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# METHODOLOGICAL

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for the organization and  
leading of cultural and art  
workshops for children  
and young people with  
developmental difficulties

# GUIDELINES

## IMPRESSUM

### Publisher

Udruga za razvoj audio vizualne umjetnosti Metamedij

Koparska 31, 52 100 Pula

Tel. 00385-52-544266

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### Design

Studio NJ13

### Edition

100

The project “In the same film — one step further” is supported through the Fund for Active Citizenship, with funds from Iceland, Liechtenstein and Norway within the framework of EEA grants.

The printing of this publication was made possible by the financial support of Iceland, Liechtenstein and Norway within the framework of EEA grants. The content of this publication is the sole responsibility of the Metamedij association and does not necessarily reflect the views of the donor countries and the Fund Operator.



# **METHODOLOGICAL GUIDELINES FOR THE ORGANIZATION AND LEADING OF CULTURAL AND ART WORKSHOPS FOR CHILDREN AND YOUNG PEOPLE WITH DEVELOPMENTAL DIFFICULTIES**

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# Content

## 1. INTRODUCTION 7

## 2. SPECIFICITY OF CHILDREN AND YOUNG PEOPLE WITH DEVELOPMENTAL DIFFICULTIES 19

### 2.1. Challenges in the field of perception 21

#### 2.1.1. Visual perception 21

#### 2.1.2. Auditory perception 22

#### 2.1.3. Proprioceptive and vestibular perception 22

### 2.2. Challenges in the field of cognition, thinking and reasoning 22

### 2.3. Challenges in the field of memory 23

### 2.4. Challenges in the field of attention and the need for activity 23

### 2.5. Challenges in the field of social skills 24

### 2.6. Challenges in communication 24

### 2.7. Challenges in the field of motor performance 24

#### 2.7.1. Gross motor skills 24

#### 2.7.2. Fine motor skills 24

### 2.8. Requirements, instructions and independence in performing tasks 25

## 3. SUPPORT STRATEGIES 27

### 3.1. Perception support 29

#### 3.1.1. Visual-perceptual support 29

#### 3.1.2. Speech-auditory-perceptual support 32

### 3.2. Support for cognition 35

### 3.3. Memory support 37

### 3.4. Support for attention and the need for activity 37

### 3.5. Support related to the specifics of sensory integration 38

### 3.6. Support for interaction and social relations in the group 40

### 3.7. Time adjustment 41

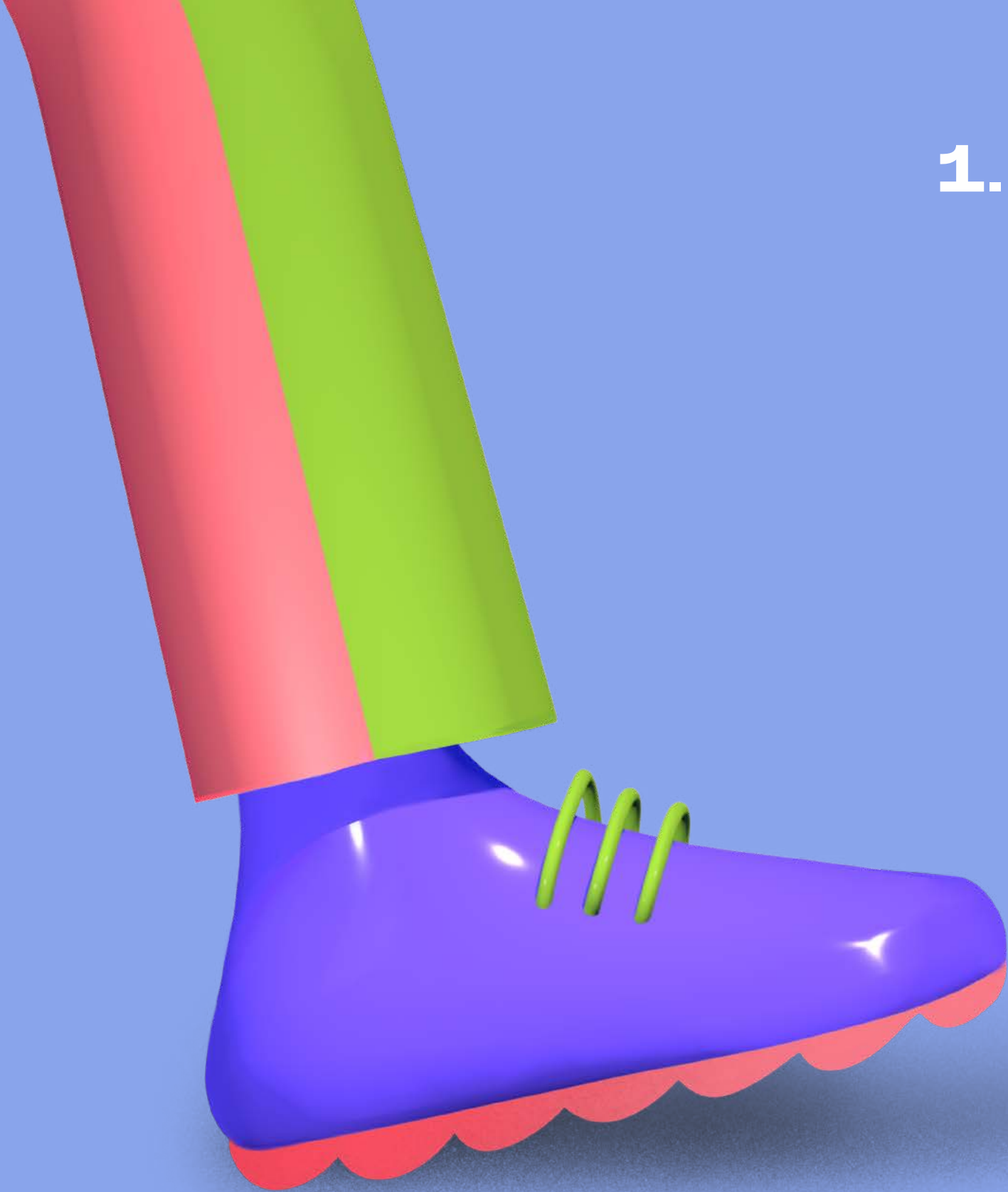
### 3.8. Support for fine and gross motor difficulties 43

### 3.9 Support for communication 44

## APPENDIX 1 48

## REFERENCES 54

# 1. INTRODUCTION



These *Methodological guidelines* were created within the framework of the project *In the same film — one step further*. The project is carried out by the association Metamedij from Pula, and the partners are the School of Education - Pula, Kino Valli, Centre for Education Krapinske Toplice and Centre for Education Čakovec.

The project *In the same film — one step further* strives to equalize the opportunities for children and young people with developmental disabilities to participate in cultural content.

The guidelines are intended for managers and organizers of cultural and artistic workshops for children and young people.

In addition to them, within the framework of the project, a *Methodological framework for holding sensory cinema screenings for children, young people and adults with sensory integration difficulties and other influential difficulties* was created.

The goal of these guidelines is to ensure that every child/young person has the opportunity to participate in cultural and artistic workshops in their community, on an equal basis with their peers, in order to reduce obstacles and overcome individual differences.

# 1. INTRODUCTION

Culture is an indispensable part of the development of every person, including the life of children with developmental difficulties and people with disabilities. If we do not adapt diverse cultural content to children with developmental difficulties and people with disabilities, and if we do not design cultural services and programs so that they can be used by everyone, regardless of their physical, sensory, intellectual and social functioning, we are responsible for excluding them from society, and we impoverish the community for their participation.

