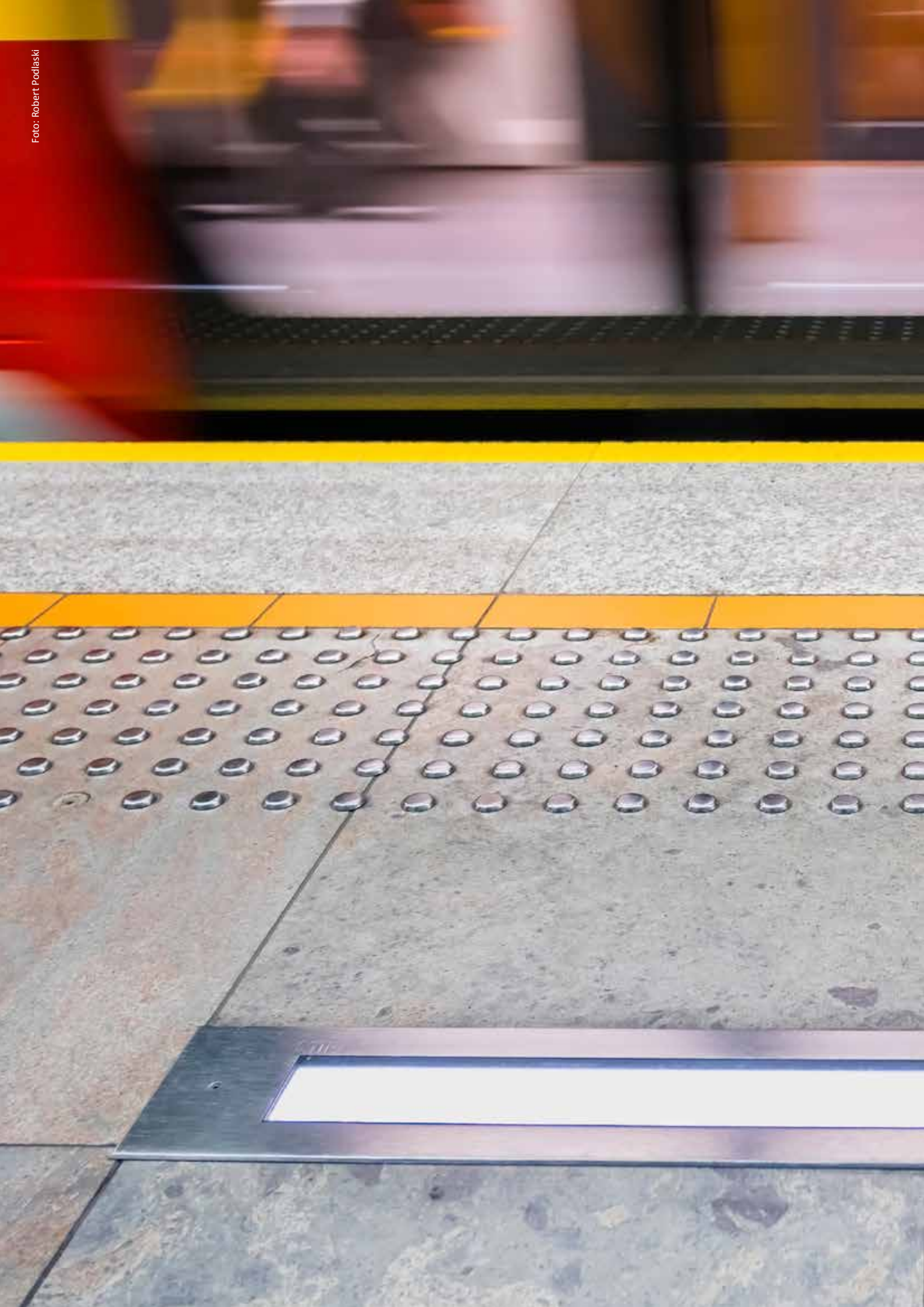
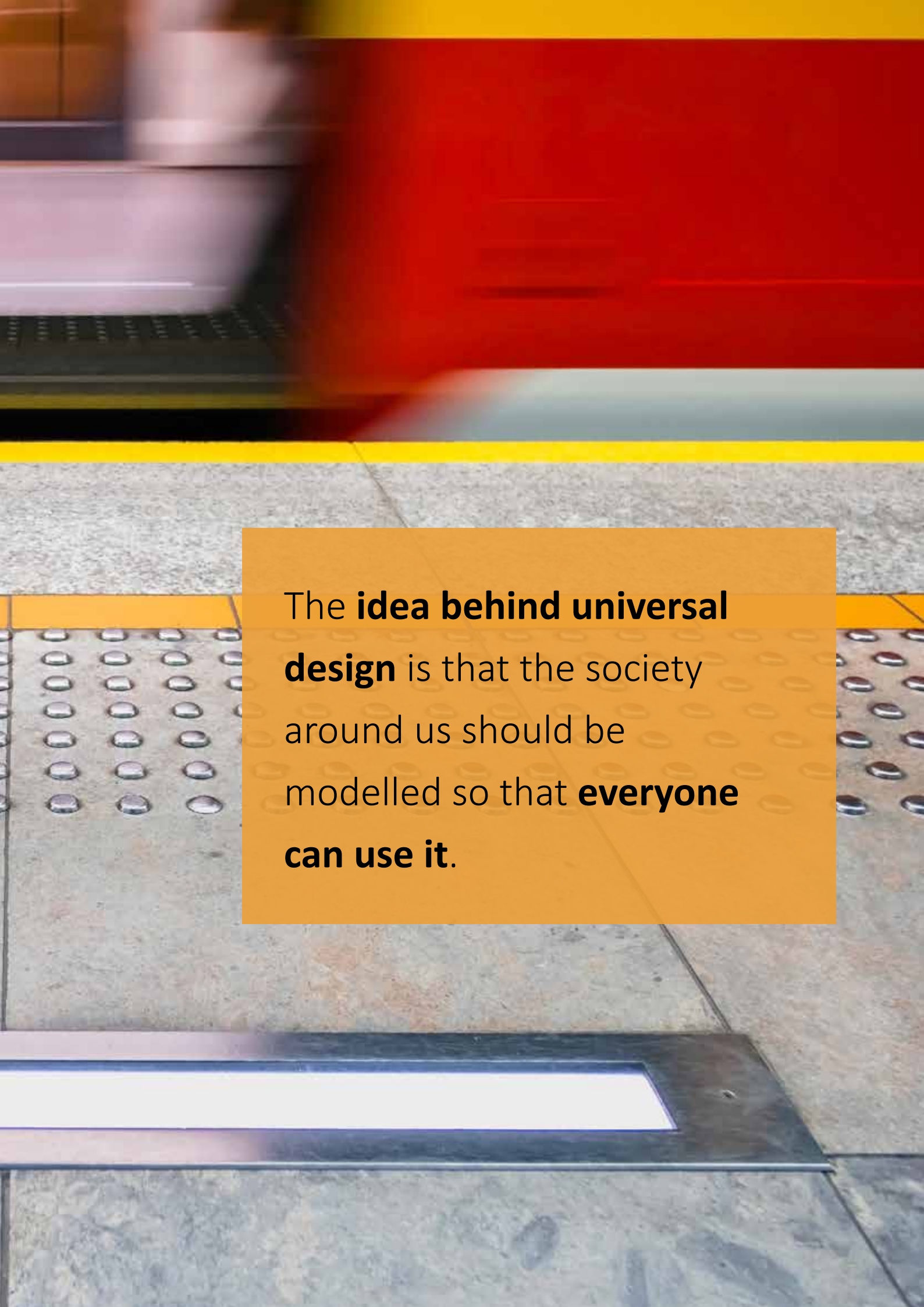


Universal Design

in Kindergarten and School

GUIDELINES AND UNIVERSAL TOOLS





The **idea behind universal design** is that the society around us should be modelled so that **everyone can use it.**



Preface

The project *Universal Design in Kindergarten and School, Guidelines and Universal Tools*, is a project in cooperation between Rehabilitation International (RI) Norway and the Education Commission in RI International. The project is funded by grants from Global Disability Development Fund of RI. Representatives in RI/Education Commission from India, Germany, and Finland have supported the project with information knowledge. Mr. Arne Lein, former RI-Norway member, has supported the project with his knowledge from a long career working with disability policy.

Kindergarten and schools and other institutions working with Inclusive Education, need guidelines and tools for making their institutions accessible for all children, also children with disability. The aim for the project has been to make a set of universal tools for use in all countries, both countries with poor economy and wealthy countries.

We hope the guidelines and the materials from the project could give inspiration for use in kindergarten and school. We also hope different countries could use the materials in making their own seminars, workshops, and conferences about the theme Universal Design in the education sector. Here bringing users, user organizations and professional together for discussing how to make kindergarten and schools more accessible.

It's important for us to underline that the advice giving in this document is universal and are relevant for both kindergarten and schools, even if we often only mention school in the text.

