



PEOPLE WITH DISABILITIES AND SPECIAL NEEDS IN RIGA TECHNICAL UNIVERSITY

Guidelines for communication and
ensuring an inclusive study environment

Introduction

The concepts used in this material are **special needs** and **disability**, or **people with disabilities**.

A PERSON WITH DISABILITY – a person who has a disability diagnosed in accordance with the law (Article 1 of the Disability Law).

SPECIAL NEEDS – the need to receive support and rehabilitation that creates an opportunity for the student to have the study program, taking into account his/her state of health, abilities and development level (Article 1 of the General Education Law).

PEOPLE WITH SPECIAL NEEDS are one of the main target groups of education defined by Article 7 of the Education Law.

Considering the recommendations of the UN Convention and following the practices of the best universities in the world, Riga Technical University provides support in studies to the following groups of people whenever possible:



**PEOPLE WITH MOBILITY
IMPAIRMENTS**



**PEOPLE WITH LEARNING
DISABILITIES**



**PEOPLE WITH VISUAL
IMPAIRMENTS**



**PEOPLE WITH AUTISTIC
SPECTRUM DISORDER**



**PEOPLE WITH HEARING
IMPAIRMENTS**

Statistics

There are no statistics available on how many students with different types of disabilities study in universities in Latvia.

In 2016, the Office of the Ombudsman of the Republic of Latvia published a study on the accessibility of higher education for persons with disabilities. 199 people with disabilities who are studying or have studied at a university at all levels of education (level 1 higher education, level 2 higher professional education, bachelor's, master's and doctoral education) participated in the study. The possibility to acquire knowledge more fully, increased focus, and an active social life are reasons why students with disabilities prefer full-time studies.

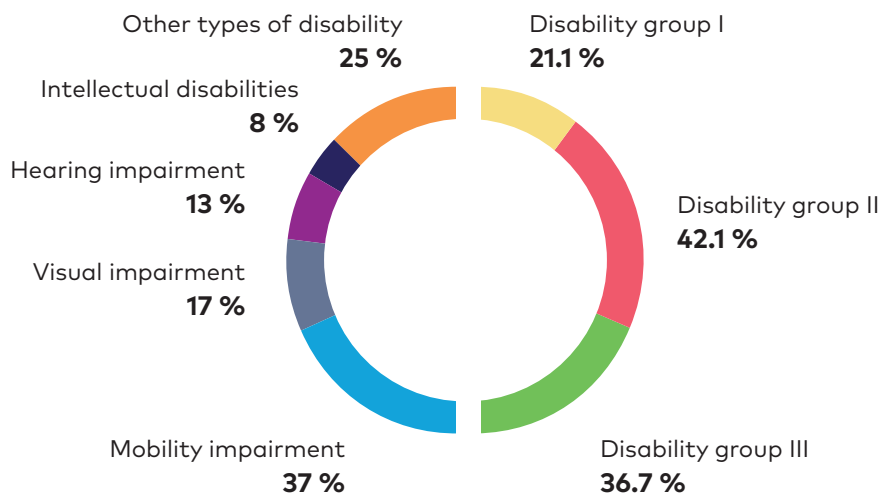
Almost a third of students with disabilities have encountered obstacles in universities due to their disability, the main obstacle being the inaccessibility of the informational and physical environment. However, slightly more than half of them have not inquired about decreasing these obstacles.

More than half of the research respondents did not have enough information about the availability of the informational and physical environment in universities.

The best way people with disabilities would like to get this information:

- directions on university websites and information pamphlets;
- representatives who could provide information about studies for people with disabilities in their required format.

The survey did not say how many respondents had a university degree, but it did indicate that 62.5 % of those students who had faced barriers had finished their degree, and nearly 22 % planned to finish theirs.



General suggestions

Although sometimes people with different types of disabilities are grouped together, each of them may be struggling with different things, and we may not be aware of it.

If you are not sure, ask if and what kind of help is needed.

Misunderstandings. Communication with anyone – even someone you know very well – tends to cause misunderstandings. Such misunderstandings can also occur when communicating with students – with or without disabilities. Apologies and constructive, solution-oriented communication will help towards building a friendlier and safer environment in RTU.

Information. Make sure that students are notified of changes in the lecture schedule in a timely manner. For students with disabilities, the journey to the lecture room may be associated with additional difficulties, sometimes with the need for additional funding (assistant service, special transport, etc.).

Be respectful. See the person beyond his/her disability. Talk to a student who wants to acquire the study material, rather than a symptom that is bothering him/her to do it like others.



01



P

People with mobility
impairments



A wheelchair is an aid that helps saving one's energy and allows being free in movements.



