

# SCIENTIFIC RESEARCH *in* FORMAL & INFORMAL EDUCATION



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**SCIENTIFIC RESEARCH IN FORMAL AND INFORMAL EDUCATION**  
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## Greetings

Dear authors and dear colleagues from universities in different regions of the world, we present to you the monograph “Scientific research in formal and informal education”. For a whole year 2023 we have been working on this digital monograph. It has been a challenging year for all of us, as geopolitical events in 2023 have changed much about the intellectual integration of the world’s scientists. But nothing can change what we call the research ethic.



Each member of the academic author team in the digital monograph contributed to the ‘enrichment’ of one or another institutional research theory. The publications author teams were unselfish and critical in making sure that their paper was highly verifiable, coherent, heuristic and reproducible. It is also important for each of us to show the morals of a scientist and humanity towards the participants in the research presented.

The project editorial team has done all it could to ensure that the research results are accessible and open to the scientific community in many parts of the EU and the world. We all have an interest in following fully the rules of scientific ethics for scientists and presenting the scientific results of authors of articles to the public in a dignified manner in accordance with the principles of the ‘Association of Internet Researchers’ and open science promotion ethics developed at Harvard University 1999/09/17 for the global scholarly community. Our general operating principle in promoting the research results: we are all equals in the face of the truth of science.

We thank everyone who has been with us all this year. And we are open to cooperation with everyone who cares about the process of intellectual integration and the possibility of unification.

*Univ.Prof. Dr.Sc. Dipl.Ing. Oskar Raif. Riabov,  
Director General, Institute for Intellectual Integrations*



# CHAPTER 1

## Scientific research on inclusion and integration in formal and informal education

# DIAGNOSTIC ACTIVITY AS A PART OF THE COUNSELLING SYSTEM IN SLOVAKIA IN THE ENVIRONMENT OF PRE-PRIMARY AND PRIMARY EDUCATION

*Alexandra Biščo Kastelová*

**Abstract.** This paper focuses on the description of the diagnostic process as a part of the counselling system in Slovakia. The counselling system in the Slovak Republic is undergoing changes in the organisation and division of counselling competences into five levels, which are provided at the level of schools and specialised counselling facilities. The article describes in more detail the diagnostic activities carried out at the first and second levels of support by various pedagogical and professional staff. The final part of the paper also discusses possible new trends and visions in the field of special education diagnostics that could bring further advances in this area.

**Key words:** counselling system in schools, diagnostic competences of pedagogical and professional school staff, school support team, special pedagogical diagnostics, psychological diagnostics, pedagogical diagnostics, speech therapy diagnostics, child/pupil with special educational needs

## **Introduction**

The Ministry of Education of the Slovak Republic is currently implementing a transformation of the guidance system with a focus on adapting guidance more closely to the needs of pupils. The changes concern the organisational structure and the redistribution of counselling competences into five levels, which are provided both at school level and in specialised counselling centres. The first tier consists of teachers, the second tier consists of the school support team. The third and fourth levels are the counselling and prevention centres, while the fifth level consists of the specialised counselling and prevention centres. The new standards for the professional activities provided by the counselling centres will ensure the same level of quality in each counselling centre.

The amendment to the School Law 415/2021 includes the transformation of the guidance system. Under this amendment, professional activities are carried out in the counselling and prevention system, which include counselling, psychological, pedagogical, special-educational, speech-educational, therapeutic-educational and socio-educational activities. The aim of these activities is to optimise the educational, educational, psychological, social and career development of children from

birth to the end of vocational training. Counselling is also provided to the legal representatives of children or pupils, representatives of the establishment, pedagogical staff or professional staff. The guidance and prevention system consists of guidance and prevention facilities and, in schools, teaching staff, the school support team or professional school staff. The counselling and prevention facilities are the counselling and prevention centre and the specialised counselling and prevention centre (Decree No 24/2022 Coll. of the Ministry of Education and Science on counselling and prevention facilities).