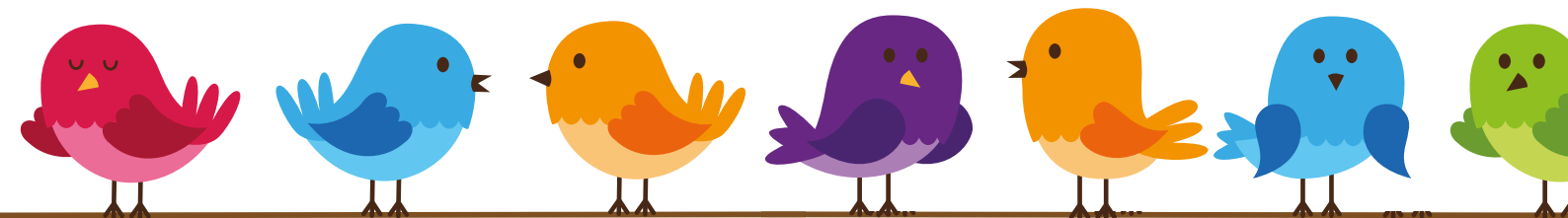
We wish you all the best in bringing the guidelines and tools out to the society and hope it will give a better situation for children and young people in their education situation.

I hope the next step will be making an International Accessibility Symbol produced by RI showing kindergarten and schools working in accordance with the principle for Inclusive Education and Universal Design Learning.

Rehabilitation International Norway and Education Commission
Tone L. Mørk
Chair of Education Commission and project manager

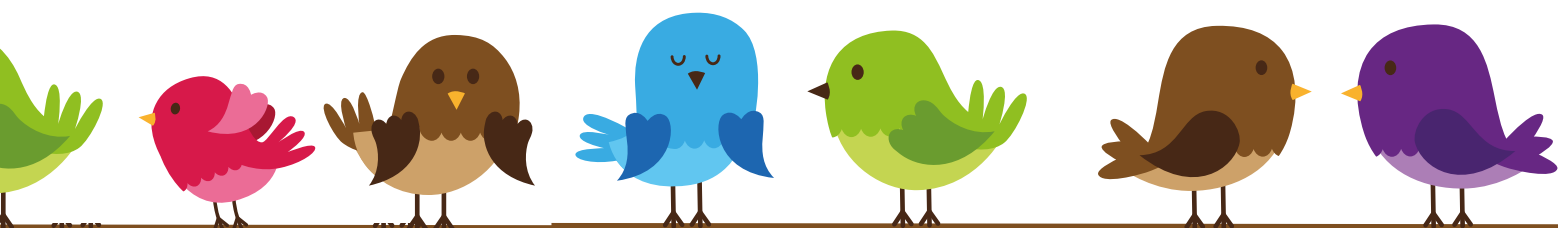
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Introduction – universal design

The idea of universal design was expressed for the first time by the Center for Universal Design at the North Carolina State University in the USA¹. This idea came up in connection with the ADA legislation, the so-called Americans with Disabilities Act. The idea behind universal design is that the society around us should be modelled so that everyone can use it.

Consequently, persons with a disability will not be met by physical and practical obstacles. Thus, they will not be kept from participating in society on an equal footing with other citizens. The whole concept is that such man-made obstacles can be eliminated and that every citizen can participate equally in society.

The UN Convention on the Rights of Persons with Disabilities (CRPD) has the following definition of universal design:

“Universal design” means the design of products, environments, programmes and services to be usable by all people, to the greatest extent possible, without the need for adaptation or specialized design. “Universal design” shall not exclude assistive devices for particular groups of persons with disabilities where this is needed.

1. NC State University (ncsu.edu)

Universal design is a normative strategy that provides the basis for specifying qualities in products, environments, programmes, and services so that they can be used equally by everyone.

Universally designed solutions should be good in general. Universal design should work in unison with other societal goals and be an integral part of general solutions.

In some instances, universal design will reduce the need for technical aids, in other instances the need for technical aids will remain important. There is no contradiction between the use of technical aids and universal design.

There is **no contradiction**
between the use of technical
aids and universal design.

SEVEN **PRINCIPLES** FOR UNIVERSAL DESIGN

- 1** **Equitable Use:** The design is useful and marketable to people with diverse abilities.
- 2** **Flexibility in Use:** The design accommodates a wide range of individual preferences and abilities.
- 3** **Simple and Intuitive Use:** Use of the design is easy to understand, regardless of the user's experience, knowledge, language skills, or current concentration level.
- 4** **Perceptible Information:** The design communicates necessary information effectively to the user, regardless of surrounding conditions or the user's sensory abilities.
- 5** **Tolerance for Error:** The design minimises hazards and the adverse consequences of accidental or unintended actions.
- 6** **Low Physical Effort:** The design can be used efficiently and comfortably and with a minimum of fatigue.
- 7** **Size and Space for Approach and Use:** Appropriate size and space is provided for approach, reach, manipulation, and use regardless of user's body size, posture, or mobility.



Foto: SDI Productions

International conventions and declarations

The requirement of universal design is included as a guiding principle in the CRPD. The preamble reaffirms:

...the universality, indivisibility, interdependence and interrelatedness of all human rights and fundamental freedoms and the need for persons with disabilities to be guaranteed their full enjoyment without discrimination.

Article 9 in the CRPD has requirements for the universal design of society. The right to an education is recognized in article 24. To realise this right, it is a prerequisite that children/youth and adults with a disability can participate in the education and that the education facilities are universally designed.

The Committee on the Rights of Persons with Disabilities has provided general comments to article 9 and 24 in the CRPD. The comments clearly refer to the protection of the right to an education in the Convention on the Rights of the Child, in which States Parties in article 28:

1. ... recognize the right of the child to education, and with a view to achieving this right progressively and on the basis of equal opportunity, they shall, in particular:

(a) Make primary education compulsory and available free to all.

Article 23 in the Convention on the Rights of the Child is dedicated to children with disabilities. The parties commit to expanding their experiences among areas such as education and social rights. The Convention on the Rights of the Child is older than the CRPD. The right to an education for persons with a disability is not new. The novelty within the CRPD is that obstacles that make the education difficult for children with disabilities are considered as discrimination.

Similarly, is the right to equal participation established in the UN's Sustainable Goal no. 4 and the first target states that by 2030 the parties *ensure that all girls and boys complete free, equitable and quality primary and secondary education leading to relevant and effective learning outcomes.*

The right to an equitable education can also be found in other international documents such as the Salamanca Statement and Framework for Action on Special Needs Education² and the World Declaration on Education for All³. In other words, there are solid international conventions and declarations that emphasise the right to an equitable education for all pupils.

2. *The Salamanca Statement and Framework for Action on Special Needs Education - UNESCO Digital Library*

3. *World Declaration on Education for All and Framework for Action to Meet Basic Learning Needs - UNESCO Digital Library*

Children and youth with a disability have the same right as others to a purposeful education. Unfortunately, the situation in most countries is that children and youth with disabilities meet obstacles in their education. This is discrimination and unjustified differential treatment as compared to what other children meet.

The realisation of children and youth's right to an equitable education can vary from country to country. However, many countries have ratified international conventions and joined international declarations. An important prerequisite is that the education is adapted to each child, and that the classroom or school is designed in a way that allows them to participate in the education and have access to the premises.

Children and youth with a disability have **the same right** as others to a purposeful education.

Different disabilities – different needs

The availability of solutions will vary according to which disability the individual child or youth has. We refer to details about challenges and what could be the solution in the chapter which describes five different types of disabilities and needs, and the questions that are important to consider and solve for children and youth to participate equally in education.

It is immediately apparent to state that the physical environment must be designed so that persons in a wheelchair, visually impaired and blind, hearing impaired and deaf are able to access the building and participate in the education.

The individual pupils with a disability may have varying degrees of functional impairment. For example, one pupil with hearing impairment can have difficulties hearing and compensate with hearing aids, one pupil with hearing impairment can be deaf and not compensate with a hearing aid but be reliant on sign language or written interpretation. Both pupils have a hearing impairment but need different adaptations to participate equally in the classroom environment. This individual variation applies to every type of disability and must be taken into consideration when adapting for all. This demonstrates how universal design, as a minimum requirement for participation, is connected to individual adaptations.

Pupils with behaviour difficulties depend on established routines, predictable limits and to be seen and heard. Clear class management is an important prerequisite for this group of pupils, and an important principle in education science in general. Good class management is naturally important for all pupils, but crucial for pupils with behaviour difficulties.



Foto: FatCamera

Technical aids – a part of the solution

Many have the experience that technical aids, adapting to have good acoustics and access to books and software within technological aids are important prerequisites for equal participation in education and in learning. To achieve this, it is crucial for the school to collaborate closely with occupational therapists, physiotherapists, teachers for visually and hearing impaired and special educators as well as the supporting services.

It is unrealistic to find people with all these qualifications in all schools. Therefore, it is of vital importance that every school has established a cooperation with relevant professional communities. The establishment of this cooperation is left to the school management. It is crucial for every teacher to be committed to this cooperation.

