBOS is involved in a future project on how people with visual impairment or blindness use accessible AI solutions in everyday life.

We will be looking at two different situations: 1) digital assistants in the home, such as Google Home, and 2) apps on the smartphone when on the move, such as Seeing AI. The project will last for approx. three years and consist in ethnographic studies, analyses, workshops, development of learning material and dissemination to all interested parties.

Some of the questions we will explore are:

- How are the technologies used in everyday life?
- How do they take part of social situations?
- How do the blind creatively manipulate the opportunities offered by the technologies and situations to make the most of them?
- What are the advantages and disadvantages of the way the technologies are designed today according to context of use?
- What are the challenges of using the technologies in social contexts?

Based on these studies, the project will lead to new knowledge that will be shared with all interested parties and lead to the development of a learning model that can be used by professionals in their work to help people with visual impairment or blindness.

For more information or input, please contact:

Birgit Christensen, IBOS, [birgit.christensen@kk.dk](mailto:birgit.christensen@kk.dk)

Lea Johanne Sarfelt, IBOS, [lea.johanne.sarfelt@kk.dk](mailto:lea.johanne.sarfelt@kk.dk)

### **Master projects**

Below are two abstracts from two master projects made by Bente Pedersen and Lea Johanne Sarfelt. They have both studied at the Nordic Masters in Vision Rehabilitation at USN, Norway and Gothenburg University.

### **What matters most in the experience of learning in school for children with blindness**

#### ***Abstract***

Author: Bente Pedersen, Synskonsulent, Synscentralen Vordingborg

**Purpose:** This study is a presentation of the experiences and know-how students suffering from blindness, and their parents, have gained from the students' learning process at school. This has been studied in order to gain knowledge and understanding of which conditions are experienced as particularly meaningful in respect to learning.

**The motivation** for conducting the survey is that students with blindness are currently taught through public schooling for the purpose of enabling them to pursue an education and to participate in the job market as adults. But more recent studies show that a dwindling number of young people with blindness achieve an education and a job. In the public schooling programs, many students with different needs are included, and they all need to be accommodated to ensure that the students are properly taught. As students with blindness need specially planned teaching, there could be some uncertainty about their needs in terms of ensuring that their learning is provided for in public schooling.

**Methodology:** A total of 6 qualitative, semi-structured research interviews have been conducted with students with blindness ranging from 15 to 18 years, which have attended public schooling, and 6 interviews with their parents. The scientific-theoretical approach used is hermeneutic phenomenological, and a theoretical interpretative framework about transformative learning, learning in a life-world perspective, and self-psychology has been used.

**Results:** In the study, responses from students and parents have been arranged into themes that deal with the experience of assuming responsibility, the experience of motivation and mastering what must be learned, as well as the experience of inter-subjective conditions, of tiring out and of organizing the teaching.

**Conclusion:** Students and parents experience that it is meaningful that teachers are empathetic and committed, and that they are knowledgeable about and want to perform the task of teaching a student with blindness. It is important for the students that they can be active, and that they feel confident in their ability to master the tasks set for them at school. This creates motivation and a desire to learn. They experience that it inhibits their learning if the teacher lacks knowledge about teaching students with blindness. It also inhibits the teacher's qualifications for understanding the student and the student's needs. There is a need for further research into inter-subjective conditions and the students' self-understanding.

Master project 30 hp. Nordic Master in Vision Rehabilitation (120 hp.). Spring 2019. Supervisor: Inger Berndtsson, Gothenburg University.

### **The Meaning of Meeting Others with Visual Impairment. A Lifeworld Phenomenological Study among People with Visual Impairment**

#### **Abstract**

Author: Lea Johanne Sarfelt, Special Consultant, IBOS

**Background:** In Denmark, professionals who work with vision rehabilitation focus on the importance that persons with visual impairment meet others with visual impairment as part of the vision rehabilitation. Professionals find it important to meet others with visual impairment, but it is not always a systematic part of rehabilitation. At the same time, research supports that group rehabilitation is important for persons ability to perform since they can discuss experiences from everyday life.

**Purpose:** To examine the importance of meeting other people with visual impairment in the vision rehabilitation or in other contexts.

**Theory:** The theoretical frame for the study is life world understanding with focus on the dimensions: *the lived body, lived space, lived time, horizons and intersubjectivity*.

**Method:** Eight people between 54 and 90 years participated in qualitative life world phenomenological interviews. A semi-structured interview guide was used. The empirical material was transcribed and interpreted based on a phenomenological approach focusing on the participants' life world and lived experiences.

**Results:** Four central themes were identified in the analysis: 1) *Belonging to a community and recognizability*; 2) *Own understanding of situation, more self-confidence and joy of life*; 3) *Sharing experiences and opportunities with assistive technology; and activities* and 4) *Relations with other persons*. Through the meetings with others with similar life world and similar bodies, they experience that they are able to do more than expected, and experience opportunities to recapture activities. Their horizon of opportunities opens making them able to move forward when living with visual impairment.

**Conclusion:** Meeting others with visual impairment, who are or have been in the same situation as themselves, is important for the participants in terms of living with a visual impairment. It is both in relation to practical and emotional aspects. This study supports that group rehabilitation or peer support could be a more permanent part of vision rehabilitation in Denmark.

Master Project 30 hp. Nordic Master in Vision Rehabilitation (120 hp.). Spring 2019. Supervisor: Inger Berndtsson, Gothenburg University.

## **What is going on in Denmark?**

### **Conference: 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 **September 2020**.

For more information or input, please contact:

Annemarie Enevoldsen, [annemarie.haack.enevoldsen@kk.dk](mailto:annemarie.haack.enevoldsen@kk.dk)

### **The Nordic Congress in Low Vision (Nordisk Kongres i Synspædagogik)**

The next *Nordic Congress in Low Vision* will take place 5-7 May 2021 in Billund, Denmark. The theme for the congress will be *Pathway to independence*. Information's on the congress will be on the congress website at <https://www.nordisksynkongress.com/>