People who move around with the help of a wheelchair are not always unable to walk – some can walk short distances with some help.

A wheelchair is a form of adaptation that helps to compensate for mobility loss.

Daily communication with students

Speak in a normal voice (without shouting), just like you would with any other person.

Talk to people with mobility impairments like adults. Communicate directly with the person in question, not his/her assistant, if he/she has one.

When speaking, it is important to ensure effective communication. Sit or stand so that your eyes are at the conversation partner's eye level for making appropriate eye contact. If the conversation takes a long time, it is better to sit down so none of you would have a neck pain due to the uncomfortable position.



When communicating with a person in a wheelchair, you can use the following invitations: "let's go", "go" or "let's run" – they only express the desire to go.

Ask the person with mobility impairments whether he/she needs help if you are not sure whether it really is required.

If you are giving directions, always think about whether the suggested route will be accessible to a person in a wheelchair (perhaps there will be no ramps or other obstacles that may prevent them from getting to their destination).

Never do that!



NEVER lean against a person's wheelchair.



Keep in mind that a wheelchair, crutches, walker or other mobility aid is a personal item of a person with mobility impairments. Do not touch them without consent.

Providing support in the study process

When planning lessons, remember that a person with mobility impairments can encounter barriers at any stage of the journey. Think about the accessibility to the faculty building and the classrooms – if ramps are available and cleared from any ice or snow, if a special parking space is provided. Are there accessible toilets in the building? Is the height of the work surface and access to the desk adjusted?



Check if aisles in the classrooms and hallways are clear and wide enough.



Information. Ensure that students are timely notified of any changes in the lecture schedule. The path to the place of study might have additional difficulties, sometimes associated with the lack of additional funding (for an assistant service or a special transport, etc.)

Universal design

People tend to perceive the world around them from their own point of view. If we are healthy, we do not ponder about the availability of doctors. If we are able to move on foot, we do not think about how comfortable the slope of the ramp is for people with mobility impairments.

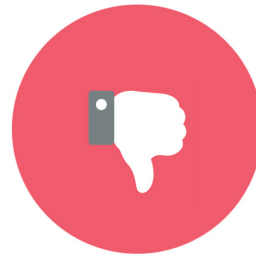
To imagine how disabled individuals feel daily, ask yourself:

- If I can't hear, how do I know someone is knocking at the door?
- If I can't see, is it possible to get from my room to my workplace without any obstacles?
- If I am in a wheelchair, how do I reach the high-mounted switch to turn on the light in the room?

Universal design promotes an inclusive environment for people with different needs.



Universal design is comfortable for everyone and does not humiliate anyone.



A common misconception about universal design is that it benefits only certain members of society, such as the elderly and people with disabilities. On the contrary, universal design benefits all members of society by creating products, services and environments that are accessible and convenient to use.

02



P eople with visual impairments





It is important to understand that your help may be needed not only by a visually impaired person, but also by a visually impaired person in an unfamiliar place.

A person with a visual impairment is not always a completely visually impaired person, he/she might have reduced vision acuity, altered visual field or colour vision, and difficulty adjusting to lighting.

Daily communication with students

Ask if your help is needed.

Meeting a blind or partially sighted person does not mean that you have to offer help; most of the time you only need to provide contact in the form of a conversation.

When addressing a visually impaired person who is unfamiliar with your voice, say your name and briefly explain who you are. The person wants to know who he is talking to and who is in the same room with him.



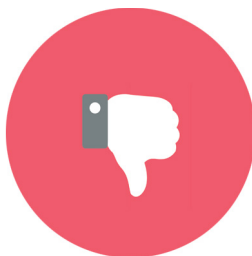
Inform the visually impaired person if you are in the room or if you are leaving. Inform him/her of what is happening around: it is difficult for him/her to understand what everyone is suddenly laughing at, or where an unusual noise is coming from.

If you want to address a visually impaired person who is with another person, address him/her directly, rather than his/her assistant, by calling him/her by his/her name (if you know him/her) or by lightly touching him/her – this way the person will know that he/she is being addressed.

Visually impaired people use and perceive the verb “to see” or something similar to it, to express their specific way of “seeing” – to feel, touch, etc.

Do not associate a person’s visual impairment with intellectual ability. This will help to avoid many mistakes in communication.

It is not desirable to use the word “blind” – it brings negative connotations.



Do not raise your voice when talking to a visually impaired person. If the person is also hard of hearing, his/her attention can be drawn by lightly touching his/her hand, speaking clearly and slowly without shouting.

Accompanying a visually impaired person

In order for a visually impaired person to be able to navigate his surroundings, he needs precise instructions. For example, "One meter to the right of you is..."