What does universal design mean in a kindergarten and school perspective

In many ways the definition of universal design is all-embracing. According to the definition in the CRPD it deals with products, environments, and services. According to the definition services and programmes must be universally designed. What does this entail in education? It may be self-evident that learning materials, whether they are paper books or digital must be available to be used by for example blind or visually impaired pupils. The education must also be universally designed, as a part of the service. We are used to saying that the education must be inclusive and adapted to each pupil's prerequisites and needs. This is established in the right to individual education. Universally designed education challenges pedagogy and didactics in such a way that communication and preparations are made to make as many as possible of the pupils understand the message. Naturally, there is a connection between inclusive education and universally designed education.

A professional community demonstrating that universal design in a situation of learning is a central issue has arisen^{4, 5}. This is called Universal Design Learning and is abbreviated to UDL. UDL principles in planning and technology integration make it easier for those in inclusive settings to engage in new teaching practices. Compared to those in adapted settings, who typically plan and teach alone, the co-teaching model appears to offer built-in support and resources for teachers learning how to apply UDL principles and learning new technologies, making it easier to move forward with changes in teaching practices.

4. <https://www.cast.org>

5. *Anthology Ally*

There are three main principles in UDL:

1. Recruiting interest
2. Representation
3. Action and expression

Inclusive education environments are barrier free: applying the universal design for learning strategy helps to remove physical, sensory, and cognitive barriers to learning and ensure accessibility of inclusive education for all learners. There is an increased focused attention to academic achievement as the most crucial goal of education in many countries. Inclusive education aims to provide all students with the most appropriate learning environments to achieve their best potential.

There is a framework that provides all the students with equal opportunities to learn. UDL describes a practice and science-based framework to support education, give challenges, and expand opportunities for all learners. It is a way of involving every student in the learning experience, promoting inclusive learning fully, and facilitating success for all learners with different abilities.

Teachers can nurture purposeful, motivated, resourceful, knowledgeable, strategic, and goal-directed learners who understand the importance of such qualities. By creating personalised learning environments, supporting learning, developing critical skills, and monitoring progress, teachers can work with their students to help them become expert learners⁶.

6. View of Evaluating Pedagogy and Practice of Universal Design for Learning in Public Schools (uwo.ca)



Foto: Lorrado



Foto: Bemian



Foto: Tashi-Delek



Foto: mrcmos



Status in selected countries

Universal design manifests itself differently in different countries. Regardless of how it is done, the guiding principle is that universal design is an essential tool for achieving equality in society.

For example, does Norway through legislation and regulations have exact measures and requirements that must be implemented for a building to be considered universally designed. In other countries, there are no defined target requirements, but they have an intention that must be realised for the building to be universally designed.

Different approaches mean that no international target requirements exist to establish that a building is universally designed. The fundamental principle is that the groups of people who depend on adaptation can use the building and can move around in the building without significant obstacles.

Universal design initially concentrated on physical adaptation. As discussed, universal design has also found its place in the learning

environment of kindergartens and schools. Adapted education for the individual, inclusive education and universal design are terms used in the education sector and in practice the terms have a common goal of making the education accessible to everyone.

From time-to-time UNESCO prepares a report describing the situation in individual countries regarding the right to education⁷. *The Right to Education for Persons with Disabilities* (2019) provides a summary of the status in this field in 64 countries. The report is based on the countries' own report on the status in their country.

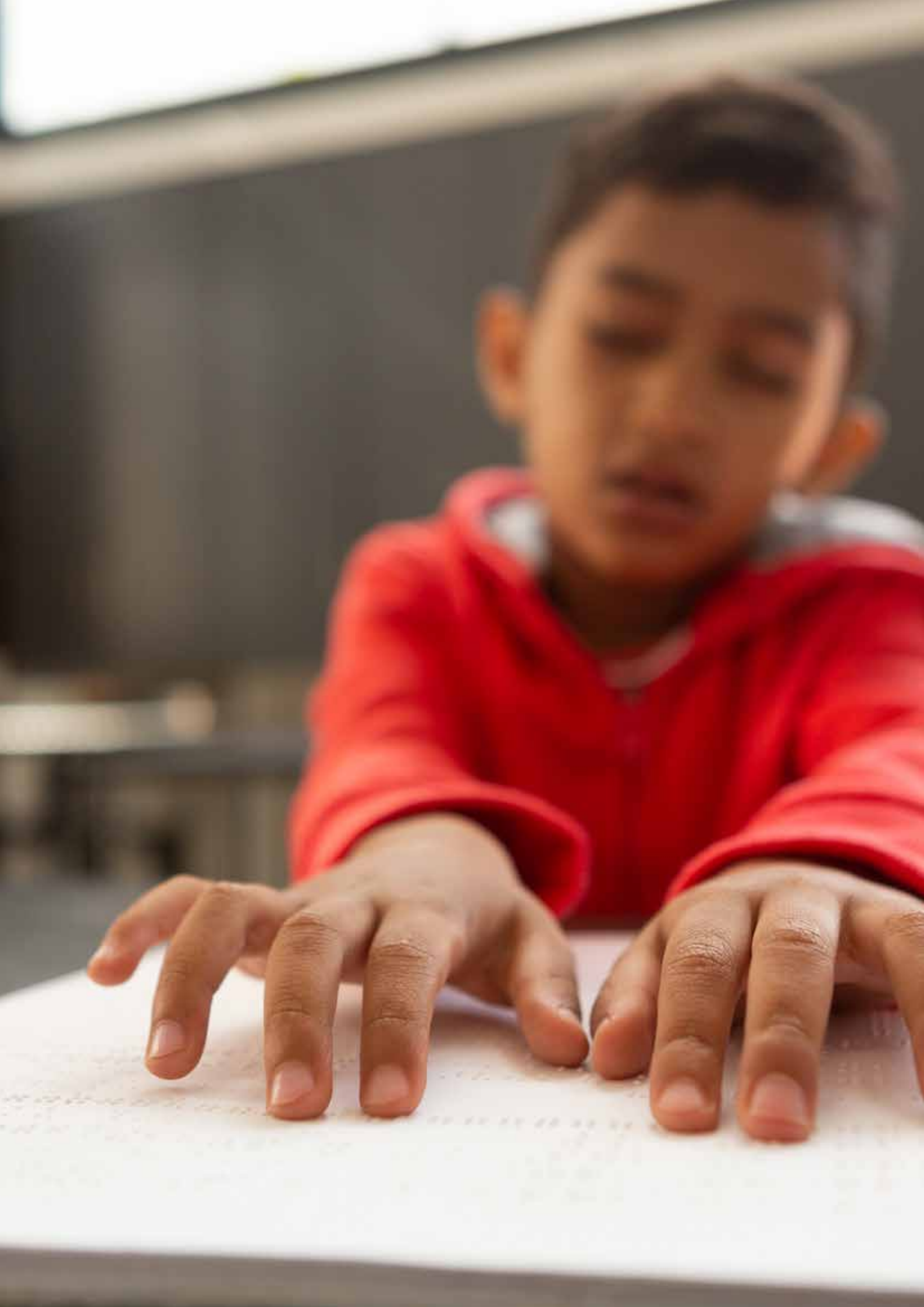
- Section one in the report presents the international legislation protecting the right to education for persons with disabilities.
- Section two provides a brief thematic analysis of actions that have been reported on by member states aimed at securing the right to education for persons with disabilities.
- Section three is a compilation of references to the right to education for persons with disabilities in the national reports from the 64 member states.

It is worth noting that universal design as a term is absent with one exception in the national reports that were the basis for the latest report in 2019. However, this does not mean that universal design is an absent strategy.

We refer to the abovementioned report as it gives a comprehensive picture of how the various countries are working to make education inclusive. However, we would like to highlight additional input we have received from India, Finland, and Germany, see attachments.

7. <https://unesdoc.unesco.org/ark:/48223/pf0000371249/PDF/371249eng.pdf.multi>

The **fundamental principle** is that the groups of people who depend on adaptation can use the building and **can move around** in the building without significant obstacles.



Different disabilities – different needs

Universal design is not a special action aimed at persons with disabilities. First and foremost, it is a way of thinking, and of planning accordingly. The goal is that society shall not discriminate, but put all citizens on a par. Everyone should be able to use the same entrance, the same public transportation, or use the same device without needing to make special efforts in one way or the other.

However, it is a fact that if everyone shall be able to use the same, the planning needs to consider the groups with challenges in relation to the specific solution. If everyone shall pass through the same door it needs to be as wide and adapted that both a person in a wheelchair and a pram can pass through it easily.

The descriptions in this chapter about the needs for universal design for different groups are taken from Norwegian organisations for different disabilities. The websites for the organisations are listed in the back of the report for more information.



Фото: Ольга Симонова

Children and youth with hearing impairment

Education is a fundamental human right also for pupils who have a hearing impairment. Everyone should have equal opportunity to participate and be taken care of. These pupils may otherwise isolate and feel left out if they do not have the same access to information as their peers. This can also lead to the pupils falling behind in the education and the learning outcomes.