**Support Level 1 (Counseling and Prevention System. Support Level 1, 2022) [1]**

Level 1 support is understood as universal preventive-educational work that is provided to all children and pupils as an integral part of the educational process. The aim of this work is to ensure optimal conditions for the social-emotional, cognitive and personal development of children and pupils. By adjusting the content, forms and methods, universal preventive activities and principles are integrated into education and training with an emphasis on creating a positive atmosphere and healthy relationships in the classroom, non-aggressive communication of feelings and needs, resolving pupil conflicts, monitoring children's progress and maintaining their motivation. It also focuses on the development of pro-social behaviour and empathy, congruence and career guidance.

In kindergarten, elementary and middle school classrooms, Grade 1 support is available for every student. This support is implemented in collaboration with each member of the teaching staff working in the classroom, such as class teachers, teachers, teaching assistants, guidance counsellors, tutors or career counsellors. They also work with the school's support team, the school's special educators or specialist staff, and the pupils' parents.

Level 1 support is based on a *comprehensive pedagogical diagnosis* that focuses on all aspects of the child's/pupil's holistic development in accordance with the professional standards. This diagnosis is an important input for all actors providing education, training and support for the child/pupil. It is one of the key factors in setting the level of support at all levels. Based on the outcomes of the educational diagnosis, the teacher adapts the educational activities to each child/pupil in order to support his/her overall development and to take into account his/her individual needs, strengths and limitations. Preventive-educational ac-

tivities, such as prevention of risky behaviour and social problems, career counselling, career education and drop-out prevention, are carried out for all children/pupils. Programmes are also provided to promote an inclusive learning environment, school culture and the physical and mental health of children and pupils.

### **The competencies of the class teacher/teacher in diagnostic activities**

In the context of support at level 1, pedagogical diagnostics focuses on several aspects, including the content - to determine the level of knowledge, skills and habits, the process - on the learning process and its impact on the child/pupil, and the level of psychological functions underlying the acquisition of knowledge and skills. *Pedagogical diagnostics* is carried out in cooperation between the class teacher and the teacher who carries out the diagnostics. In addition, anamnestic data on the child/pupil and his/her family are collected. The findings are analysed and synthesised and the conclusions are the basis for planning the next steps. The teacher monitors not only the results but also the process itself. He/she tries to identify the positive moments in the child/pupil's development that become the starting point for his/her further education, and at the same time he/she records the negative moments as well.

*Pedagogical diagnosis* is a process that aims to obtain basic information about children/pupils in order to identify their learning strengths and weaknesses and to contribute to the development of an individualised approach to teaching. This process involves a number of diagnostic procedures such as observation, interviews with children/pupils and their parents, test methods and others. The results of the indicative educational diagnosis are used to determine the need for and type of further diagnosis and to design individual educational measures for children/pupils. Educational diagnostics is an important part of pedagogical work, as it enables a better understanding of the needs of individual children/pupils and contributes to effective and successful education.

*Support Level 2 (Counseling and Prevention System. Support Level 2, 2022) [2]*

Professional staff and school-based special educators provide Level 2 support. They may work in a multidisciplinary team or as part of a school support team. Their professional activity relates to the educational needs of the child/pupil and they provide methodological support and advice to teaching staff when working with the child/pupil. They

also carry out professional activities towards children/pupils and their legal representatives, as well as collaborate in professional conferences (in accordance with the process standard of the VÚDPaP 2020). In addition, they create the conditions for cooperation between the school, guidance and prevention facilities and actors from other departments, such as doctors, social workers, probation officers, etc.

Support for the child/pupil at support level 2 is provided in the school environment, including in the classroom, outside the classroom and after school in the framework of the activities of the school children's club, full-day educational programmes or individual education. The aim is to optimise and support the process of education and training of children/pupils with increased support needs, including children/pupils with special educational needs and their legal guardians. The school's special educator cooperates with the school's teaching staff to provide methodological support and guidance when working with children/pupils.

There are a variety of ways in which Level 2 support can be provided in the school setting - it can be delivered individually or in groups and also in out-of-school settings such as the family home or other appropriate community settings. The provision of such support depends on the school's context and focus on the interests and needs of the individual child or pupil.

Within the Grade 2 support level, intervention activities are offered to promote inclusion. In addition, preventive action is also provided, which is divided into universal prevention for the general population and selective prevention for groups or individuals at higher risk due to biological, psychological, social or environmental factors, as well as age, gender, family history, residence and social disadvantage.