When walking, inform the visually impaired person about obstacles – thresholds, steps, stairs going up or down, narrowing or widening of the path.



If you are accompanying a visually impaired person – hold his/her arm above the elbow, grasp the palm or put his/her hand on your shoulder. Do not push him/her forward, as it can cause falls and injuries.

If you have arrived at the destination, tell the person where you are, what is in the immediate vicinity, where and whom to contact in case of confusion or complications. Ask if you can leave him/her on his/her own.

Providing support in the study process

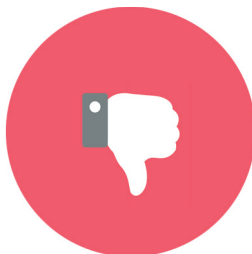
Evaluate performance based on merit, not the disability.

Any new place or route must be relearned by the visually impaired, and it takes time getting used to it. It is advisable to plan lectures in the same room or in the same building at least.

Orientation is made significantly easier by universal design – a safe and accessible environment for everyone – tactile indications, sound signals, contrasting markings on the doors, and non-reflective surfaces.



Do not comment on study choices in the context of disability.



If you want to give an object to a visually impaired person, give it directly to his/her hands, let the person get acquainted with it – feel the shape and texture.

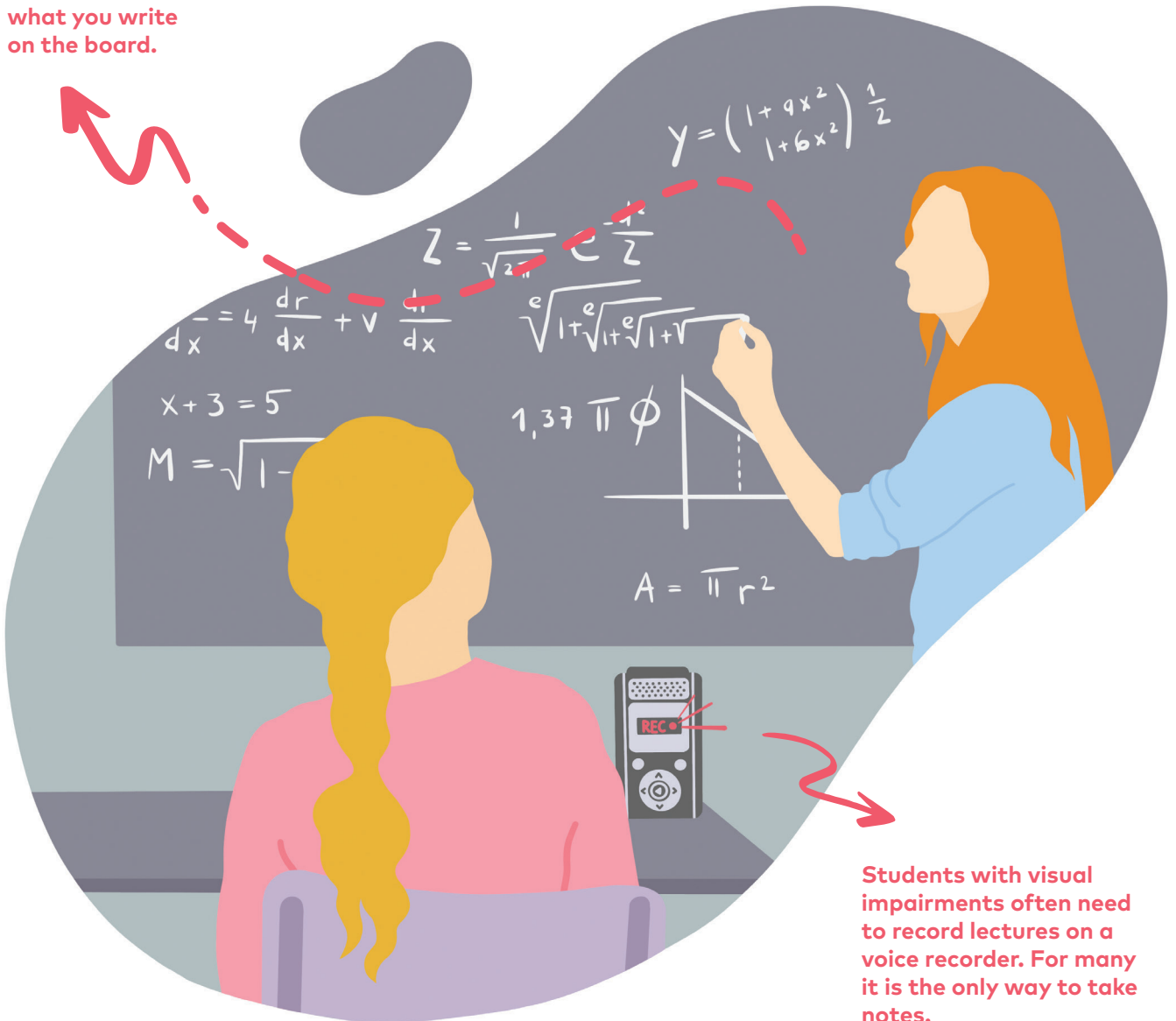
Often study materials need to be adjusted. Presentations and other texts should preferably be saved in text formats that the student can read with speech synthesis programs (most often these are Word and pdf text formats).