By ensuring access to cultural content and programs for children with developmental disabilities and persons with disabilities, we encourage the freedom of their creativity, contribute to the quality of their lives, equality and wealth of society (Advocate for Persons with Disabilities 2020).

Involvement in extracurricular activities, as well as various free time activities in the community, is extremely important for all children, with typical or atypical development. The best-known and most widespread way of preparing children and young people for active and meaningful leisure time, but also for the development of social skills, is the organization and implementation of extracurricular activities at and out of school.. An important determinant in defining extracurricular activities is that they are activities organized and performed by another institution, association or club, independently or in partnership with a school institution (Valjan Vukić 2016). These guidelines are intended, first of all, for civil society organizations, institutions and individuals that are directed towards the organization of extracurricular activities for children and young people, but they can also be used within an educational institution, as guidelines for the organization of extracurricular activities.

The balance between beneficial and harmful ways of spending free time probably, as Reed W. Larson and Suman Verma (1999) point out, also depends on how much time young people spend watching television and in similar activities, that is, how much time they devote to what we call

## 1. INTRODUCTION

structured free time activities. A large number of scientists around the world, as well as scientists from Croatia, saw the potential of free time in the field of behavioural problem prevention, as well as the importance of quality structured free time for the mental and physical health of the individual (Matijašević and Maglica 2022). Although children with developmental disabilities should have the right to the same opportunities to participate in leisure activities as other children, children with developmental disabilities in reality face numerous challenges and obstacles when it comes to participating in leisure activities (United Nations Convention on the Rights of Persons with Disabilities 2006, according to Shikako-Thomas and Law 2015). One of these obstacles is certainly the self-assessed competencies of the performers of various extracurricular activities, who are often considered unwilling to offer the content they perform equally to children with developmental difficulties and children with typical development.

We hope that these *Guidelines* will remove at least part of the mentioned obstacles and empower associations, institutions and individuals to include children and youth with developmental disabilities in their cultural activities.

Within the framework of the project *In the same film - a step further*, research was conducted which, among other things, sought to determine the extent to which children and young people with developmental disabilities are involved in various workshops outside of school., which are related to cultural content. The research also sought to determine their specific needs for adaptations of the environment, which are necessary in order to equalize the possibility of participation in cultural content.

Workshops intended for the general population, as well as those organized in cooperation with educational institutions exclusively for the population of children and youth with developmental disabilities, were also taken into account. Respondents in this research were parents of children and youth with developmental disabilities aged 3 to 21, from Istria, Krapina-Zagorje, Međimurje and Zagreb counties. The research was conducted from January 15 to March 1, 2023, and 159 respondents participated in it.

In the part of the research related to cultural and artistic workshops, the involvement of children and young people with developmental disabilities in art workshops, photography workshops, music workshops, dance workshops, creative workshops (decoupage, making decorative objects,



## 1. INTRODUCTION

ceramics, etc.) new media workshops (making GIFs, stickers, emojis, etc.) and drama workshops was examined.

The results of the research showed, among other things, that children and young people with developmental disabilities are most often involved (often, occasionally or rarely) in art workshops (34%), and least often in new media workshops (6.3%). A total of 25.8% of students participate in creative workshops, 19.5% in music workshops, 12.6% in drama workshops, 10.7% in dance workshops and 9.4% in photography workshops.

The questionnaire also examined which particularities of the environment represent the greatest obstacle to the inclusion of children and young people in workshops in the field of culture and art. The following obstacles were examined, i.e. peculiarities of the environment: physical accessibility (stairs, availability of ramps or elevators, door width, etc.); communication with the workshop leader, crowding (many participants); duration of the workshop; understanding of instructions; communication with other participants; the relationship of the leader towards the child; the safety of the environment (possibility of the child getting hurt); the time of day when the activity takes place; the complexity of the requirements and the lack of independence of the child in performing the task.

It has been shown that the biggest problems for children and young people involved in art workshops are the complexity of the requirements, communication with other participants and lack of independence in performing tasks and understanding the tasks. The least significant obstacle in their environment is physical accessibility, which is also traditionally the aspect of environmental adaptation that is most often taken into account when thinking about accessibility and adaptation for children with developmental difficulties and people with disabilities. This research confirmed the assumption that the concept of accessibility is often perceived only as taking into account spatial/physical/architectural accessibility, and significantly less about the other two important segments: informational and social accessibility. The biggest problem when participating in photography workshops and dance, creative and drama workshops are the peculiarities of the environment, and then the complexity of the requirements and the lack of independence in the performance of tasks, while in music workshops the understanding of instructions joins these obstacles. In new media

## 1. INTRODUCTION

workshops, according to parents, the biggest obstacle is communication with other participants.

This research also showed that there are no statistically significant differences in obstacles in the environment, considering whether the participants have attention deficit hyperactivity disorder (ADHD) and whether the child has been diagnosed with behavioural problems. However, in all types of cultural and artistic workshops, greater needs for environmental adjustments were confirmed if the participants are children and young people with autism spectrum disorder.

Many previous studies suggest that children with developmental disabilities participate in fewer organized leisure activities than their peers without developmental disabilities. In addition, numerous authors warn of the fact that children and youth with developmental disabilities face numerous challenges and external and internal obstacles when it comes to participating in leisure activities (King et al. 2010; Axelsson and Wilder 2014; Sanches-Ferreira et al., 2019 according to Kranjčina 2020).

In the continuation of these Guidelines, we have tried to systematize basic information about the developmental characteristics of children and youth with developmental disabilities that can help the performers of cultural and artistic workshops to better understand their specific needs, and we have proposed some characteristic adaptations and support strategies that can contribute to the creation of an inclusive environment.

Accessibility, like inclusion, is understood in public discourse much more narrowly than the actual meaning of the term.

Most often, the concept of accessibility is associated with spatial or architectural accessibility. This would mean that we took care, for example, that the building and the room where we hold workshops for children and young people has an entrance ramp, an elevator, sufficiently wide entrances, adapted sanitary facilities and the like. However, this is only part of what needs to be taken into account when we talk about accessibility and inclusiveness. Two other important aspects of accessibility - information-communication and social accessibility - are often neglected because they are not part of the material world. Information and communication accessibility can take different forms, and some of the application examples

## 1. INTRODUCTION

are Braille for blind people, sign language for deaf people, facilitating understanding for people with intellectual disabilities and easy-to-read texts that use specially developed fonts for people with dyslexia.

Social accessibility refers to changing attitudes towards the possibilities and inclusion of people with disabilities and children with developmental disabilities in all spheres of activity in the community. Currently, these attitudes are unfortunately based to the greatest extent on the model of mercy and pity, or on the medical model that observes a person with a disability exclusively through his disability, that is, his impairment, and his ability to fit into the typical world with various aids or to be excluded from it. However, the best way to build positive attitudes is precisely through social interaction, togetherness and participation, which includes participation in cultural activities on an equal basis with all other citizens.

The purpose of these *Guidelines* is to promote the development of accessibility through the application of universal design and reasonable adaptations in the preparation, organization and performance of cultural and artistic workshops intended for children and young people so that children and young people with developmental disabilities can be included in them on an equal basis with others. .

Universal design means designing products, environments, programs and services in such a way that they can be used by all people to the greatest extent possible, without the need for adaptation or special design (Convention on the Rights of Persons with Disabilities 2007). In the context of cultural and artistic workshops, the principles of universal design can be applied to the physical environment, but also to the content of work and activities, as well as to the materials, means and aids used.

