

Sounds in European E-Learning - SEEL
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Learning Concept for visually impaired students
Intellectual Output No. IO2-A2
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SEEL

Learning Concept for visually impaired students

Sound in European E-Learning
IO2- A2

P1 University Paderborn – UPB Germany

<i>Project Title</i>	<i>Sound in European E-Learning</i>
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Introduction

Visually impaired persons are a specific target group of the SEEL project. There is a huge range of visually impaired person and they always have to be seen as individuals. They don't have to be blind due to the fact that the term blindness is used in this project (but not only here) for complete or nearly complete vision loss.

Here is where SEEL steps in to foster learning of visually impaired persons.

This learning concept for visually impaired person is spitted in 3 parts:

- Part 1: Elements of visual impairment
- Part 2: Learning with visually impaired persons in a classroom

Part 1: Elements of visual impairment

The WHO identifies 4 levels of visual function. They do this according to the International Classification of Diseases (see <http://www.who.int/mediacentre/factsheets/fs282/en/>):

1. normal vision
2. moderate visual impairment
3. severe visual impairment
4. blindness.

The WHO uses the term “low vision” for the group “moderate visual impairment” combined with the group “severe visual impairment”. Therefore, low vision and blindness represent all varieties of visual impairment.

Usually visual impairment causes difficulties for the people compared to those who aren't visually impaired. This can be difficulties in daily life activities. Such problems can exist for example in the fields of movement like walking or driving but also in the field of learning especially concerning reading, socializing.

According to the WHO about “285 million people are estimated to be visually impaired worldwide” (see <http://www.who.int/mediacentre/factsheets/fs282/en/>)

Moreover, the WHO states that “82% of people living with blindness are aged 50 and above.” (see <http://www.who.int/mediacentre/factsheets/fs282/en/>)

But this also means that there is a rest of young people who are visually impaired as well and who has to tackle learning under these conditions.

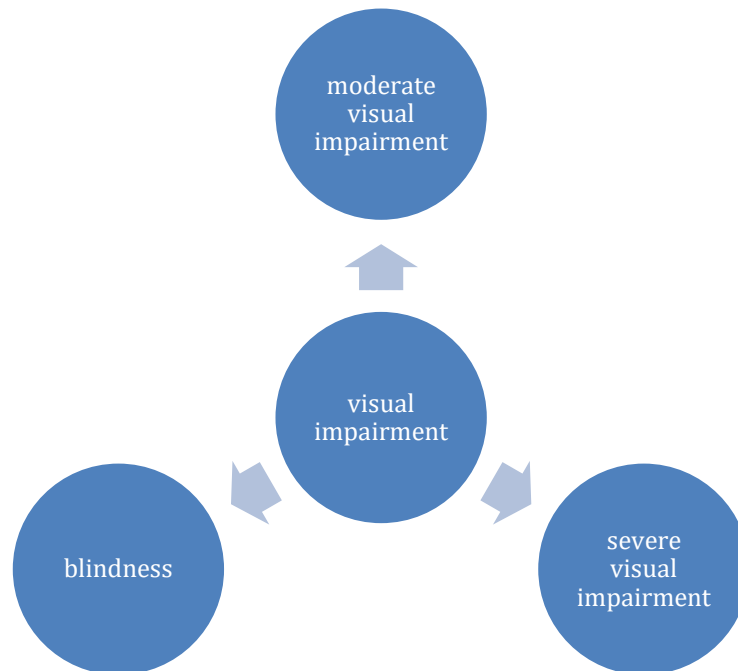


Figure 1: Different sorts of visual impairment

Part 2: Learning with visually impaired persons in a classroom

In many cases blind and visually impaired learners face barriers to learning. Learning with visually impaired persons can happen in very different ways:

- There can be the inclusive way where the visually impaired person is learning together with people of normal vision.
- There can also be the way of teaching them in separate classes for visually impaired persons.
- They can also learn in informal learning scenarios.

Social inclusion is an important aspect because most of the learning activities happen in social settings. Most of the learners with visual impairment have reduced opportunities for incidental learning. Therefore, much multi-sensory learning approach is helpful in the classroom. The idea is to include as much multi-sensory learning as possible.