Acoustic environment

The acoustic environment influences the participation on many levels. This is especially true for persons with a hearing impairment but can also be of importance for persons with a visual impairment, persons with dyslexia, persons with a different mother tongue, ADHD, autism, and other sensory difficulties.

The education sector is a setting where there are many secondary sounds and a need for solutions to filter the sound.

To create better acoustic environments in existing schools it is possible to start by identifying where the noise is coming from, and the possibility to reduce the sound from these sources. Usually, there is noise from the ventilation system, projectors, and air conditioning. In addition, the sound proofing of walls, doors and windows can be improved to prevent the noise from outside to come through.

An efficient way to improve the acoustics in a room is to install sound-absorbing ceiling and wall panels.

An efficient measure to reduce background noise is to distribute the teacher's voice evenly in the classroom through a microphone and distributed speakers in a so-called distributed audio system. This is of course beneficial for the hearing impaired, but it also spares the teacher's voice and improves the learning situation as such. Internationally, the positive effects of distributed audio systems are documented.

Communication and information

Communication and information are especially important for everyone to have equal access to the education. This applies to physical conditions such as information desks and receptions, resonance, and good acoustics. In addition, it applies to the training of education personnel to communicate with pupils and students with hearing impairment, technical equipment, and access to an interpreter in the education.

All contributing factors must be available at the same time. In the education it is important that the peers are disciplined in their

conversation and that other disturbances are reduced. It is equally important to prioritise adequate lighting so that persons with hearing impairment can read the mouth of the teacher and others they communicate with.

Pupils with a hearing impairment may benefit from a hearing aid. For the pupils participating in the education, it is vital that the other pupils in the class use a microphone when they participate in the communication in the classroom.

Other pupils with hearing impairment may need sign language or interpreting by writing. It is important that the interpreter manages to convey what happens in form of communication in the class environment.

If the teacher is standing with their back against the class, it may be difficult to hear what is said.

Management and training

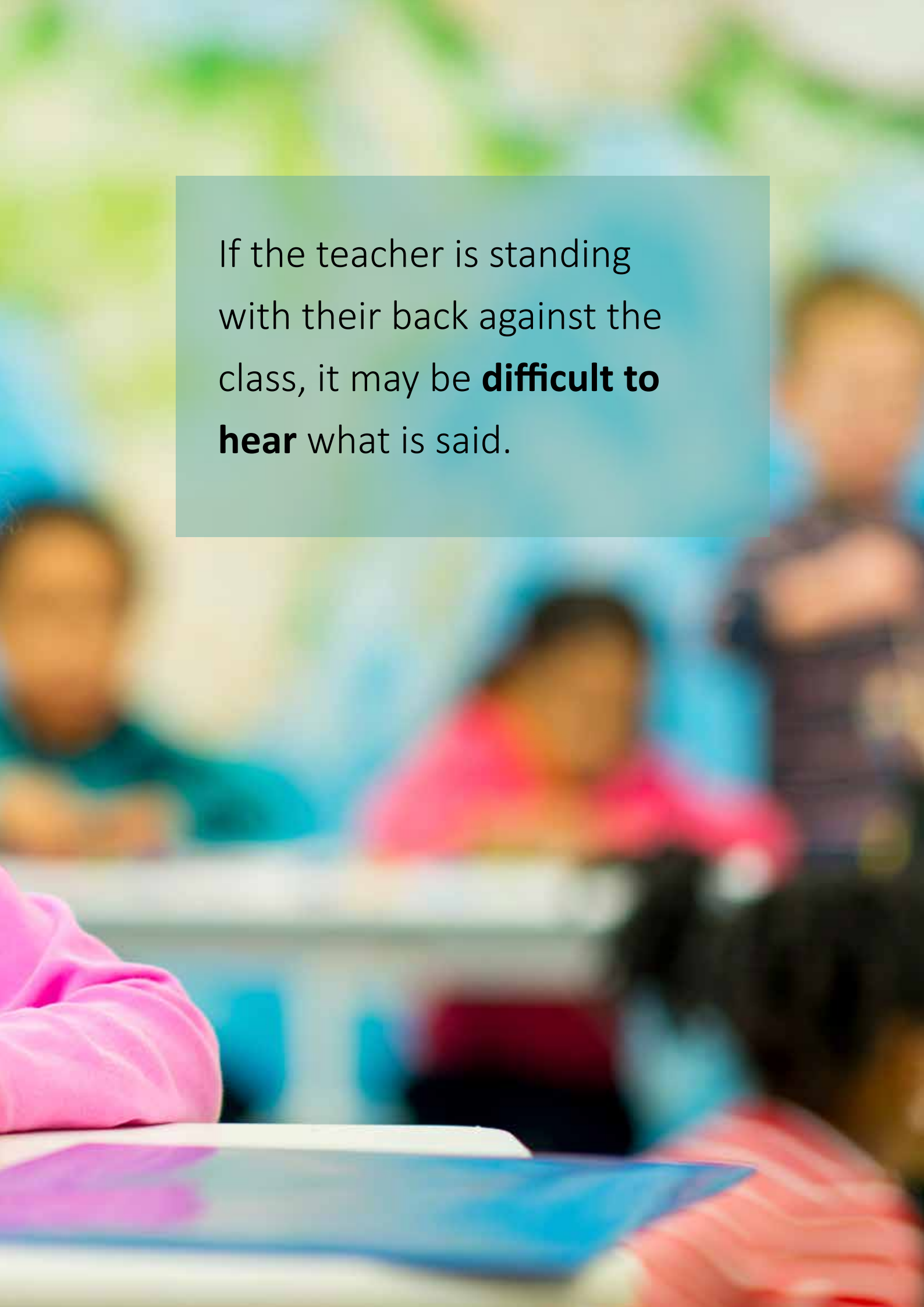
It is essential that the school management provides competence development for the employees, and that they have the competency needed to procure equipment and other things to the educational institution. Systematic user involvement in the procurement process is of great importance.

Services in education are provided by the administrative and the teaching staff. In both instances it is necessary that the administrative management of the educational institution ensures that the staff receives training about how to adapt the services to the challenges pupils with hearing impairment have. This is to ensure they have access to the same services as other pupils and students. An effort must be made to prevent the service provision to be characterised by personal conceptions about hearing impairment.

POINTS TO **REMEMBER**

- Identify noisy areas
- Adequate lighting to support lip reading
- Registering the acoustics in the class environment
- Cooperation with teachers for the hearing impaired/other relevant professionals
- Technical aids
- Control and improvement of the sound system
- Ensure adequate training of teaching staff and other staff



The background of the image is a blurred photograph of a classroom. Several students are visible, sitting at white desks. The focus is soft, with the students in the foreground and background appearing out of focus. The colors are warm and slightly muted, typical of indoor lighting. A semi-transparent light blue rectangular box is overlaid on the upper portion of the image, containing the text.

If the teacher is standing
with their back against the
class, it may be **difficult to
hear** what is said.



Children and youth with visual impairment

With the right knowledge about the consequences of visual impairment, educational and practical adaptation, parents/guardians have the experience that children and youth with a visual impairment have the possibility for a good everyday school life. Adaptation is however essential for the children to be as independent as possible.

Classes and groups

Blind pupils can attend the education in ordinary classes and groups. The prerequisite is that the school staff has been trained and given continuous guidance in physical and educational adaptation of supporting materials, teaching materials and technical aids. To a large degree visual impairment affects the pupil's possibility to function well in social situations. If the group is too big it becomes difficult to have an overview and have contact with the other pupils in the group – especially in situations with a lot of noise and disturbances.

Experience shows that conditions such as peace and order, the tone among the pupils, the teacher's ability to make the pupils listen, wait their turn and work quietly are as important as the number of pupils. Good working habits and a good environment are important for everyone, also for pupils with a visual impairment. It is difficult to point out the ideal group size. For overview, it is important that the groups are not too large. Adaptation and how the teaching staff organises the education are also of great importance. Experiences also show that successful social integration of pupils with a visual impairment is more likely if the pupil already knows as many of the other pupils as possible, either from the neighbourhood or from kindergarten.

Contrasts

For persons with visual impairment, the degree of saturation and lightness in the colour selection are important for the contrasting effect. Colours that are in contrast with each other are light colours on a dark background and dark colours on a light background. Use a contrasting colour on doors and door frames, stair noses and other elements that are important for orientation. Signs should have a minimum letter height of 5 cm, and it must be possible to walk right up to the sign to read. Glass doors must be marked. It is important

to have good lighting in entrance areas, stairwells, and on signs. Take care that the lighting is not glaring.

Tactile paving and signs

For persons with blindness and severe visual impairment who must move from one place to another, it is important to have fixed signs to orient themselves by. Variation in the surface is one measure; the most common are tactile paving/lines in the walkway leading up to the front door. Handrails must start at least 30 cm before going up and down the stairs. The railing must follow the physical shape of the stairs and have a rounded end. The top of the stairs must be marked with a danger zone (“a tactile area”) at a depth of 60 cm and across the entire width of the stairs. The field must end at a depth of one step before the stairs start. The bottom of the stairs must be marked with an attention field (parallel lines) at a depth of 60 cm across the entire width of the stairs, before the bottom step and close to the step.