Therefore, the concept of universal design goes beyond the concept of accessibility, and its goal is to make all aspects of culture more inclusive, both for consumers (workshop participants, visitors and the like), and for artists, workshop leaders and organizers. Universal design, in short, is the principle of introducing changes that remove obstacles that society has created for certain groups.

The concept of universal design as design for each user was first defined by a working group of architects, industrial designers, engineers and

## 1. INTRODUCTION

environmental designers at the University of North Carolina, which also developed seven principles of universal design (Connell et al. 1997). The mentioned seven principles refer to:

### 1. Equality of use

The design (of products, services) should be such that it can be used by people with different abilities. It is necessary to enable the same way of using the product/environment for everyone, as well as equal care for protection, security and privacy. It is important to avoid segregating users.

Application of the principle: the work process in the workshop is designed to be useful and accessible to participants of different abilities. There are no tasks that will exclude any participant or put them in an unequal position with others.

### 2. Flexibility of use

Product design should have the ability to adapt to a wide range of users with different capabilities and preferences. In other words, the product should provide multiple ways to use it. It is necessary to enable use for right-handed and left-handed people and ensure adaptation to the user's pace.

Application of principles: in the process of participating in the workshop, a choice is made in the ways of performing the task/using materials and tools.

### 3. Simple and intuitive use

Regardless of the user's experience, concentration level, language skills or knowledge, the design of the product/environment must be easy to understand and easy to use. Consistency with user expectations is important, as well as avoiding unnecessary complexity and arranging information according to their importance.

Application of principles: the work process is simple and divided into smaller logical steps. When using technology, tools and materials, the instructions are clear and simple, in a language that the participants understand, without using professional slang. Guides and reminders that break down the task into steps, accompanied by pictures, can also be prepared. Everything that is not necessary to achieve results and can disturb the participant is removed from the work process (e.g. sometimes the background music or other elements that we add to make the workshop more interesting can be motivating, but it can also disturb some participants).

## 1. INTRODUCTION

### 4. Observable information

The product must effectively convey the necessary information to the user regardless of his environment, sensory state or conditions. It is desirable to use different ways of transmitting information (image, text, tactile and sound) and to enable compatibility with devices used by people with sensory limitations. It is necessary to enable adequate contrast between the information and its background.

Application of principles: subtitles on video materials, contrast between instructions and background.

### 5. Tolerance for mistakes

Product design should minimize errors. Elements that could lead to an error must be isolated, that is, placed away from frequently used elements. It is important to warn the user about the possibility of error.

Application of the principle: continuous monitoring of the participant's work and frequent feedback to prevent the participant from making a mistake that he will not be able to correct (eg. adding too much water to the paint, etc.).

### 6. Minimal physical effort

The product should be used with minimal physical effort, comfortably and effectively. It should reduce repetitive actions and allow the user to use it in a neutral body position.

Application of principles: work tasks, tools and aids are selected so that they can be used by every participant of the workshop.

### 7. Size and space suitable for access and use

Adequate size and space are provided for access, reach, manipulation and use of the product regardless of the user's posture, mobility or body size. Visibility must be equal for a person in a sitting and standing position, as well as the availability of all product components. It is necessary to provide adequate space for the use of assistive technologies.

Application of the principle: the workshop area is accessible, all the material can be reached and used, which needs to be taken into account especially for participants with motor disabilities.

The Convention on the Rights of Persons with Disabilities (2007) also defines the concept of reasonable accommodation. It, in contrast to

## 1. INTRODUCTION

universal design, refers to individual measures adapted precisely to the needs of the individual.

In the field of culture, reasonable adaptation means ensuring access to an environment in which there is some cultural content of appropriate cultural programs, professional support and adaptation in accordance with the developmental characteristics and individual needs of the individual, in order to enable his participation in cultural content on an equal basis with others and thereby preventing his discrimination on the basis of disability.

When preparing a workshop intended for children and young people with developmental difficulties or people with disabilities, it is necessary to carry out an analysis of what we designed and planned (including an analysis of the content, tools, workplace and possible support strategies) with regard to (potential) participants.

In order to facilitate this process, which is not always simple, for workshop leaders, at the end of the *Methodological Guidelines* there is a working material, i.e. a rubric for analysing the workshop according to the principles of universal design and reasonable adaptation.

In the final part of the introduction to the *Methodological Guidelines*, we will look at potential questions about whether investing significantly more effort (and sometimes greater material resources) in the organization of inclusive cultural and artistic workshops is profitable, both for the individual or the organization that performs the workshop itself, as well as for the users themselves, including those with typical and atypical development.

Numerous studies have shown that inequality exists in society and that it is related to different layers of the identity of children and their families, such as race, social class, gender, sexual orientation, language, mental and/or physical ability and others (Ryan 2006 according to Ažman et al. 2022). Being a child at risk means belonging to a group whose rights are more likely to be threatened, who will live below the average well-being of the society they are a part of, or who will experience negative life experiences more likely and to a greater extent than their peers who belong to other groups. The approach to the organization of any public activity according to the principles of equity (as opposed to the approach according to the principles of equality) therefore begins with the recognition of risk factors and encourages policy makers, but

also all other responsible persons, to value the individual and group identity of children. This approach ensures that all children have at their disposal everything they need to reach their full potential. Although the concept of equality indicates that all children and young people should have equal access to resources and opportunities, including those for participation in cultural content, the concept of fairness ensures that those who need more resources and opportunities than others do, receive them and thus have the same chance for success.

A 3D graphic featuring a green diagonal band with white stars, and a purple boot-like shape extending from the bottom right. The background is a solid blue color.

## 2. SPECIFICITY OF CHILDREN AND YOUNG PEOPLE WITH DEVELOPMENTAL DIFFICULTIES



## 2. SPECIFICITY OF CHILDREN AND YOUNG PEOPLE WITH DEVELOPMENTAL DIFFICULTIES

Children and young people with developmental disabilities are people who function in different ways, depending on their individual abilities and needs. It is necessary to respect such individual ways of functioning and to find methods of adaptation that will suit each individual person in order to enable them to participate equally. Before designing adaptations, it is necessary to be familiar with the possible challenges that children and young people face in different developmental areas.

### 2.1. Challenges in the field of perception

#### 2.1.1. Visual perception

Challenges in the field of visual perception mainly occur in children and young people with visual impairments, whether it is low vision or blindness. However, difficulties in visual perception can also be present in people with other developmental disabilities, such as cerebral palsy. Difficulties in visual perception can be divided into difficulties in the area of movement and reading.

Difficulties in movement are manifested as difficulties in noticing and successfully going around obstacles or difficulties in crossing height differences (stairs).

Difficulties in reading occur either because of the features of the text or because of the features of the space. A feature of the space is, for example, inadequate lighting of the room or the reading area. Features of the text can be: inappropriate font size, excessive stylization of the text (use of decorative font, italic font, WordArt or similar), insufficient space between letters, words or lines, visual oversaturation of the text (excess amount of text or image material on paper, disorganization of the text on the paper and redundant paper decorations, such as text frames), failure to highlight important parts of the text, inappropriate contrast on the paper (if the text is the same colour as the background) and the use of reflective (plasticized) paper.