Problems may occur in the areas of:

- working speed,
- communication skills and the reduced ability to recognize facial expressions or body language,
- reading and writing skills
- environmental awareness
- social interaction
- lower self-confidence



In a school or a course the classroom environment may have a significant impact on learning. The success of teaching and learning is connected with the learning environment.

With special regard to visually impaired persons it is important to have a close look at core health and safety issues. But, it is also necessary to focus on a room's sensory nature and the room organization.

SEEL refers to SEN – Special educational needs and comes up with the questions SEN provides to those who work with visually impaired learners in classrooms.

Concerning partially sighted learners they suggest to take the following questions into account:

- “is the student’s level of sight stable or variable and under what conditions?”
- is the learner’s field of vision restricted?
- what size/style of print is comfortable for the student?
- does the learner have particular preferences for the learning environment, in terms of, for example, lighting or choice of seat?”
(see SEN <https://senmagazine.co.uk/articles/articles/senarticles/supporting-the-visually-impaired-learner>)

And for the direct work in the classroom they ask the teacher and the educator to consider the following questions:

- “is the space clear and tidy to allow easier movement?
- are frequently used resources kept in the same accessible place, and labelled?
- is the level of lighting right for the learner?
- are learners with visual impairment sitting close to a power source if they are using accessible ICT devices?
- do you use real objects to support your teaching?
- have you allowed adequate space for any special equipment or large print resources to be stored and used?”
(see SEN <https://senmagazine.co.uk/articles/articles/senarticles/supporting-the-visually-impaired-learner>)

Moreover, SAN states that “Access technology has enormous potential for supporting learners with visual impairment across different ages and abilities.” (see SEN <https://senmagazine.co.uk/articles/articles/senarticles/supporting-the-visually-impaired-learner/>)

The project IDEAL had the finding that: “Reduced vision often results in a low motivation to explore the environment, initiate social interaction, and manipulate objects.” (see Project IDEAL <http://www.projectidealonline.org/v/visual-impairments/>)

In addition to that IDEAL found that it is important to “encourage the student to move independently through the classroom, and organize your classroom accordingly.” (see Project IDEAL <http://www.projectidealonline.org/v/visual-impairments/>)

And IDEAL states that “One key accommodation that is absolutely essential is access to textbooks and instructional materials in the appropriate media and at the same time as their sighted peers.” (see Project IDEAL <http://www.projectidealonline.org/v/visual-impairments/>)

Sometimes visually impaired persons use audio information much more intensively than other people to cope with their learning challenges.

In addition to that the best way to address different learners is a methodological variety. Therefore, the SEEL learning concept for visually impaired persons includes a combination of different aspects:

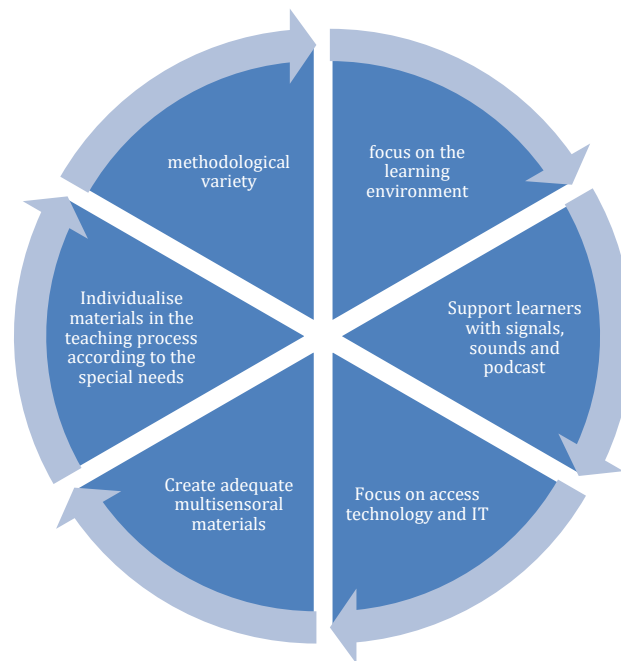


Figure 2: Elements of the learning and teaching concept for visually impaired persons of SEEL

The IDEAL Project put it together in the following sentence which is really crucial:

“The key is to design your instruction so that the student has the most opportunity to act independently.” (see Project IDEAL <http://www.projectidealonline.org/v/visual-impairments/>)