Mobility

Peers and teaching staff should receive training in mobility. Adapt the surroundings so that the pupil with visual impairment does not encounter obstacles or objects that pose a risk of collision. These can be projecting corners, signs protruding from the wall and unsecured sharp edges. Peers must keep order and not leave backpacks and the like in corridors. Fixed traffic routes should be kept clear of obstacles.

Lighting

Correct lighting can make the difference between whether a person is practically blind or has low vision. The visual functions of a person with visual impairment can vary and it is difficult to say anything general about lighting.



Foto: kokouu



Foto: zilkovec

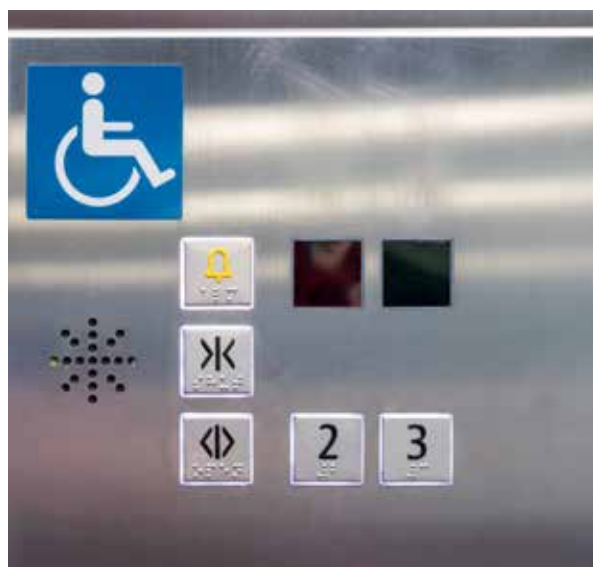


Foto: kckate16



Foto: Lorado

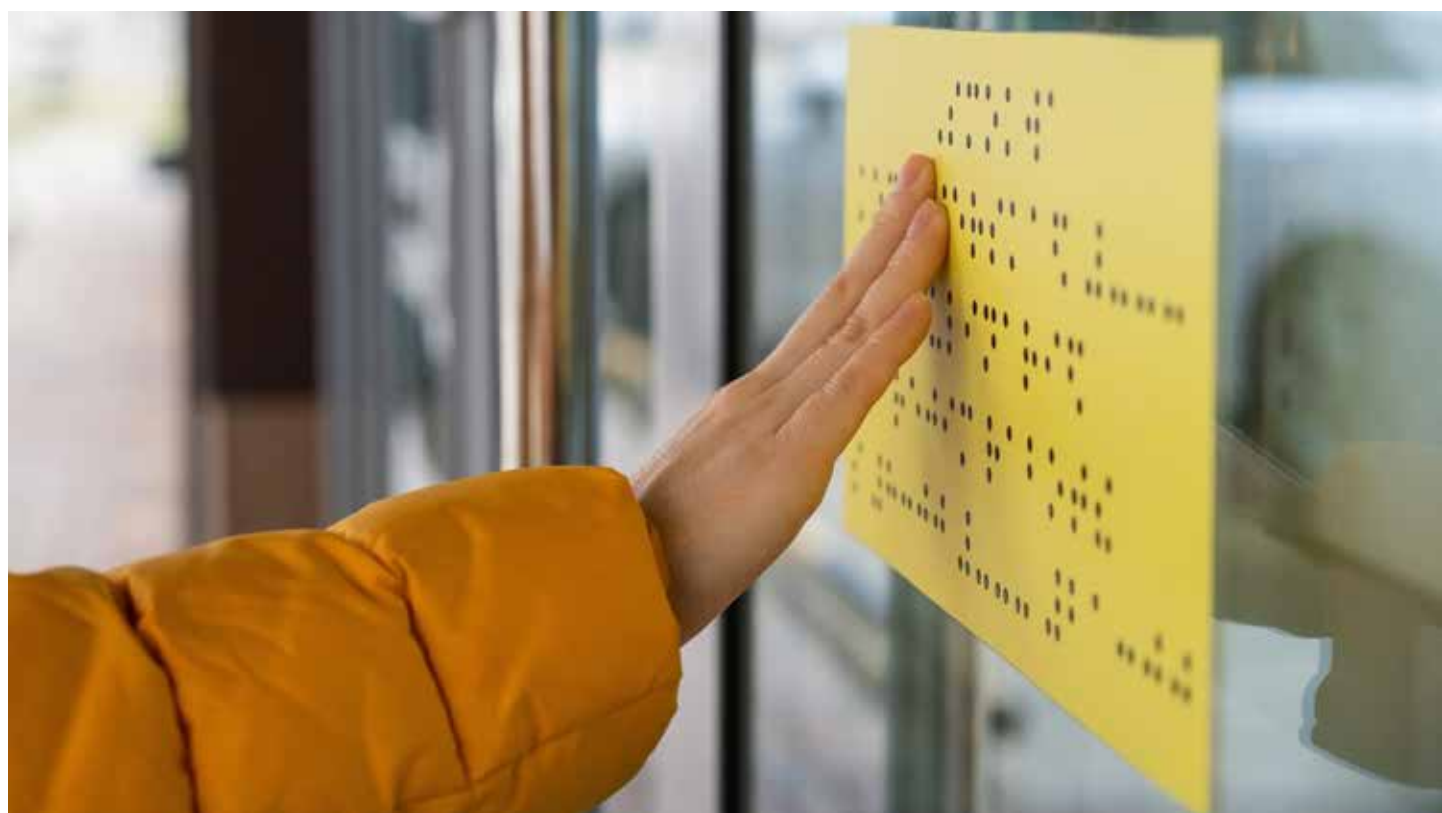


Foto: Inside-studio

Noise

For pupils who depend on hearing as an important supplementary sense, noise from traffic and adjacent rooms can be bothersome. In the same way, poor acoustics can also disturb pupils with visual impairment. Therefore, it can often be necessary to soundproof the room.

Access to and size of the room

In many instances it will be beneficial to choose a room that is close to an exit door. If other rooms are more suitable, access must be arranged and pupils who are severely visually impaired or blind must be given ample opportunity to practice finding their way around, so that they can function independently.

Many pupils with visual impairment have a lot of space-consuming equipment. It is therefore important to have a sufficiently large classroom. There should also be space to organise students into small groups.

Technical Aids

Many different aids have been developed for pupils with blindness and low vision. Access to this varies from country to country. When aids are acquired, it is important that the teaching staff and the pupil learn how they work and how to use them.

Braille and sound

Signs and other central information should also be in braille and placed at a height and position that makes it possible to read. The same information should be available in braille and as audio files.

Digital access

Digital resources that the school uses in the education should be available to the pupil. This means that learning platforms and digital books are designed according to the principles of universal design and websites.

Digital resources that the school uses in the education should be **available** to the pupil.

POINTS TO **REMEMBER**

- Think contrasts
- Think good lighting
- Think tactile paving/lines
- Avoid physical obstacles
- Noise and acoustics
- Access
- Technical aids and maintenance
- Digital teaching materials
- The placement of information boards
- Braille and sound files for information
- Secure adequate training of teaching staff and other staff



Children and youth with a physical disability

Universal design for people with reduced mobility uses the person in a wheelchair as a starting point. Physical adaptation is the major challenge, but the experience of what is demanding varies greatly from pupil to pupil.

Accessibility

Wheelchair users often find it difficult to go by bus and are taken to school by car. The distance from the car park to the classroom should be as short as possible, a maximum of 50 metres. The walkway to the classroom should have a firm surface that provides little friction and rises insignificantly, if possible. If there are differences in level, the walkway should be built with an even rise, but not steeper than 1:15.

The entrance should be at ground level. If there is a level difference this must be levelled out with a ramp or another solution. There must be plenty of space in front of the entrance so that the wheelchair user easily can open the door and roll in. It is preferable if there is a free circle in front of the door with a diameter of 1.6 metres. The door should have a minimum clear width of 1.16 metres, and the door must be opened easily with little force.

Inside the school building, the walkway area should be sufficiently wide, a minimum width of 1.5 meters is recommended. The doors from the corridor area to the classroom should have a width of 1.5 meters and a corresponding free circle on each side of the door with diameters of 1.5 metres. The free width of the doors inside should be at least 0.86 meters. Door thresholds should be avoided. If that is not possible, no thresholds can be higher than 2 centimetres.

Inside the classroom, sufficient space must be set aside so that a person in a wheelchair can reach their workplace easily. It should be considered that the person concerned can use any technical aids.

The toilet should be designed so that a person in a wheelchair can use it. This means that there must be a free area with a diameter of 1.5 meters in front of the toilet, and 0.9 meters free space on both sides. Fold-down support handles which the person can lean on when transferring from a wheelchair to the toilet and back again should also be installed on both sides of the toilet. Toilet paper must be easily accessible and not far from the toilet. Mirrors, sinks and locks must be installed so that you can operate and use them in a reasonable way from a sitting position. There should be a handle on the toilet door so that the person in a wheelchair can close the door.