## **2. SPECIFICITY OF CHILDREN AND YOUNG PEOPLE WITH DEVELOPMENTAL DIFFICULTIES**

### **2.1.2. Auditory perception**

Difficulties in auditory perception are mainly associated with children and young people with hearing impairments (hard of hearing or deafness). Challenges in auditory perception occur due to features of the space or features of the speaker. A feature of space is, for example, background noise or a loud environment. Characteristics of speakers are insufficient volume of the speaker or the content being listened to, slurred speech or too fast speech, which makes it difficult for people with hearing impairments to read lips.

### **2.1.3. Proprioceptive and vestibular perception**

This type of difficulty is often associated with sensory integration difficulties. These are difficulties such as difficult awareness of the position of body parts and/or one's own body in space, difficulties in lateralization (understanding which is the right and which is the left side of the body), difficulties in bilateral coordination of movements (ability to perform and coordinate movements on both sides of the body simultaneously) and possibly more frequent dizziness when taking certain positions. Due to the aforementioned difficulties, the person may have difficulty understanding instructions about taking certain body positions or will avoid certain positions due to excessive sensory sensitivity.

## **2.2. Challenges in the field of cognition, thinking and reasoning**

By the term cognition, we mean the states and processes that participate in the creation of knowledge, and in its entirety it includes perception and judgment. Cognition includes all the conscious and unconscious processes by which knowledge is accumulated, such as perception, recognition, understanding and reasoning. In other words, cognition is a state or experience of knowing that can be distinguished from an experience of feeling or will (Encyclopedia Britannica 2003). Thinking includes the unintentional or intentional use of various cognitive experiences (sensations, perceptions, ideas, memories, words, concepts, attitudes, etc.), which together make up what is called our "awareness of ourselves and the events around us" (Hrvatska enciklopedije 2003). It is present and self-explanatory, so many "don't even think about thinking" (ibid.). In the field of cognition,

## **2. SPECIFICITY OF CHILDREN AND YOUNG PEOPLE WITH DEVELOPMENTAL DIFFICULTIES**

thinking and reasoning in children and young people with developmental disabilities, difficulties in performing various mental operations - such as planning, problem solving, abstract thinking, understanding complex ideas, fast learning and learning through experience - are most often recognized, which makes a much more difficult acquisition of abstract learning contents. Very often there are also difficulties in the field of perception, memorization, attention, speech reception and expression, which also affect the processes of acquiring new knowledge and skills.

### **2.3. Challenges in the field of memory**

Memory can be described as the ability to acquire, retain and use information. It allows us to retain and find information that we use in the present moment (Zarevski 2007). In the field of memory, children and young people may have difficulties in acquiring, organizing, retaining, understanding or using information. Memory difficulties can also manifest as difficulties in reading, understanding what is read or calculating, as slowness in carrying out activities and in the form of low motivation. There are many memorization techniques that, with systematic practice, can contribute to greater memory capacity.

### **2.4. Challenges in the area of attention and the need for activity**

Attention difficulties and the need for activity are often associated with attention and activity disorders, but also with sensory integration difficulties. Children and young people with difficulties in this field are characterized by an increased need for activity, restlessness, a constant need for new content and a constant need to move, while their attention span is very short or distractible. Distraction can be sensory or social: in the first case, the attention is attracted by unimportant images, sounds, etc., due to which it is not possible to focus on important content, while in the second case, the distracting factor is the group, whereby the person makes many mistakes that he does not notice and cannot complete the started activities.

## **2.5. Challenges in the field of social skills**

Some children and young people may have difficulties in establishing and maintaining social interactions such as presentation skills, conversation skills, public speaking, group work or pair work. The aforementioned challenges occur due to less developed social skills or sensory hypersensitivity to larger groups of people and lack of personal space.

## **2.6. Challenges in communication**

Children and young people with developmental disabilities can have different communication difficulties. They can be seen as difficulties in expressive communication or receptive language (understanding spoken language). As for difficulties in expressive communication, some people may have difficulties such as stuttering or articulation difficulties that make it difficult to understand their speech, or they may be non-verbal. People with expressive communication difficulties can use assisted ways of communicating with their environment, such as a communication book, communicator, sign language, and the like.

## **2.7. Challenges in the field of motor performance**

Difficulties in motor functioning mainly occur in children and young people with motor difficulties, such as cerebral palsy, but they can also be present in other types of difficulties. Challenges in motor functioning are divided into gross and fine motor difficulties.

### **2.7.1. Gross motor skills**

Difficulties in gross motor skills are manifested as difficulties in walking, jumping, running, turning, squatting, lying down, standing up and sitting down. People with gross motor difficulties can also move in wheelchairs, in which case it is important to take into account the availability and adaptability of the space.