In collaboration with Level 1 educational staff, an orientation diagnosis is made to serve as a basis for more comprehensive diagnosis in counseling settings at higher levels of support.

### **The competencies of the school psychologist in diagnostic activities**

*The orientation psychological diagnosis* focuses on identifying the strengths, specificities and limits of the child/pupil and his/her needs in order to provide care that supports his/her development in the context of the process of education and training. School psychological diagnosis focuses in particular on the areas of cognitive development and processes, thinking and problem solving, creativity, personality traits and aptitudes, family rearing styles, motivation, interests, social relationships, social climate, group dynamics, learning styles and career orientation.

School psychologists are not involved in making comprehensive assessments and reports with recommendations, but prepare and evaluate the basis for comprehensive diagnosis. Diagnostic methods include observation in the natural environment, diagnostic interviewing, analysis of child/pupil work and activity products, rating scales, psychodiagnostic and sociometric tests, personality questionnaires, and projective techniques. Performance tests are part of the test battery used in counselling and prevention centres and specialised counselling and prevention centres.

### **The competencies of the school speech therapist in diagnostic activities**

A school speech therapist is a specialist in the assessment and treatment of speech and communication disorders in school-age children. *The orientation speech therapy diagnosis* that he/she performs enables the assessment of the child's impaired communicative ability in all levels of language and communication. The different levels include the pragmatic level, i.e. the ability to communicate in different situations, the lexical and semantic level, which concerns vocabulary and the meaning of words, the morphological-syntactic level, which involves the correct use of vocabulary and grammar, and the phonetic-phonological level, which concerns the correct pronunciation of vowels and words. In addition, the school-age area of read and written language is also assessed, which is crucial for successful school performance.

The assessment of impaired communication skills is crucial for the school speech and language therapist as it allows the identification of specific areas in which the child is having difficulty. This assessment is carried out using a variety of methods and techniques to obtain a comprehensive picture of the child's abilities and difficulties. For example, one example of the methods that are used in the assessment may be speech therapy testing, which allows for a more accurate determination of what specific skills the child needs to develop. The school speech and language therapist will then use the results of the assessment to develop an individual therapy plan that will help the child improve his or her communication skills and thus help him or her to succeed in the school environment and in everyday life.

### **The competencies of the school special educator in diagnostic activities**

*Orientation special education diagnostics* at the support level of level 2 aims not only to identify and assess potential barriers, but also positive

factors that influence the child's/pupil's education. This type of diagnosis focuses on the analysis, evaluation and completion of information related to the child's education that can be used as a primary basis for a more comprehensive diagnosis in the counselling and prevention centre. In the school setting, this diagnosis is carried out at the elementary (basic or sub-elements) level and focuses on knowledge, school skills, sensory perception, motor skills, speech development, laterality, impaired sub-functions, behaviour and socialisation.

Observation and observation scales, analysis and evaluation of pupil performance, structured interviews and questionnaires, sensory perception orientation tests and didactic games focusing on the sub-functions are most often used in orientation special education diagnostics. The main purpose of these methods is to obtain sufficient information about the pupils and their abilities to be able to evaluate them and use them for further decision-making and planning of the educational process.

In the event that some more serious problems are identified during the orientation special educational diagnostics, the child/pupil will be referred to a more comprehensive diagnostics at the counselling and prevention centre, where professional help and support will be provided to further the educational process.

### **The competencies of a social pedagogue in diagnostic activities**

Social-pedagogical diagnosis is an important part of the process of education and upbringing of children and students. This diagnosis focuses on identifying certain phenomena and determining the prognosis of the group's development, as well as assessing the atmosphere in the classroom. The diagnosis takes place in the school and aims to support the process of education and upbringing of children and students.

In social-pedagogical diagnosis, various methods, techniques, and tools are usually used to obtain necessary information about the group or class. One of the most important tools is observation, which enables the diagnostician to gather information about the behavior, activities, and interactions among children in the class.

In addition to observation, various questionnaires, interviews with children and parents, tests, and other diagnostic tools are used in social-pedagogical diagnosis. The aim of these tools is to obtain a comprehensive view of the situation in the class or group and identify any problems that could affect the education and upbringing of children.