In multi-storey buildings, either a lift or a ramp must be installed so that a person in a wheelchair can move between the levels/floors. The lift must be at least 1.1 meters x 1.6 meters. The ramp must have a width of at least 0.9 metres, not be steeper than 1:15 and with a rest stop for every 1-meter rise.

Every room and hallway need a firm surface that is easy to manoeuvre the wheelchair on and gives little friction.

POINTS TO **REMEMBER**

- Consider the distance and level difference from the car park to the building
- Consider the entrance area and the opening force of the main door
- Consider the pedestrian area
- Consider the door opening into the classroom
- Consider space in the classroom
- Think about order in the classroom
- Consider the toilet facilities
- Think about level differences in the school building
- Think about the surface of the floor
- Ensure adequate training of teaching staff and other staff



Foto: Özgür Çankaya

Children and youth with hidden, invisible, and cognitive disabilities

Persons with disabilities are as diverse as every other person. For certain groups such as the blind/visually impaired, the deaf/hearing impaired and persons with mobility difficulties, it is necessary to adapt the school premises so that they can participate equally in the education. The same applies to pupils with hidden, invisible, and cognitive disabilities.

Everyone has the right to an education; it is a human right. The education must be individually adapted, and the school premises must be designed so that all pupils, regardless of functional impairment, can take part in the education on an equal basis with others.

Diversity in the challenges

A pupil who has a defined disability that is not immediately visible, has a hidden disability. Many of these pupils depend on short distances and lifts to move between floors. An example of this is a pupil with heart disease.

Pupils who have various types of behavioural difficulties and are dependent on fixed routines and a calm learning environment, have a hidden disability. An example of this is a pupil with an ADHD diagnosis.

Pupils with cognitive impairments have developmental disabilities, many of them are dependent on adapted teaching aids, and easy-to-read literature.

For all three of these groups special measures may be necessary when considering the structural conditions of the buildings. Some people with hidden disabilities may rely on measures that apply to one of the previously mentioned groups. Some individuals with cognitive impairment may, for example, have challenges with vision, hearing and movement and will benefit from measures aimed at these groups. However, this is individual and can vary significantly from person to person.

Fixed routines

For the abovementioned three groups of pupils fixed routines are important. They need to be seen and heard based on their prerequisites and the education needs to be predictable. This is about good class management, all pupils will benefit from a teacher being clear in their role as a leader, creating a good learning environment in the classroom. However, this is particularly important for pupils with behavioural difficulties. Through clear class management, disruptive

elements will be reduced, something which is a prerequisite for pupils with behavioural difficulties participating in ordinary education.

Withdrawing

For pupils with behavioural difficulties, it is important to be able to withdraw to calm down together with an adult. This is crucial to protect the pupils against themselves and others.

The challenge for people with hidden disabilities and/or cognitive impairment is how the education is organised and how it is approached to ensure that the pupil understands the message and can take in what the teacher wants to convey. In principle, this is nothing other than what is every educator's great challenge - to individually adapt the education so that all pupils have something to strive for.

Making demands

Unfortunately, what many pupils experience, particularly in the case of pupils with cognitive impairments, is that no demands are made of them, and that they are not expected to be able to learn. Consequently, many in this group receive a service that is not really an education at all. Absence of books, absence of expectations, absence of organised education and training imply not taking the individual child seriously.

In education for all, it is crucial that demands are placed on all pupils and that they are expected to learn something – the absence of this means not taking the individual pupil seriously. This practice is in opposition to international conventions and agreements.

Sensory challenges

For pupils with sensory challenges, the biggest challenge is that sensory impressions are amplified and can distract the pupils. The challenge is therefore to create teaching arenas where sensory experiences, whether they are visual impressions or sound impressions, are reduced to not be disruptive.

Sensory difficulties mean reacting faster, longer, or more intensely to sensory stimuli where the sensitivity is linked to smell, sight, taste, hearing, touch, pain, and the sense of balance.

In principle, this is nothing other than what is every educator's great challenge- **to individually adapt the education** so that all pupils have something to strive for.

POINTS TO REMEMBER

Some examples of what we need to be aware of to stimulate equal access for this group of pupils:

Floor plan

- Good class management
- Simple and logical layout
- Possibility of a shielded entrance in addition to the main entrance
- Choice of layout that facilitates good sound conditions
- Possibility of permanent places for pupils
- Doors/exits at the back of the classroom so that pupils can leave the area without anyone observing them.
- Enough group rooms/private rooms (defined quiet rooms/rest rooms). It must be possible to cover glass walls and some of these rooms should have daylight.
- Option for pupils to have their own changing room/shower

Material use and equipment

- Well considered placement and use of windows and glass walls so that pupils with cognitive and sensory difficulties also get a good learning outcome. Possibility of shielding if necessary.
- Lighting that can be dimmed (especially in parts of the building) and that does not flicker.
- Little contrast between wooden slats and sound-absorbing material at the back when using slatted panels.

- Conscious use of materials and colours both to find your way around and as an effect in a room.
- Good signage and use of pictograms
- Choice of floor surface and furniture that do not make scraping noises when furniture is pushed
- Proper soundproofing in all rooms (this includes the corridor, cloakroom, and shower where the noise level is high)
- Sound equalising equipment in all classrooms
- Ventilation systems and other equipment that emit minimal noise (projector whirring, school bell in the classroom ticking). Placing the copier so that it does not interfere.
- Closed shelving systems such as cupboards and drawers

Outdoor areas

- Quiet zones in addition to zones for activity and play
- Well considered placement of zones for activity in relation to the windows in the learning areas. Some students experience reduced concentration when they have a view of the school yard.

Management and training

- Ensure adequate training of teaching staff and other staff.



Implementation

Article 24 Education in the CRPD recognises the right to education without discrimination and based on equal opportunity for all, ensuring an inclusive education system at all levels and lifelong learning.

Inclusion in school does not happen by itself. Belonging is about organising the daily school routine, but also about the experience of being included.

To succeed it's important to see our recommendations together.

Some activities must be handled on a national level and some activities at the school level.

Policy - National commitment - Economy

Including children with disabilities in education requires changes to systems and schools. The success of inclusive systems of education depends largely on a country's commitment to

- adopt appropriate legislation
- provide a clear policy direction
- develop a national plan of action
- establish infrastructure and capacity for implementation

Ensuring that children with disabilities can have the same standard of education as their peers, can also require increased funding but mainly it requires changing attitudes.

Inclusive education and universal design are closely connected. To succeed with making the education inclusive the principle and the concept universal design is essential. Making the school and kindergarten accessible are important, otherwise children with different disabilities will not be able to attend the classroom and the education.

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Leadership

Targeted work is required to achieve real inclusion in school and kindergarten. This involves both the leader's attitude to inclusion and giving teachers information about methods, organisation and learning resources. It is also important to have competence to support the school/kindergarten in developing an inclusive culture.

A school/kindergarten administration that promotes inclusive attitudes and practices among pupils and employees is necessary. It is necessary to work with different dimensions in the implementation process.

The leadership is also responsible for giving the teachers and other staff the possibility to be trained in how to make an inclusive environment. The leadership also has a role to play in giving the national authority signals about what should be essential in the courses and in the education in university colleges and universities.

The leadership is also responsible for giving the teachers and other staff **the possibility to be trained** in how to make an inclusive environment.



Education in universal design and inclusive education

Formal education in this area must include how to work with the aspect of changing attitudes. Furthermore, education must clarify who is responsible for what and where to turn for professional guidance. The education must also contain good didactic guidelines for good educational practice. It is also crucial that the education provides direction about physical conditions and the needs to adapt the school surroundings. Education must therefore focus both on universal design in education and training and on the physical conditions.

Some guidelines are purely technical with practical examples on how to create files (Power Point, videos etc.) so that they are as

accessible for everyone as possible, and how to use integrated functions in the software to control and check the files.

Didactical guidelines can include where and how the teacher should be placed in the room, the use of microphone, how to think inclusion in for example group work and individual work, coherence between verbal and written information. How the written and oral work of the pupil can be solved differently without quality loss using for example sound recordings (podcast), video and different forms of presentations should be included.

The educational message is that several of these work methods can embrace more pupils with the result that more pupils will not need individual adaptation or need it to a lesser degree. Incorporating and understanding such approaches will in the long run save work for the individual teacher and pupil.

An openness about the use of universal design in learning situations can also contribute to a social atmosphere where diversity is enriching, rather than appearing as something “unknown”. In addition to hearing, visual and reading and writing problems, it also affects more high-frequency challenges such as concentration difficulties (such as ADHD) and anxiety.

The kind of education that has been described will be relevant for educational staff and support staff both in kindergartens and schools but is equally relevant for studies at university college and university level.





Foto: Juan Monino

Understanding and implementation

At the *school/kindergarten level* the following will be important:

a) Questions – attitudes and understanding

To succeed it is important to raise questions for discussion among everyone working in the school and kindergarten.