## **2. SPECIFICITY OF CHILDREN AND YOUNG PEOPLE WITH DEVELOPMENTAL DIFFICULTIES**

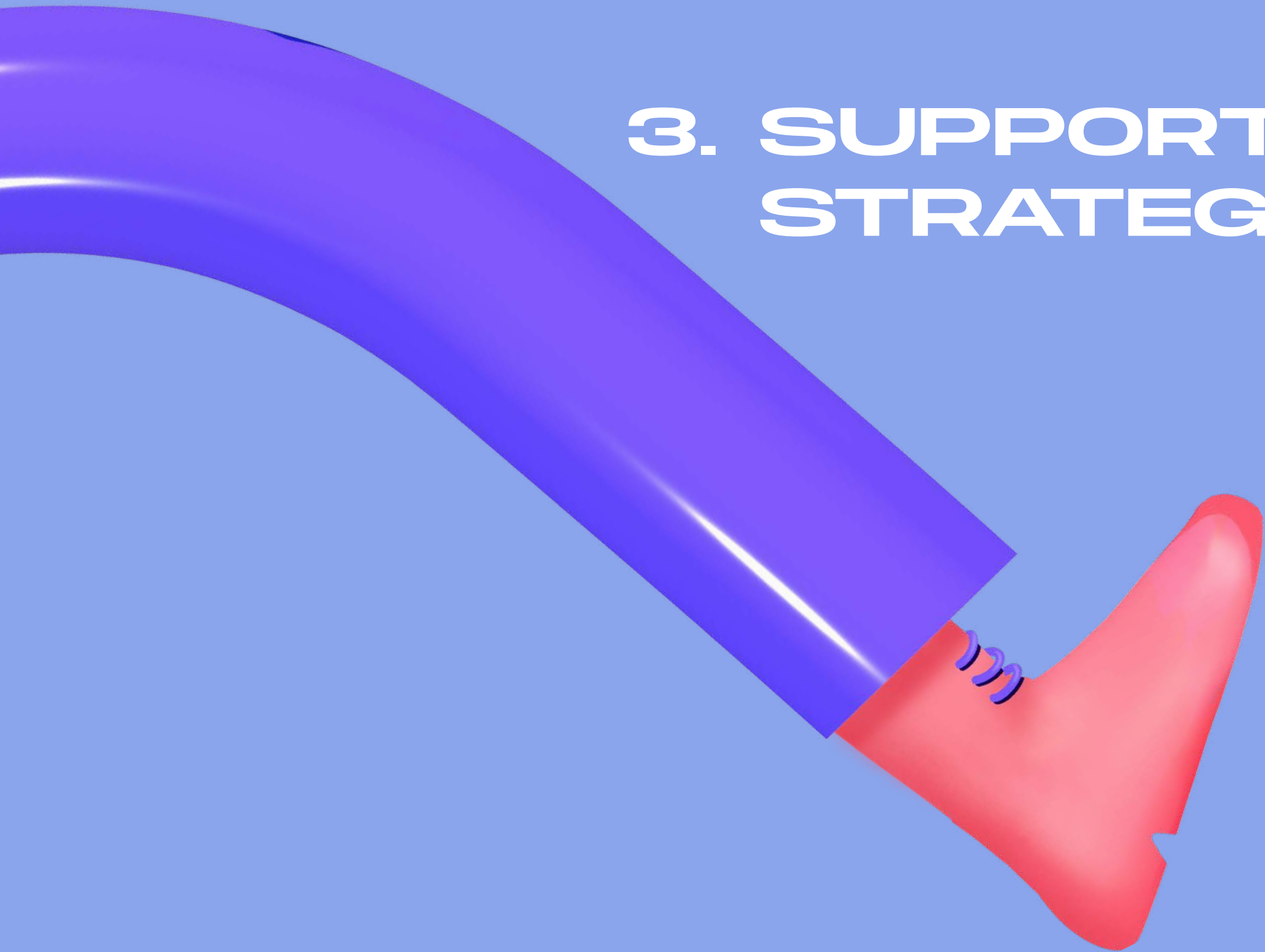
### **2.7.2. Fine motor skills**

Difficulties in fine motor skills are expressed through limited possibilities of performing finer movements with the fingers or difficulty in grasping, for example, a pencil or brush.

## **2.8. Requirements, instructions and independence in performing tasks**

Too high or too low demands and misunderstanding of instructions have a negative effect on independence when performing tasks. Planning and setting requirements requires a good knowledge of the functioning, abilities and skills of the person to whom they are intended. The requirements should be optimal and somewhat more demanding than what that person can solve and the instructions appropriate to the way of understanding and functioning. Consistency and systematicity in rules and expectations create a sense of security, and are especially important for those who have difficulty following instructions. Optimal requirements and customized instructions have a positive effect on independence when performing tasks, but also on self-esteem, self-confidence, perseverance and motivation.

# 3. SUPPORT STRATEGIES



## 3. SUPPORT STRATEGIES

### 3.1. Perception support

Difficulties with visual and auditory perception are not only present in the population of children and young people with visual impairments (blindness and low vision) or hearing impairments (deafness and hard of hearing). They also occur as a characteristic of numerous other developmental difficulties such as specific learning difficulties (dyslexia, dysgraphia and dyscalculia), language difficulties, intellectual difficulties, damage to the central nervous system (such as cerebral palsy), disorders from the autism spectrum, ADHD and others.

Visual and auditory perception, on the other hand, are extremely important for noticing, recognizing, distinguishing and connecting numerous experiences from our environment. For this reason, in the preparation and execution of workshops with children and young people who show difficulties in this area, it is necessary to use different support strategies that will enable them to participate equally and gain new experiences.

#### 3.1.1. Visual-perceptual support

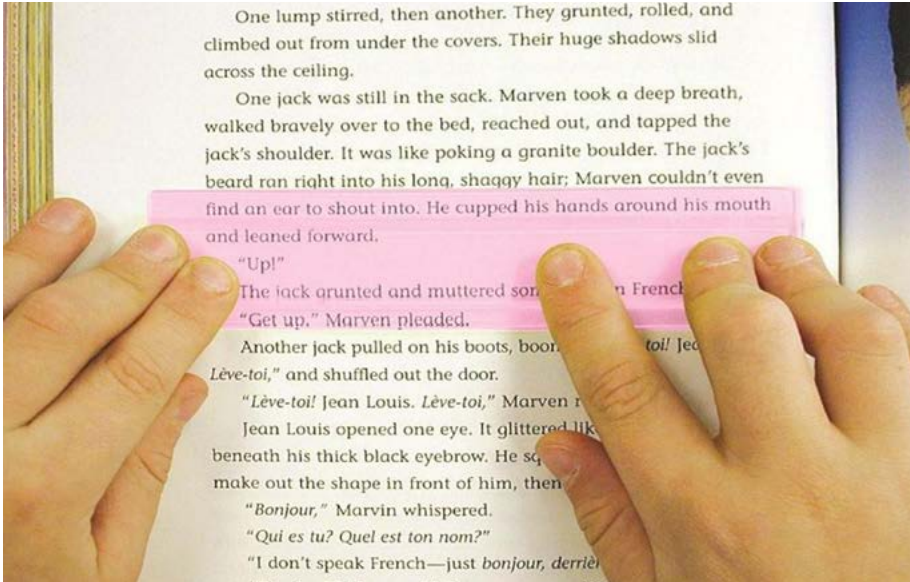
##### Covering unimportant content

In activities that include reading or observation, the content determined by the workshop leader as important for understanding the instruction or task remains visible, while redundant illustrations, text and other visual elements are covered on the material intended for a child/young person with visual perception difficulties, so as not to distract attention and make understanding difficult. This, for example, with written instructions, can be done with frames as in Figure 1.

##### Highlighting the important (font colour, underlining, bolding, shading)

The content that the leader has determined to be important is highlighted by being printed in a different colour, bolded or underlined, framed or marked in some other way. When emphasizing, italic letters should be avoided. Underlining should be avoided for students with dyslexia.

### 3. SUPPORT STRATEGIES



**Figure 1.** Frame for covering unimportant content  
(Source: [www.learning-loft.com](http://www.learning-loft.com))



**Figure 2.** Difference between serif and sans-serif  
(source: <https://www.manypixels.co/blog/post/serif-vs-sans-serif>)



### 3. SUPPORT STRATEGIES

#### Increased spacing

When creating written materials intended for workshop participants with visual perception difficulties, it is good to use double spacing. Depending on the needs of the students, the space between letters and words can be increased or double space between sentences can be used. It is mandatory to increase the spacing between paragraphs.

#### Enlarged and/or bold print

The size of characters in written materials for students with visual perception difficulties must be 12 points or more. **The optimal size is 14 points.** A size smaller than 11 points should definitely be avoided. **Bolding the entire text is used to make the text more visible.**

#### Non-stylized font

When preparing written materials, use “sans-serif” fonts (letters without short dashes at the ends), such as Arial and Calibri or specialized dyslexic fonts.

#### Other text adjustments (written materials)

In addition to the above, participants with visual perception difficulties may also benefit from the following adjustments:

- adjustment of text alignment (lines aligned on the left side, with large margins. It is especially good to avoid double-sided alignment)
- adjustment of the colour of the base/paper (although there is no universal recommendation for choosing the colour of the base because different students are suited to different colours, it turned out that cream colour is the most acceptable for most children/young people with visual perception difficulties)
- starting each sentence in the text on a separate line.

#### Artistically/graphically refined materials

Background graphics, too many illustrations and colours make the content unreadable. Therefore, the design of pages in materials for students should be simple, devoid of all unnecessary details and decorations.

### 3. SUPPORT STRATEGIES

#### Regulating the amount and source of light

Natural or artificial lighting should be adjusted so that it is not too dark or too bright. The light source should be opposite the dominant hand so that the shadow does not fall on the writing, drawing or working surface.

#### Eliminating reflective glare and using contrast

It is necessary to prevent or remove reflective glare from windows, tables, floors or work materials. Glossy papers can also create a reflective glare that further hinders the visual perception of the participants. Contrasts will help the student to better navigate the space and work material.

#### Inclusive description

When working with blind students, it is necessary to add an audio description of what is in the image to each picture in the material. For other participants with visual perception difficulties, the description of the picture in the form of an interpretation will help them better understand what is on it

In addition to the above, it is important to take into account how visual perception difficulties will manifest themselves in activities that require movement in space. One of the adjustments that can be applied is the marking of height obstacles or important positions in the space (for example in dance or drama workshops) with contrasting strips.