After obtaining the necessary information, social-pedagogical diagnosis is used to determine specific measures and strategies that can help solve the identified problems. These measures are then implemented as part of support measures provided at various levels.

Therefore, social-pedagogical diagnosis is an important part of the process of education and upbringing of children and students. It helps diagnosticians obtain necessary information about the group or class, identify any problems, and suggest specific measures to address them. In this way, it contributes to improving the atmosphere in the class, increasing children's motivation, and helping them achieve better results in education and upbringing.

### **Competencies of a therapeutic educator in diagnostic activities**

*Therapeutic pedagogical diagnosis* is a process that focuses on identifying the needs and limitations of the child/student, as well as their strengths. The goal is to understand their behavior and find solutions that help support the child's education and development. Therapeutic pedagogical diagnosis is an important part of intervention procedures and strategies used to treat and support children/students facing various problems.

This type of diagnosis is carried out in close collaboration with the school and educational staff and is important for providing appropriate care for each individual student. The form of therapeutic pedagogical diagnosis can be individual or group-based. Various methods can be used for individual diagnosis, such as problem history, observation, analysis of activity results, biographical method, tests based on the child's goals or needs, and questionnaires.

In group therapeutic pedagogical diagnosis, the focus is on evaluating interactions within the school in the context of inclusion. The goal is to determine how children/students in the group cooperate, communicate, and how different problems and conflicts manifest within the group. This type of diagnosis is characterized as orientation and can help teachers improve the classroom atmosphere and support inclusion.

Therapeutic pedagogical diagnosis is an inseparable part of the education process and helps the child/student find solutions that will assist them in their development and provide support in school.

Currently, there are many *new trends and visions being applied in the field of special education and diagnosis* in early childhood and primary education [3, 4].

- Use of modern technologies and digital tools in diagnosis that can increase the efficiency and accuracy of the diagnostic process. Digital tools such as applications or web platforms are becoming increasingly important for special education diagnosis. These tools can help with data collection and analysis, and simplify the diagnostic process.

- Multiple perspectives: Special education diagnosis often focuses on the needs of one specific child. A new trend seeks to include multiple perspectives in diagnosis, such as those of parents, educators, and the child/student themselves.

- Personality approaches: Special education diagnosis often focuses on diagnosing individual symptoms or disorders. A new trend seeks to also include personality factors in diagnosis and examine how these factors affect the learning and behavior of children/students with special education needs.

- Multicultural diagnosis: The world is becoming increasingly multicultural and changes in the population require new approaches in special education diagnosis. Multicultural diagnosis seeks to include cultural factors in the diagnostic process and ensure that diagnosis is sensitive to cultural differences.

- Set of supportive measures: A new trend in special education diagnosis includes multiple supportive measures designed to help children/students with various needs. These measures include special education procedures, therapeutic activities, and counseling for children, students, parents, and educators.

- Comprehensive approach to diagnosis, which includes not only the assessment of cognitive abilities, but also emotional and social development of the child.

- The need for prevention and early intervention in diagnosing special education needs. This approach focuses on early detection of signs of problems and their subsequent rapid intervention, thus preventing their deepening and complications in later life.

- Focus on inclusive education and diagnosis. This approach emphasizes an individualized approach to the child and their needs, while seeking to include children/students with special educational needs in the regular education process. This trend also emphasizes collaboration with legal guardians of children and their active participation in the diagnostic process.

All of these trends and visions have a common goal - to provide children with different educational needs with an individualized and quality approach to diagnosis and subsequently to education.

## **Conclusion**

In conclusion, we state that the diagnostic process is an important part of the counseling system in Slovakia, and its success depends on the effective organization and distribution of counseling competencies across five levels. This article focuses on describing diagnostic procedures carried out at the first two levels, where various educational and professional staff members of schools are involved. At the same time, possible new trends and visions in the field of special education diagnostics are discussed, which can contribute to further progress in this area and adapt to the changing needs of children and their families.