Questions which are important to discuss are:

- What does inclusion mean in practice?
- Are there pupils who cannot be included in a regular class?
- Must pupils be similar or alike to enjoy interacting with each other?
- How can teaching on different levels take place in the same classroom?

b) Strengthening the team around the teacher

It is demanding to have the academic responsibility for pupils who largely diverge from the curriculum. Teachers know a great deal about how to increase the pupil's learning outcome, but they will need additional skills to be able to transform this to the education of pupils with complex learning difficulties.

c) Competence

To help ensure the realisation of the right in the UN Conventions and regulations the school must take appropriate measures to employ teachers who are qualified in for example sign language and to educate children with different disabilities. This could be:

- Facilitating the learning of braille, alternative script, augmentative and alternative communication.
- Facilitating the learning of sign language and the promotion of linguistic identity of the deaf community.
- Ensuring that the education of persons, and in particular children, who are blind, deaf, or deafblind, is delivered in the most appropriate languages and modes.

At the *national level* it will be important that the parliament and ministries follow up and ensure that the different systems work according to the signals given. That they follow up the implementation and realisation of the goals for universal design and inclusive education according to International Conventions and regulations.

POINTS TO **REMEMBER**

- National policy
- Leadership
- Education for teaching staff/ other staff
- Implementation
- Following up results

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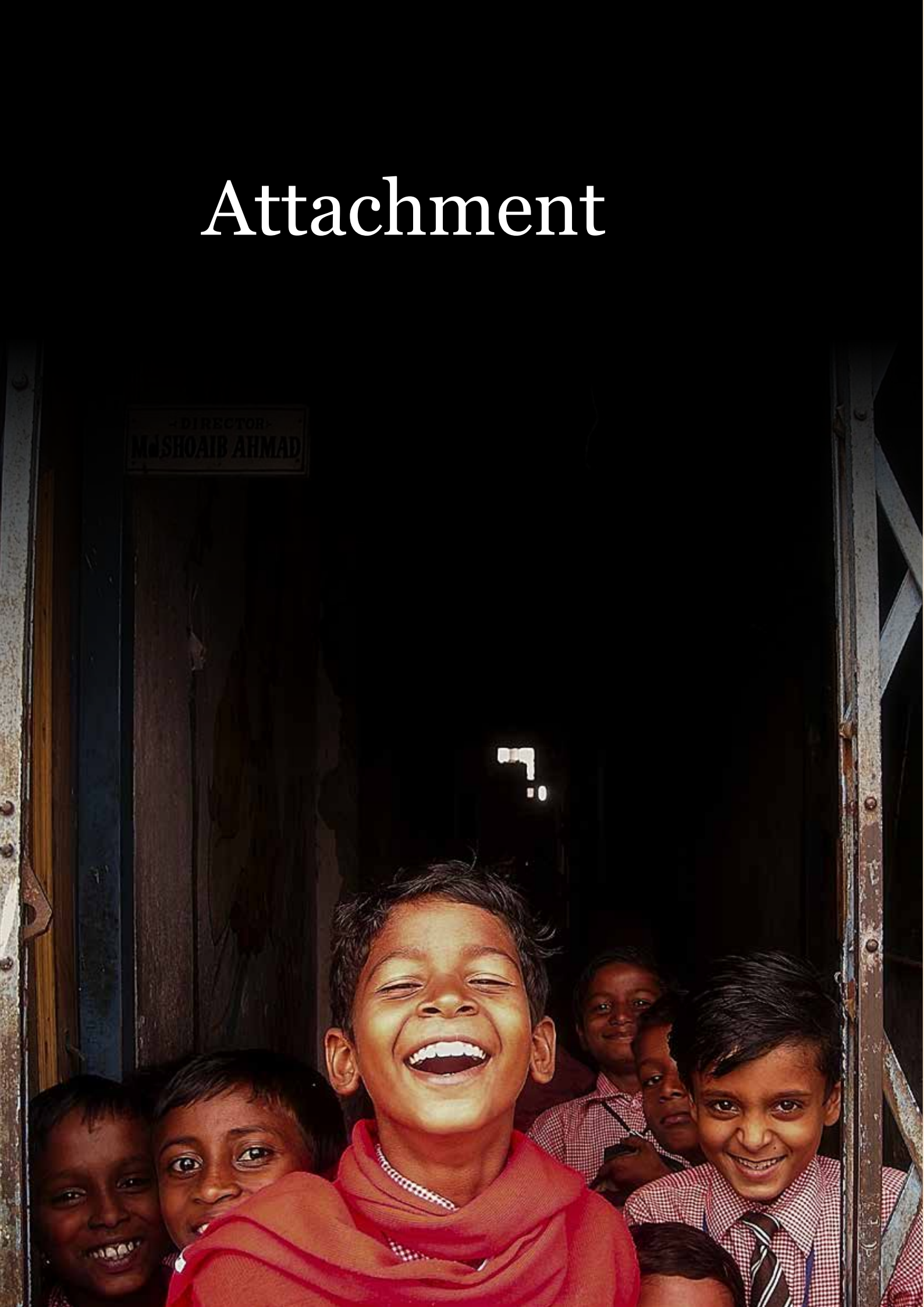
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Attachment

-DIRECTOR-
M. SHOAIB AHMAD



India

By Asha Hans/Vice Chair Education Commission and EVP SMRC India

Education is an essential pillar to achieving the UN's 2030 Agenda for Sustainable Development in India.

Legal Framework

In India starting with the Constitution, as per Article 21A every child with a disability has the fundamental right to education. India has been a party to all major international commitments related to education and disabilities. This is strengthened by the ratification of the CRPD, the Rights of Persons with Disabilities Act, 2016 which provides inclusive education, and the introduction of a large number of laws and mechanisms to make school education accessible to children with disabilities. The Right to Education (2009) confirms the right of all children to have accessible education facilities and its 2012 amendment specifically mentions 'disadvantaged' children.

The National Plan of Action for Children 2016 provides specific goals, strategies, and indicators for the education of CWDs, achievable by 2021. India has built an inclusive legal framework which provides specific features such as the New Education Policy (2020) for the provision of home education for children who cannot attend school due to a disability. A Unified District Information System for Education (UDISE) in India provides monitoring on what is known as one of the largest data bases in the world.

There are also mechanisms of accountability through the National Commission for the Protection of Child Rights (NCPCR), Government of India, which has the responsibility to review the safeguards for child rights provided under this Act, investigate complaints and have

the powers of a civil court in litigation. The SSA (Samagra Shiksha Abhiyan Universal Education Campaign), oversees the implementation of the Right to Education Act from preschool to Year 12. to enable all children and young persons with disabilities to have access to inclusive education.

The Primary School System

According to the 2011 census of India, there are 368,697 five-year-olds with disabilities in India. A total of 40,801 children with disabilities below the age of 5 attend special schools. Out of them, 19,341 are girls (47 per cent) and 21,460 are boys (53 per cent). The foundational stage of these children is in two parts, that is, 3 years of pre-schooling in rural areas by the village system (Anganwadi) and then 2 years in primary school in Grades 1-2; together covering ages 3-8, Preparatory Stage Grades 3-5, covering ages 8-11. Though the right to inclusive education exists provided by the Ministry of Human Resource Development (MHRD), the Ministry of Social Justice and Empowerment (MSJE) runs separate schools for children with disabilities.

Accessibility in Schools

As per the RPWD Act, *“universal design means the design of products, environments, programmes, and services to be usable by all people to the greatest extent possible, without the need for adaptation or specialized design and shall apply to assistive devices including advanced technologies for a particular group of persons with disabilities.”*

In 2015, the Government of India launched the Accessible India Campaign (Sugamya Bharat Abhiyan) to achieve universal accessibility for persons with disabilities. Accessible India Campaign audits

schools, to assess the accessibility of the physical environment, and obliges governments to retrofit existing buildings to meet accessibility norms. The National Building Code provides guidelines for barrier-free features. The National Education Policy (NEP) also specifies that universal design should be incorporated into sports facilities and school building design.

Curriculum

India through its new Early Childhood Education Curriculum Framework takes a developmental approach, with different activities for age groups 3 to 4 and 4 to 6. In addition to interactive learning around reading, storytelling, songs, problem-solving, writing and numeracy, the curriculum also includes activities to develop fine motor skills, physical coordination, and fitness, as well as creativity through drama, music and more.

Support System

Mid-day meals remain a draw for many children with disabilities. The other support system is the right to opt for home-based education as per the Right to Education. They also have a right to free education in a special school of their choice, which is considered important as general schools are not yet prepared for teaching children with disabilities. It however is being criticised by many disability activists as it violates the spirit of inclusion.

Assessment

Many studies have been carried out that reflect the gaps between policies and implementation. The most important is the apex economic development body of the Government of India i.e., Niti Aayog which in its Three-Year Action Agenda (2017) recognized challenges in the schooling system such as the absence of ramps and disabled-friendly toilets, special teaching materials and sensitized

teachers. This critique was confirmed by Access audits carried out in 500 schools in 16 Indian states which found that due to a lack of expertise and poor understanding of access standards among construction personnel and school administration, school infrastructure was often barrier-filled and unsafe for children with disabilities. The gendered impact is related to the absence of toilets which affects girls the most and leads to dropouts.