#### 3.1.2. Speech-auditory-perceptual support

##### Adequate volume of the workshop leader's speech

Adequate speech volume promotes understanding of what is being said. The leader's speech should not be too soft, but not too loud either. If the leader is too far away for the participant to hear him well (for example in the hall), another person (a peer, another leader) can have the task of repeating the instructions given to the participant with difficulty in hearing perception.

##### Paralinguistic and extra linguistic adaptation of the leader's speech (tone of voice, facial expressions, gestures, etc.)

Paralinguistic and extra linguistic signs complement and enrich communication, but they can also hinder it. The leader should be aware of the volume, tone and colour of his voice, pauses, fluency of speech, intonation, gestures and facial expressions, and his body position, so that

### 3. SUPPORT STRATEGIES

he can adapt them to the participants for the purpose of speech-auditory-perceptual support.

#### **Amplification/silencing of verbal instruction due to insufficient sensitivity to sound**

Some children and young people with developmental disabilities are less sensitive to sound stimuli and therefore verbal instructions should be given louder and repeated several times if necessary. On the other hand, some participants are hypersensitive to sound stimuli and therefore it is good to address them in a soothing voice. In both cases, by speaking in the vicinity of participants with such difficulties, we will ensure that the child hears the instruction well, and in addition, we will draw his attention to what the leader is saying, which is useful when working with participants who have easily diverted attention. The content of what is said can be accompanied by an appropriate illustration/pictogram.

#### **Checking the understanding of what was said**

When working with children and young people with developmental disabilities, the leader often checks understanding, but never in a way that negatively highlights the student with disabilities compared to the other students in the group. Therefore, you should avoid the constant questions “did you understand?” aimed exclusively at students with disabilities. The leader checks understanding continuously, in various subtle ways and during the entire work process, both in the theoretical and in the practical part.

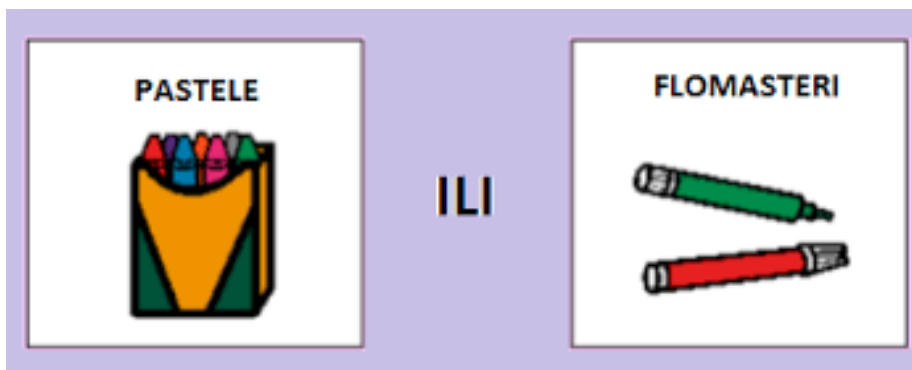
In addition to the above, it should be borne in mind that many children and young people with developmental disabilities have a less developed vocabulary considering their chronological age. This especially applies to functional vocabulary, that is, words that the student really understands and knows how to use in the right context. Therefore, it is necessary to check with people who know the child/young person whether it is necessary to use simpler language in communication than that which would be appropriate for children of the same age with typical development.

We can expand the vocabulary gradually, taking care that the student learns to use new expressions correctly, connecting them to real life. It should be avoided to introduce several expressions that are new to the child at once.

### 3. SUPPORT STRATEGIES



**Figure 3.** The “stop” symbol that can be used in the workshop



**Figure 4.** Use of symbols in an art workshop  
(source: [www.vrtic-medobruno.zagreb.hr](http://www.vrtic-medobruno.zagreb.hr))

### 3. SUPPORT STRATEGIES

New expressions should be explained using words that the leader knows are already known to the participant.

## 3.2. Cognitive support

### Backing up content with immediate reality

Direct reality helps the participants to understand the content better and provides clearer ideas about what is being done/learned. Whenever possible, the leader should devise ways to accompany the lecture, task, instruction, or content presentation with real-world examples and real-world objects.

### Supporting the content with a picture, drawing, scheme, sketch and symbols

Just like the immediate reality, pictures, drawings, schemes and sketches enable the participants to understand the content better. Visual representations must be concrete, clear and focused on the content, so as not to further hinder understanding.

If the leader uses symbols to support the content, they must be clear and familiar to the participant. It is a good idea to agree on the symbols for frequently mentioned concepts in advance and to familiarize the participants with the symbols that will be used in advance.

### Reducing the number of facts

The number of facts must be in accordance with the cognitive capabilities of the participants. The leader is the one who knows how to determine which facts are necessary so that the participant can understand the content and build on that knowledge later. The original content that is presented to students with typical development needs to be transformed into sentences that contain only key information, and then presented briefly and clearly. Terms that are repeated or are not crucial for understanding the content or activity should be omitted.

### Introduction to the procedure by step-by-step assistance

Assistance and support to the student should be gradually reduced in a planned manner in order to achieve as much independence as possible. This applies both to physical support in the performance of practical tasks,

### 3. SUPPORT STRATEGIES

as well as to verbal guidance, reminders and other types of support. It is good to periodically check whether the trainee is ready for a new level of independence in the execution of tasks, so as not to limit him by providing excessive support when it is no longer needed.

#### **Semantic simplification**

Words (in speech or writing) that are difficult to read or understand should be replaced by other, alternative words that are known to the student or are easier to read/understand. The order of words in the sentence should be such that it emphasizes what is important in the sentence. Written sentences should be short, with emphasized (bold) key words. New concepts can be further explained, supported by photos/symbols, or a glossary with explanations can be created for the student.

#### **Checking the understanding and the following of content**

Just as when checking the understanding of what was said, it is also necessary to check whether the participant is following what is happening at the workshop. Directing the trainee's attention should be done subtly and unobtrusively, with agreed signs or procedures, so that the trainee with developmental difficulties does not stand out negatively during work.

#### **Additional explanation of the purpose of the content**

It will be much easier for the participant to follow, understand and remember the content if we explain to him why we are doing something, how the new content builds on the previously processed and those that are yet to follow, and what the ultimate goal of our activity is.

#### **Additional written and spoken instructions**

Additional written instructions/visual layouts and reminders will make it easier for the participant to understand and remember the content and sequence of activities. The instruction must be adapted to the student's capabilities, i.e. such that he can understand it without difficulty. Complex instructions should be divided into several simple ones.

With verbal instructions and information, we direct the participant to what is important in the observed content or practical activity. In this case too, the instruction must be adapted to the student's abilities so that he can understand it without difficulty. Complex instructions should be divided into several simple ones. There should be a break between the instructions.

### 3. SUPPORT STRATEGIES

A new instruction is given only after the previous one has been processed. If the leader determines that the participant did not understand the instruction, it should be repeated. Furthermore, if he did not understand the same instruction several times, it should be reformulated to make it clearer.

#### **Multimodal environment**

Creating a multimodal environment refers to the inclusion of as many senses as possible in learning the content. Visual sources, digital media, images, speech sources, movement, gesture, but also the smell, taste and touch of the original reality can be used as multimodal stimuli.