If you use handouts, it is preferable to prepare materials with enlarged letters or sent electronically in advance so that the visually impaired student can read them with the help of assistive devices.

In a normal situation, a visually impaired person moves safely, finds the necessary places and objects. If possible, do not change the established study routine in the room. Do not place boxes or other objects in the aisles and do not move chairs, trash cans, etc. from their usual places. If changes have been made in the room, remember to inform the visually impaired person about them.

During lectures

Tell, comment what you write on the board.



Students with visual impairments often need to record lectures on a voice recorder. For many it is the only way to take notes.

What is a guide dog?

A guide dog is a specially trained dog (confirmed with a special certificate) that helps people with visual impairments.

According to the laws and regulations of the Republic of Latvia, the dog is allowed to go wherever the owner goes.



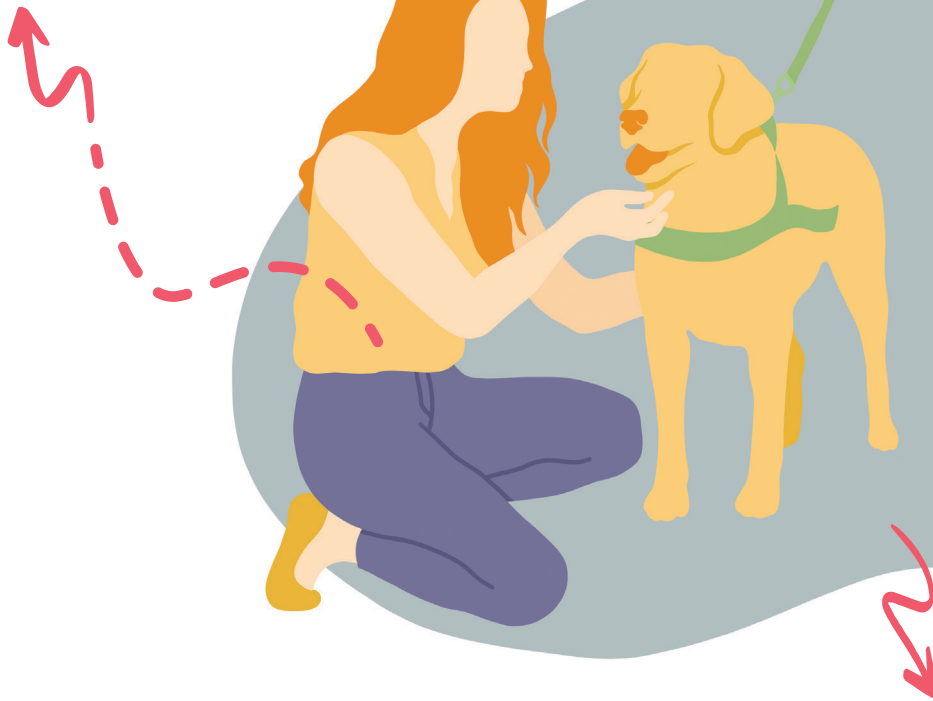
A guide dog does not have to wear a muzzle. Guide dogs are specially trained to help disabled people daily with various tasks. Most often, guide dogs help visually impaired persons to navigate the route or find the necessary belongings.

Guide dogs can also be trained to help people with mobility impairments, people with hearing impairments, people with epilepsy or diabetes. The dog is trained to fetch various objects, turn the lights on and off, identify various sounds, press the emergency call button and bring a first aid kit.

Rules regarding guide dogs



The guide dog **MUST NOT** be disturbed or distracted from work – you must not pet or feed the guide dog, nor look into his eyes.



The presence of a guide dog **MUST NOT** be a reason for service denial.

03



P eople with hearing impairments





Degrees of hearing impairment can vary from mild to complete hearing loss. Hearing may be lost before speech has developed or during a person's lifetime. Hearing loss can affect a person's ability to read and write.