Research including the 2019 UNESCO report on the Status of Children with Disabilities in India also identified several specific gaps which resulted in disabled children rarely progressing beyond primary school, and only 9% completing secondary education⁸. Teachers were unwilling to take responsibility for the low learning of children with disabilities, as they had concerns about their own professional strengths.

Rural Urban Divide

Compared to urban settings, rural schools face particular challenges including lack of resources, poor infrastructure and a shortage of trained teachers. Most at the entry stage depend on the village “Anganwadi” Centres which take care of their health nutrition and preschool education and are the initial point of recognizing disability and motivating their reaching schools. is a universal system and extremely effective, unlike the school system which has many gaps in providing education to children with disabilities. They however face budgetary constraints.

The use of universal design for learning to meet the educational needs of diverse learners is a promising instructional approach which is not fulfilled. 70% of India is rural where technology is yet to reach. In urban areas schools may be physically accessible but

8. Educational Planning: Dropout of CWSN and SLD Children in India (iafor.org)

internal fixtures and reading materials are not accessible. There is no accessible transportation. Availability of aids, appliances and rehabilitative services also tends to be concentrated in urban areas. Assistive devices are distributed, and no training is provided on their use and maintenance especially hearing aids which are discarded as there is a lack of knowledge of recipients about hearing aids. Attitudinal barriers amongst parents remain in place and in the case of children of poor who need to work to meet daily needs and cannot take time off to ensure children have access to education.

Many urban schools have started to use ICT for improving the educational experiences of children with disabilities. Rural schools have little access to digital technology and during COVID-19 missed out on schooling.

Conclusion

In order to meet its commitments under SDG4, India aims to make all education facilities disability-inclusive by 2030. To achieve this goal and advance the inclusion and non-discrimination agenda, more is needed to ensure that accessibility in school infrastructure is available. Budgets for schools would have to be increased and teacher training strengthened.

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Germany

By Dipl. Päd. Manfred Weiser/ Deutsche Vereinigung für Rehabilitation and Dr. Angela Ehlers.

Legal framework elementary schools

In the Federal Republic of Germany (FRG) the responsibility for school organisation and school legislation lies with the 16 federal states. To coordinate development in the federal states, the ministers of education are organised in the Kultusministerkonferenz (KMK). This has the task of reaching agreements on school laws, examinations, and general developments so that the developments in the individual federal states do not diverge too much.

Regarding the issue of school inclusion, we have seen very different developments in the Federal Republic. This is primarily due to the activities of parents; the school incentives and measures have been gradually expanded.

On March 26, 2009, the federal government ratified the CRPD, laying the foundation for further development in inclusion in Germany. The federal states have transferred the CRPD to corresponding state legislation, so that today inclusion can take place in all federal states.

The state of inclusion in elementary schools

Inclusion is a self-evident right. Parents can decide whether to accept an inclusive school offer for children or whether they want their children with disabilities to be supported in a special school.

We are currently experiencing a very strong increase in the number of children with mental disabilities. This trend existed before the coronavirus pandemic and has increased a lot during the pandemic. Therefore, we can see an increase in children receiving inclusive

education - but also an increase in children receiving support in special schools.

A major point of discussion is always the question of resources: are there enough teachers available to ensure inclusion, enough teacher hours per week? Work has been initiated to provide inclusive content in teacher training.

Universal Design of Learning (UDL)

UDL has played an important role in school inclusion so far, especially in the inclusion of students with sensory disabilities. Special schools, especially for children who are deaf or blind, have departments that prepare learning resources and materials so that children can participate well in the classroom. That is, the learning resources and materials are designed so that the sensory disability does not become the all-important barrier. In negotiations with textbook and teaching material publishers, these schools try to ensure that the actual learning resources already meet the standards of the UDL framework.

Legal framework for kindergarten

The organisation and design of children's facilities in Germany are regulated by federal laws⁹ which provide the overall framework. The 16 federal states substantiate the work through corresponding state laws.

Thus, there are significantly different conditions between the federal states. The federal level is trying to improve the quality of elementary education and compensate for differences between the federal states. In each legislative period, a so-called child and youth report is drawn up by an expert council from science and practice, in which elementary education plays a major role.

9. Book VIII of the Social Code (SGB VIII) or the Child and Youth Welfare Act Disabilities.

The state of inclusion in day-care centres

Inclusion is a fundamental social concept that includes all people equally and refrains from exclusion¹⁰. Thus, it is the aim of inclusive kindergartens not to exclude children with disabilities and not restrict participation. All children get to know diversity and diversity in daily kindergarten life. Those who attend an inclusive kindergarten learn from the outset that diversity enriches coexistence through children being different. In inclusive kindergartens, each child is perceived and individually supported with his or her individual abilities, needs and competences.

The relationship between elementary and primary education has changed significantly and the kindergarten professionals as well as the specialists of the primary schools actively shape the transition. An undergraduate socio-pedagogical vocational qualification is indispensable, and it is based on an overarching European qualifications framework.

Universal Design of Learning (UDL) in kindergarten

Heterogeneity and diversity of all learners must be considered equally at all levels and in all institutions. Of course, this includes children with special educational needs from the very beginning. The learning environment must be inclusive, i.e., educational barriers must be removed as far as possible, and accessibility of offers must be ensured everywhere.

This barrier-free access naturally includes all resources and materials (appropriate precautions in Article 2, CRPD). This is subject to the so-called UDL framework, which controls the design of content, media, methods, and materials in an adapted manner and ensures that different levels of representation of learning are always used.

10. Inclusion as a supranational human right through the UN Convention on the Rights of Persons with Disabilities.



Finland

By Petteri Ora/ Development Director, Kiipula Vocational College, Finland

Legal framework for kindergarten and basic education

According to the Early Childhood Education Act (2018 / 2021), all children must have an equal right to participate in early childhood education. If necessary, the child is given general, enhanced, or special support. The support may include pedagogical, structural, and therapeutic measures that the child needs. The special early childhood education teacher participates in the assessment of the child's need for support, support measures and their implementation as needed.

According to the Basic Education Act (628/1998), those participating in education have the right to receive adequate support for learning and going to school as soon as the need for support arises. Support can be short-term and part-time or continuous. A three-tier support model is used. Support can be general (given alongside normal education), enhanced (e.g. remedial education) or special (e.g. small groups, special schools).

Inclusion in basic education

Based on the Salamanca Declaration and other international declarations and agreements, Finland is committed, like other Western countries, to develop its own school system in an inclusive direction.

Inclusive education is defined in Finland in such a way that every student receives adequate and timely support for their learning and other growth. Inclusiveness requires changes in both structures and educational activities.

Respect for diversity, equal opportunities and equality in studies are seen as the most important elements of inclusion in Finland. A common school for all students is seen as ideal. Inclusive pedagogy is promoted in teacher training and various projects.

Legal framework in vocational education and training

According to the Vocational Education and Training Act (2018), education supports the development of students into good, balanced and civilized people and members of society, and provides students with information and skills necessary for further study readiness, professional development, hobbies and the versatile development of personality.


In vocational education, everyone has the opportunity to acquire a profession and update their skills at different stages of their life and career, regardless of their previous educational background. Vocational education has different forms of education so that there is a suitable one for everyone.

Every vocational education student has the right to receive the support and guidance they need for their studies. The student receives guidance and support for his studies from the group supervisor, teachers, study counsellor and special education teacher. For their own well-being, the student receives support from the health nurse, curator and psychologist in the study care.

Inclusion in vocational education

The inclusion of vocational education means the cooperation of different actors in order to realize equal and equal study opportunities. The goal is that every student can participate in teaching and acquiring skills, regardless of learning ability, age, gender, nationality, religion, illness, or disability.

In vocational training, inclusion is implemented together with working life. During the training, we study at real workplaces and try to find jobs that suit everyone's abilities and skills. The realization of inclusion in vocational training supports and requires the realization of inclusion in working life and in society.

A photograph of a classroom scene. In the foreground, a male teacher with a beard and glasses, wearing a brown sweater, is giving a high-five to a young student. The student is smiling and wearing a dark blue sweater. In the background, another student in a green sweater is visible, and the classroom is filled with papers and books on desks.

Inclusion in school **does not happen by itself**. Belonging is about organising the daily school routine, but also about the experience of being included.



Rehabilitation International is a global organization and network that empowers persons with disabilities and provides sustainable solutions toward achieving a more inclusive society for them.

Founded in 1922, Rehabilitation International (RI) is a worldwide organization comprised of people with disabilities, service providers, government agencies, academics, researchers and advocates working to improve the quality of life of people with disabilities. With member organizations in more than 100 countries and in all regions of the world, RI also provides a forum for the exchange of experience and information on research and practice.



Foto: FatCamera



Rehabilitation
International

OUR MISSION

To advance **the rights
and inclusion** of persons with
disabilities across the world