## 3.3. Memory support

#### **Using reminders**

Reminders are especially useful for children and young people with attention deficit disorder and working memory difficulties. Any content for which the participant needs to be supported in memory can be included in the reminder, for example new terms or work instructions. The reminder may also include individual steps of a more complex procedure.

#### **Repetition of important parts of the content**

Key parts of the content that are important for participation in the workshop need to be repeated in order to ensure their constructive and purposeful memorization, while focusing on the functionality and application of newly acquired knowledge. Information is chained in such a way that new contents are connected with previously adopted ones.

## 3.4. Support for attention and the need for activity

#### **Focusing attention on the task**

The leader can direct the participants' attention to the task verbally, using appropriate directing expressions such as "please pay attention to this". However, the leader can also direct attention by touching, patting the participant on the shoulder, etc., in various inconspicuous ways that can

### 3. SUPPORT STRATEGIES

avoid the negative attention of the entire group being constantly drawn to the participant with developmental difficulties.

#### **Enabling adequate movement during work**

A participant with an increased need for movement in the space where the workshop is held must be accommodated in such a way that he can satisfy his need for movement without disturbing other participants. It is also a good idea to design special tasks for the student that will satisfy his need for movement (bringing materials, adding tools and conveying simple messages).

#### **Providing tasks that require physical movement**

The leader can organize the work in the workshop so that the participant who has an increased need for movement can participate in the activities by moving.

#### **More frequent change of activities**

The time that the student spends working on a specific task should be organized in such a way that activities of different physical and mental intensity alternate more often. Attendees with attention and concentration disorders should be given more frequent work breaks and the possibility of going to a “quiet corner”.

## 3.5. Support related to the specifics of sensory integration

Sensory integration is the process during which sensory information from our senses of movement, vision, hearing, touch, taste, smell, etc., arrives in the brain via brain nerves, is then processed in such a way that we give it meaning, and then we can act on it to respond with some activity. Sensory integration disorder occurs when the brain and nervous system are unable to adequately integrate sensory information, resulting in difficulties in perception, behaviour and learning. Every person avoids or prefers certain sensory stimuli. The choice of our favourite foods, the fabrics and cuts of clothes we wear, the conditions in which we can sleep, and even our hobbies and the way we spend our free time depend on them.

#### **Removal of disturbing odours**

The participant can be distracted and distracted from work by various smells (for example, the smell of work accessories, cleaning agents, etc.). In the



### 3. SUPPORT STRATEGIES

case of participants with hypersensitivity of the olfactory system (sense of smell), we can notice that they will block their nose even when most of the other people around do not smell anything. It is necessary to detect and remove such odours and/or adequately ventilate the work area.

#### **Room temperature adjustment**

Too high or too low a temperature and significant differences in temperature can also distract the trainee's attention. It is necessary to ensure that the space in which the work is done is sufficiently ventilated.

#### **Tactile adjustment**

Some students with sensory integration difficulties may react negatively to the touch of others. In addition, they can be picky about different materials. They will often get upset if they get dirty and need to wash their hands immediately. Such children usually do not like working with clay and plasticine. In the opposite case, there may be insufficient tactile hypersensitivity, due to which the participant will have a poor assessment of personal space, so there is a risk of colliding with furniture and other participants. It is especially necessary to take care of this when working with substances and materials that should not be spilled or that are easily breakable.

#### **Adaptation in hypersensitivity and insufficient sensitivity of the vestibular system (balance maintenance system)**

Children and young people with vestibular hypersensitivity difficulties generally do not like movement, as well as changes in position, especially the position of the head. They are unskilled when walking on uneven surfaces. When they want to look at something, they turn their whole body instead of just turning their head. They mostly feel insecure on the stairs and don't like to use the devices in the children's playgrounds. They feel dizzy easily and do not like driving.

Conversely, a child with insufficient vestibular sensitivity will find it difficult to take positions in which balance must be maintained (eg standing on one leg). These children are constantly on the move, fidget and cannot sit still. They do not show fear of heights or falling, so it is necessary to take special care of activities at height or near open windows. They have difficulty following objects with their eyes.

### 3. SUPPORT STRATEGIES

#### **Adaptation in hypersensitivity and insufficient sensitivity of the proprioceptive system**

Proprioception is the awareness of where our arms, legs, head and rest of the body are and how our body is positioned in space. Children with an overly sensitive proprioceptive system tire easily, lack strength and are not durable in physical activities. When moving and standing, they will often look for some kind of support. On the other hand, when insufficient proprioceptive sensitivity is present, the child will act as if he is never still and will be constantly in motion. Such children do not respect other people's space, often push or throw themselves at others and initiate physical contact, although they are not aggressive. Due to clumsiness, they have problems with activities that require fine motor skills, such as stringing beads, building with blocks, buttoning/unbuttoning, and the like. While running or walking, they often look at their feet instead of in front of them.

#### **Adaptation in hypersensitivity and insufficient sensitivity of the visual system**

Children with excessive sensitivity of the visual system are extremely bothered by bright light, whether from a natural or artificial source. When encountering bright light, they squint and close their eyes. These children pay attention to almost all visual stimuli in their environment, so it is very difficult to focus their attention on the target activity and they get tired faster. If insufficient visual sensitivity is present, it is noticed that the child does not pay attention to new people who enter the room or to new elements and objects that are introduced to work. These children find it difficult to find similarities and differences and act detached from the events around them.

## **3.6. Support for interaction and social relations in the group**

### **Work in pairs**

Working on practical tasks in pairs with another participant in the group. Rules, roles and tasks should be clearly defined and enable both members of the couple to successfully perform their part and contribute to the final result.

### 3. SUPPORT STRATEGIES

#### Working in a group

It is good to use group work as often as possible, so that heterogeneous groups (groups of participants of different abilities) are formed in the workshop, and tasks are divided in such a way that each member of the group can successfully complete his or her part of the task.

#### Ensuring personal space

The participant is provided with enough personal space to be able to complete the task without distraction. This is useful for some students with, for example, sensory integration difficulties/autism spectrum disorder.

#### Peer support

The purpose of guided peer support is to improve the interaction between children with disabilities and their typically developing peers. Participants who will provide peer support must be prepared in advance. Peer interaction affects all important functions in children, such as communication skills, cognitive abilities, social adaptability, long-term relationships, the development of emotions and the achievement of educational outcomes.

#### Public highlighting of student success

The leader publicly praises the participant for the achieved successes, focus of attention, appropriate behaviour and effort. The praise is concrete, comprehensible to the participants and refers to the real achievements of the participants (not made up).

## 3.7. Time adjustment

Children and young people with developmental disabilities will often need more time or differently structured work time to complete certain tasks than their peers with typical development.

#### Fewer tasks

The number of tasks of equal complexity is reduced. Fewer tasks are assigned at once or the task is divided into smaller parts.




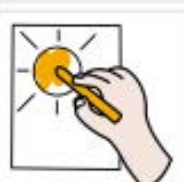

#### Breaks in work

The participant is provided with breaks in work to rest, or more demanding tasks are alternated with less demanding ones.

### 3. SUPPORT STRATEGIES



## Vizualni raspored

	LIKOVNA RADIONICA
	SJEDNI NA SVOJE MJESTO
	SLUŠAJ VODITELJA
	CRTAJ
	POSPREMI SVOJE RADNO MJESTO

**Figure 5.** Visual arrangement for an art workshop made in the free application Multi-Sklad using ARASAAC symbols

### 3. SUPPORT STRATEGIES

#### Clear determination of time to work on the task

The participant is introduced to the plan of work on the task so that he knows how much time is allocated for each activity. In this way, the student will allocate his resources better and more efficiently, for example attention and concentration.