Please note that

- people with hearing impairments mostly rely on visual communication;
- spoken language is a second language for many deaf people;
- deaf people consider themselves a cultural minority and if they communicate in sign language, then this language is their first/native language;
- deaf people may also not use sign language when communicating in writing.

Daily communication with students

Make sure you have the student's attention before you start speaking. Maintain eye contact until the end of the speech.

Keep a certain distance between you and the deaf person, the optimal distance is two meters.

Ask which form of communication the person prefers – lip reading, using a sign language interpreter (using sign language or typing), or writing.

If communicating with the help of an interpreter, speak and look directly at the deaf person and not at the interpreter.

Do not underestimate the abilities of the hearing impaired below the abilities of other students. Difficult communication with deaf students does not necessarily mean that they have problems with language comprehension.

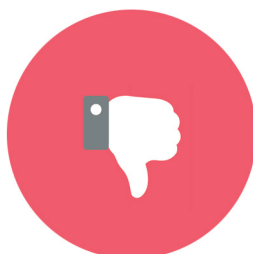


Allow extra time to communicate with a hearing impaired person. Be patient if you are asked to repeat something. Paraphrase.

If students do not understand what you said, paraphrase what you said instead of repeating the same thing.

Speak clearly and at a normal pace. Use concise sentences and questions.

Use complete sentences (not just one word) for your answer – in lip reading 70 % of cases are guesses and many words look alike.



Talking to a student who has hearing impairment

Stand directly opposite and level with the person as much as possible. Make sure your face is well lit.



Communication with the student if no sign language assistance is used in class

Let the student sit where he/she feels most comfortable. Remember to turn your face towards the student when speaking so that he/she can see your lip movements.



FM system – microphone and receiver operating on the same frequency; the text arrives with the help of the transmitter and the receiver directly into the hearing aid, eliminating surrounding background noise.



Acoustic loop – a device that allows to hear a sound directly from a microphone.

Help improve listening conditions for those who use hearing aids, cochlear implants or sound transmitters. Consider installing an FM system or using an acoustic loop in one of the classrooms. Sometimes students need to be encouraged to use these aids.

If something needs to be written on the board, explain it before or after doing it.

Hearing aids make not only what you say louder but all other sounds as well. Pay attention to noises in the room, it may be necessary to close the door or window.



For easier perception of information, supplement the presentation with visual materials – pictures, tables, diagrams or graphs.

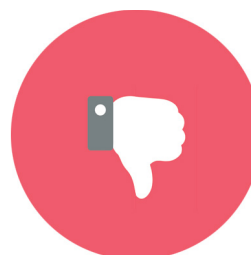
Whenever possible, stand facing your audience including the hearing impaired.

Include students with hearing impairment in your lessons, don't be afraid to ask questions and engage them in discussions, but at the same time don't pay too much attention to that.

Speak a little more slowly, clearly, and naturally, without exaggerated lip movements. Try to speak in short phrases and sentences.

In discussions and when asking questions, try to pick up other students' answers, comments or questions that the hearing impaired student may have missed.