#### Visual layout

The visual schedule of days/hours/activities enables the participant to familiarize himself with the sequence of activities. Such schedules encourage student independence, ensure predictability and consistency, increase understanding of what follows, and thus reduce undesirable behaviours and student anxiety.

#### Extended work time

The participant is given more time to solve a particular task compared to other workshop participants, or the time allotted for the adoption of certain outcomes is extended.

#### Reduced work time

Taking into account the attention, concentration, motivation, perceptual and cognitive functioning of the participants, the time allotted for working on a certain task is shortened.

## 3.8. Support for fine and gross motor difficulties

#### Ergonomic adaptation of the workplace

Participants with difficulties in body positioning will sometimes need, according to agreement with parents or other persons who know their needs, to provide an adapted chair, table or access to the workplace due to the use of wheelchairs or other mobility aids. It is ideal to provide a table that has the ability to adjust the height and inclination of the work surface. The need to use an adequate additional support for the hand, an adapted mouse pad when using the computer, and the like is also considered.

### 3. SUPPORT STRATEGIES

#### Writing and drawing aids

If the participant uses this type of equipment, it is also necessary to provide writing and drawing aids for the workshop, such as heavy-duty pencils, accessories for easier holding, pencil extensions, and the like.

#### Spatial accessibility

It is necessary to provide such environmental conditions that each participant, regardless of the way of movement and body position, can move around the space safely and independently as much as possible. This includes access to sanitary facilities, ramps, the ability to retrieve tools and materials for work, and the like. It is necessary to avoid such an organization of the environment in which, due to physical or other barriers, the participant will often depend on the help of others.

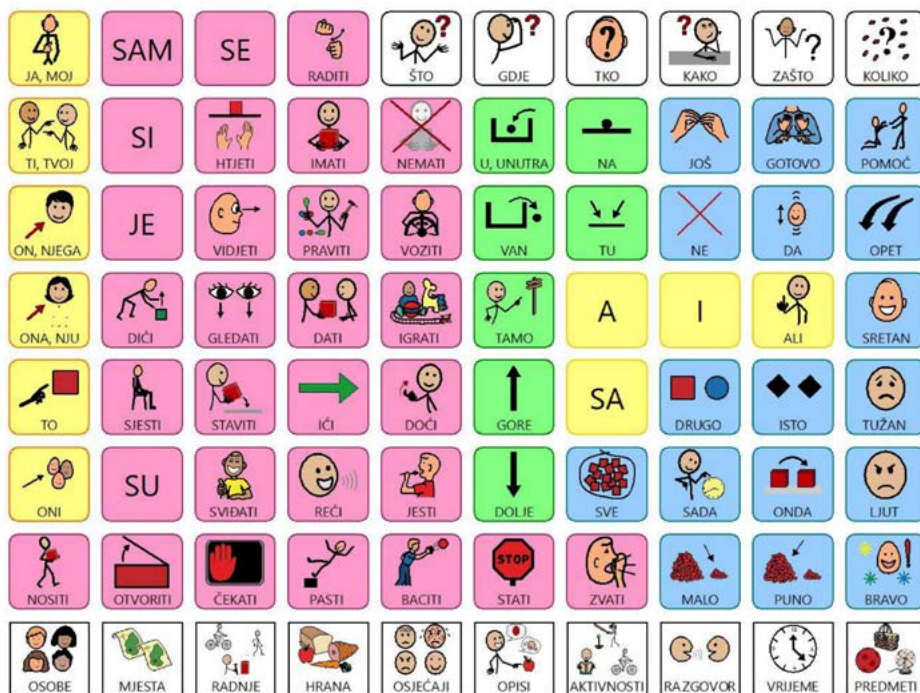
## 3.9 Communication Support

#### Assisted communication

If the participant uses one of the assisted communication systems (communicator, communication book, etc.), the leader must familiarize himself with the mentioned system and the basics of its communication. It would be useful if the leader during the workshop could provide support to the participant in cases when, for example, the battery of the communicator runs out, when the system is resetting, etc., so that the participant is not deprived of the possibility of communicating with the environment.

If the participant communicates in other ways, for example with gestures, it is important that the leader is familiar with the basics of the participant's communication profile. The leader must know how the participant expresses agreement and disagreement, pleasure, discomfort or how he makes his basic needs known (eg thirst, the need to go to the toilet, etc.).

### 3. SUPPORT STRATEGIES



**Figure 6.** Communication panel with core vocabulary  
 (Source: Faculty of Education and Rehabilitation,  
 University of Zagreb, Laboratory for Assisted Communication)





### 3. SUPPORT STRATEGIES



Figure 8. Personal communicator (Source: CoughtDrop, School of Education-Pula)

# APPENDIX 1.

Rubric for the preparation and analysis of the workshop according to the principles of universal design and reasonable adaptation

1. What is the work task in the workshop (if there are several tasks, it is advisable to do a separate analysis for each one)?

2. What are the steps of its performance?

3. What tools are used in the workshop?

4. What material is used in the workshop?

### 3. SUPPORT STRATEGIES

5. What do we know about potential participants of the workshop?

About their cognitive functions	
About their psychomotor statuses	
About the specifics of their attention and concentration and the need for activity	
About their speech-language and communication specificities	
About the peculiarities of their perception (sight, hearing)	
About their sensory hypersensitivity/insensitivity	
Other important features	

### 3. SUPPORT STRATEGIES

6. What are the characteristics of the space where the workshop is held?

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7. Is the **principle of equal use** ensured in the workshop (can all potential participants participate equally in all phases of work)?

YES	NO
-----	----

In which phases of work will some participants not be able to participate?

--

What adjustment and/or replacement activity do you plan for these participants?

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8. Is compliance with the **principle of flexibility of use** ensured in the workshop (are there more ways of using tools and materials? Is there a possibility of choosing the ways of performing the task)?

YES	NO
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9. Is the **principle of simple and intuitive use** ensured in the workshop (is the work process simple? Is it possible to divide it into smaller logical steps)?

YES	NO
-----	----

### 3. SUPPORT STRATEGIES

Are there elements that can disturb the participants?

YES	NO
-----	----

10. Is the **principle of providing visible information** ensured in the workshop (is important information available to all participants, regardless of their specifics)

YES	NO
-----	----

11. Is the **principle of error tolerance** ensured in the workshop (is it possible to prevent the participant from making a mistake that he will not be able to correct)?

YES	NO
-----	----

12. Is compliance with the **principle of minimum physical effort** ensured in the workshop (can all participants physically perform all tasks in the workshop)?

YES	NO
-----	----

If they cannot, what aids will be used?

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13. Is compliance with the **principles of size and space suitable for access and use** ensured in the workshop (is the space accessible?)  
Can all participants access tools and materials and use them in the performance of the task?

DA	NE
----	----

If not, what measures will be taken?

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### 3. SUPPORT STRATEGIES

14. What support strategies should be used considering the specifics of potential participants?

a. Visual-perceptual support:

b. Speech-auditory-perceptual support:

c. Cognitive support:

d. Memory support:

e. Support for attention and the need for activity:

### 3. SUPPORT STRATEGIES

f. Support related to the specifics of sensory integration:

g. Support for interaction and social relations:

h. Time adjustment:

i. Support for fine and gross motor difficulties:

j. Communication support:

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