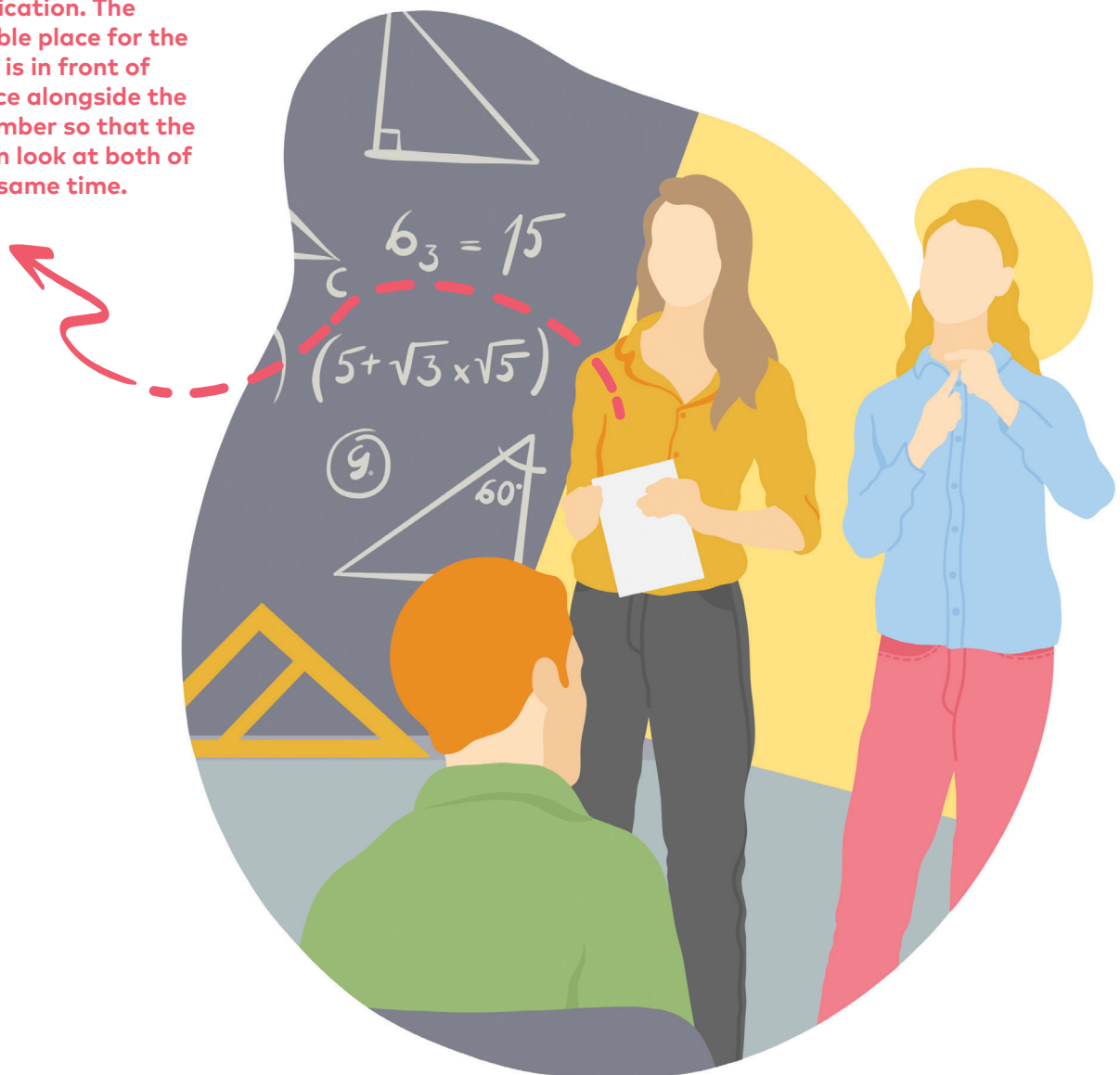
If the student is using the FM system, there is no need to speak louder.



If the student is lip-reading, try not to stand in front of the window so that your face is not in the shadow, and try not to move while speaking. Otherwise, part of the information can be missed.

Communication with the student if the help of a sign language interpreter is used in class

When speaking, address the student, not the interpreter. The interpreter is the student's assistant in communication. The most suitable place for the interpreter is in front of the audience alongside the faculty member so that the student can look at both of you at the same time.



Providing support in the study process

The biggest challenge for a lecturer may be introducing changes in the teaching method.

Some students may need more support from teaching staff than others, but in any case, regular, direct support and supervision is needed.

The biggest problem in communication with hearing impaired people is the availability of information. Such people often feel isolated from the rest of the usual information environment – all kinds of informative announcements, information about changes conveyed in oral communication, etc. Pay attention to whether hearing impaired students receive the same information about the study process as others.

The student may need to be given extra time, pre-prepared written material on the topic to be covered in class, or use subtitles when using video materials.

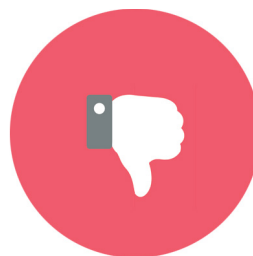
These solutions must be agreed upon with the student before the start of the course in order to find the optimal solution.



Provide a sign language interpreter or lecture note taker whenever possible. The interpreter creates communication between the teaching person, students and the rest of the audience.

Perhaps, before the lesson, you can give the translator study materials that explain the topic so that he can better prepare for the translation and familiarize himself with new concepts and terms.

Remember that students cannot divide their attention between several activities, for example, look at a drawing and receive information in sign language at the same time, look at the computer screen and talk about it.



It is important to remember that the task of the translator is not to explain the content of the lecture but only to translate; during the translation process, the student will receive what you say with a delay.

04



P eople with learning disabilities





The most common learning disability encountered in the university environment is dyslexia.

What is dyslexia?

Dyslexia is a specific neurobiological learning disorder characterized by difficulty reading words accurately or fluently and poor spelling skills.

It is important to remember that the underlying problem with dyslexia is neurobiological difficulty in reading and is not related to intellectual ability.

Each person with dyslexia has his/her own strengths and weaknesses. Even the most typical symptoms of dyslexia can vary from person to person, both in terms of intensity and expression. For example, some people with dyslexia cannot learn to read at all, others read somewhat quickly but poorly understand the text they read, others read very slowly and with great difficulty but understand the meaning of the text very well.

Level of education in universities is more complex and voluminous than in school. Dyslexia not only makes learning difficult for students who have experienced it before in school, but it can also manifest itself in young people whose reading difficulties were not so disruptive in their previous experience of education.

Often students with dyslexia stop their studies because, despite the long time devoted to studies, little is achieved due to inability to learn in a traditional way. That is why they can lose faith in their own abilities.

The purpose of the support measures is to facilitate the reading process so that the student can effectively understand tasks, complete assignments, and fully participate in the process of studying.

What else there is to know about dyslexia:

- it is hereditary;
- it causes difficulties throughout life;
- if a person is not provided with proper help, continuous difficulties in the study process can cause so-called secondary symptoms: low self-esteem and self-confidence, identity difficulties.

How common is dyslexia?



According to statistics, 5–15 % of people worldwide have dyslexia. Latvian statistics show a prevalence of 0.5 %, but, according to the Latvian Dyslexia Society, it cannot be considered correct due to diagnostic deficiencies.

Providing support in the study process

At the beginning of the study year, it is preferable to identify the functional difficulties of the particular student (they may vary) and create an individual study plan.

When creating presentations and study content, it is desirable to pay attention to the design of the material – effectively structure the text, supplementing it with schemes, diagrams etc.

Allow extra time for test tasks (both due to the longer reading process and the use of additional tools).

Give the student an opportunity to orally present an answer to a question.



Allow the student to use ICT tools on his/her computer or phone. If possible, a university computer or a mobile phone with the necessary software can be provided to the student.

Allow the student to record the lectures (for example, by putting the recording device on the lecturer's desk for better sound), so that he can fully focus on understanding the meaning of the learning material.

Make sure that the texts in the online study environment (Moodle etc.) are in formats that can be read with the help of text-to-speech tools (text formats – pdf or Word).



Information and communication technology tools (ICT)

A text editor with text correction tools and speech synthesis software.

Speech synthesiser, digital books, multimedia dictionaries and encyclopaedias. Ability to listen to digital text.

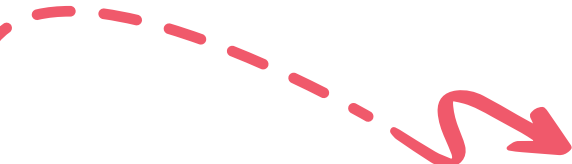
Scanner, OCR (optical character recognition software). Software that converts your scanned text from pdf format to text (e.g. Word) format so that it can be read by a speech synthesis program. Speech recognition software that converts spoken words into digital text. For example, "Tilde" or the free access tool "Hugo".



Speech-to-text software, speech synthesis programs that help in cases of writing difficulties (dysgraphia).

Text correction tools (spell checkers) that help correct spelling mistakes in computer writing.

Internet. A source of easily accessible learning materials; the content can be read with the help of a speech synthesis program.



Allow the student to use the necessary support materials: dictionaries, formula sheets, schemes with the most important concepts, recalculation table or calculators, charts and tables.

05



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People with autism
spectrum disorder





Autism spectrum disorder (ASD) is a complex developmental brain disorder that affects social communication throughout life (American Psychiatric Association, 2013).

Autism is characterised by different degrees, states and manifestations, so it is generally referred to as an autism spectrum disorder, and all recommendations must be tailored to each such student depending on the degree of individual's autism spectrum disorder.

What is autism spectrum disorder (ASD)?

People with ASD have difficulties to a greater or lesser extent in three important areas:

- in social interaction (difficulties with social relationships, for example, the desire to be isolated from others, indifference to the surrounding people);
- in social communication (difficulties with verbal and non-verbal communication, for example, incomplete understanding of the meaning of gestures, facial expressions and voice tones);
- in social imagination and imagination development.

These difficulties are often accompanied by sensory overload, repetitive activities, and resistance to changes in daily routines and routines.

People with ASD always check and pay attention to details because it helps them understand what to expect from a situation. The importance of rules and routines for people with ASD can manifest as inflexibility, demands for fixed rules, which can interfere with communication at the university. It may be seen as desire for conflict and sometimes lead to avoidance and abandoning studies. Beginning studies at the university is a natural source of anxiety for most students, but it can be overwhelming for students with ASD.



Daily communication with students

Think how you convey information to students – is it clear, structured and consistent across different information sources. It should not be contradicting.

Before the start of classes, send the student a visually understandable and perceptible information – lecture schedule, campus plan, pictures of main study buildings and rooms.

Do not avoid contact with an autistic student. If you discuss study arrangements, requirements and concerns sooner, cooperation will be easier in the study process.

Think of a “safe space” that students with ASD can use when their anxiety levels are too high. It is important to let them know where they can go to calm down before they start studying.



Preferably, one specific person is responsible for communication with the autistic student. In this way, the student will feel safer and communication during studies will be more efficient.

At least during the first semester, provide the student with an ASD mentor who would help the student to get used to the study process. Most likely, the faculty already has a student mentor program. In this case, it is important to make sure that a student with ASD has a mentor who will be able to devote more time directly to him.

It is necessary to promote the independence of such students as much as possible – it is important for them to learn anxiety and emotion management techniques. However, it must be understood that this will require more patience and empathy from university staff.

Supporting students with ASD



Take into consideration that students with ASD may have different levels of sensory sensitivity and the environment (for example, bright lighting or intense sound) can influence the student's response, therefore, whenever possible agree to adapt the environment to suit them.

Providing support in the study process

Allow an additional time for students to familiarise themselves with the environment, processes, and people. It is crucial to prepare them for any changes.

To compensate for a student's lack of social flexibility, be more flexible yourself. It will take more time to find the most successful communication model with them.

Make sure that communication is clear both verbally and in writing. Try to avoid figurative comparisons or jokes, which can only cause confusion in this case.

A student with ASD needs a daily schedule and routine, and this can affect his/her abilities to study. The student can easily get confused if there are last-minute changes in facilities or processes. During the daily study planning process, it is important to remember about the student with ASD. For example, inform the student at the beginning of the study year about possible scenarios where changes are likely to be expected.



It is important to help students develop their self-organisation and prioritisation skills. University counsellor and non-governmental organisations can provide support to students with ASD. It would be equally important to help the student engage in social life over time by developing his/her communication skills.

To help the student acquire the necessary social and study skills, encourage the use of mentor support, university counsellor consultations, NGO social support, as well as provide a quiet space in the faculty building where students can calm down and regain concentration skills independently.

Provide additional printed materials. For example, it would be useful to print out a rough lesson plan or instructions for independent work using bullet points.

Estimate the additional time the student may need to start or complete an assignment.

Preparation for exams

If possible, notify the date, time, place and duration of the exam as early as possible. Also indicate who will supervise the exam – faculty or exam committee members, as well as the number of people who will take the exam with this student.

Specify the exam topic and format.



Preparing an exam for a student with ASD



If you know that a particular student is worried about where he/she will sit during the exam, you can discuss this in advance or draw a diagram.



Give the student time to familiarise himself with the room in which the exam will be held in advance.



A student with ASD could be overly sensitive to environmental conditions, so it is recommended to choose a room with less noise and moderate lighting. If it is not possible, the student can use headphones to reduce noise.



If a student displays anxious behaviour, distraction techniques can help. For example, mumbling can be reduced with the help of chewing gum. It is important to understand that what may feel like disruptive behaviour to others, helps the student with ASD feel safer. Therefore, it is important not to prevent such behaviour but to change it so that it does not disturb others as much.



Relaxation techniques can have a good effect and can be taught to students so they can use these techniques before exams.



Sometimes it is necessary for a student with ASD to be addressed individually, as he/she may not absorb the information if it is presented in an audience. Sometimes individual instructions for the exam are required.

To conclude

These guidelines mention groups of students who need the support of RTU in order to be able to learn the study program without undue difficulties, yet with the same requirements compared to other students.

Take in consideration that the range of students who may need support is much wider. For example, students with epilepsy, depression, anxiety disorders, chronic illnesses, etc.

It is equally important to understand that any improvements we gradually make in the university benefit everyone who studies and works at RTU. Feeling respected makes a pleasant environment to study, work and create.

Sources used in the material

Association of the Disabled and their Friends "Apeirons" (www.apeirons.lv)

Association of the Blind of Latvia (www.lns.lv)

Association of the Blind of Liepāja "See the Light" (www.redzigaismu.lv)

Latvian Dyslexia Association (www.disleksija.lv)

Study by the Office of the Ombudsman of the Republic of Latvia on Accessibility of Higher Education (www.tiesibsargs.lv)

American Psychiatric Association (<https://www.psychiatry.org/>)

National Autistic Society (autism.org.uk)

Service Dog Association TEODORS (teodors.org)



01

People with
mobility
impairments



02

People with
visual
impairments



03

People with
hearing
impairments



04

People with
learning
disabilities



05

People with
autism spectrum
disorders