## **Summary**

The importance of the diagnostic process in the counseling system in Slovakia and the need for effective organization of counseling competencies across five levels is emphasized in the article. Diagnostic procedures at the first two levels are described, and possible new trends and visions in the field of special education diagnostics are discussed, which contribute to further development and adaptation to the changing needs of children and their families.

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# TEAMWORK OF TEACHERS AND PARENTS IN THE EDUCATION OF CHILDREN AND PUPILS WITH SPECIAL EDUCATIONAL NEEDS

*Miroslava Bartoňová*

**Abstract.** The paper presents the topic of teamwork between teachers and parents in the education of children and pupils with special educational needs in an inclusive environment. The multidisciplinary team places high demands on the cooperation of all participants as well as on the competences of each team member. Good and constructive joint working is essential to extensively support a child/pupil with special educational needs. It involves different actors working together in some way. Effective cooperation with parents is important, with respect, active and varied cooperation based on stimuli, oriented towards the child's strengths, feasible and realisable.

**Keywords:** special teacher, parents, child/student with special educational needs, early care, kindergarten and primary school, special teacher, teaching assistant.

## **Introduction**

The child represents a significant emotional value for the family. It provides to parents new stimuli, knowledge and experience, gives meaning to their lives, strengthens the emotional bonds within the family, increases the social status of the parents and provides them a future outlook that is an extension of their own lives. The reactions of the parents' immediate environment (grandparents, extended family) can help the parents by their expressions or, on the contrary, make them worse by their inappropriate attitude. The family is an integral part of intervention work. There is a need for a proactive approach to dealing with the difficulties of children with disabilities. When it is discovered that a child with a disability has been born into the family, it is good to focus on the mothers as a vulnerable group. They need to find a system to manage the situation in the long term. At the same time, if the parents are very busy with their time or are dealing with health problems, they also fall into the risk group. The questions of how parents understand the causes of their children's difficulties, how they interpret them and what they think their meaning is, are essential for counselling practice.

## **Early care and the family of a child with disabilities**

Early childhood care in the Czech Republic is regulated by the Act on Social Services: No. 108/2006 Coll [1]. Social services include social counselling, social care services and social prevention services. They provide

residential, outpatient or outreach services. Early care is a field-based, outpatient service provided to a child and parents of a child aged up to 7 years who is disabled or whose development is at risk as a result of an adverse social situation. The service is aimed at supporting the family and supporting the child's development with regard to their specific needs.

The early care service includes basic activities: educational, training and activation activities, assessment of the child's and parents' abilities and skills, and identification of the needs of the family and the child with disabilities. Educational, training and activation activities include assessing the child's and parents' abilities and skills, identifying the needs of the family and the child with a disability or disadvantage. It includes specialised counselling for parents and other close persons, support and strengthening of parental competences, reinforcement and training and skills of parents or other caring persons that contribute to the appropriate development of the child and family cohesion.

An important support for parents is the offer of programmes and techniques to support the child's development, guiding parents through instruction in practicing and consolidating the child's skills in order to maximise and develop the child's cognitive, sensory, motor and social abilities. Social and therapeutic support, psychosocial support in the form of listening, support for the exchange of experiences and the organisation of meetings and residential courses for families also play an important role in early intervention.

*Example: Hearing impairment is obviously very serious, but if early diagnosis and determination of the type and degree of impairment is made, or if appropriate and suitable prosthetics and follow-up care are provided as soon as possible, it is quite likely that an individual who is hearing impaired will not fall behind intact individuals in other areas.*

The following characteristics can be observed in families with children with disabilities: increased levels of stress, higher incidence of anxiety, lower levels of life satisfaction experienced by individual family members, an overprotective tendency, increased emphasis on the development of non-disabled siblings, greater pressure on the structure and control of the family system, more conflict within the family, lack of mutual support among family members, and less encouragement to express emotions freely.

A child with a disability is a burden for the family on both a material and emotional level. On the one hand, adequate care represents high

financial costs and time demands; on the other hand, experiencing the child's current condition leads to emotional strain [2]. G.W. Lauth [3] adds the issue of social strain. Similar burdensome moments are mentioned for chronic illnesses: coping with everyday problems, hospital stay, limitations in physical exercise, identity development, self-evaluation, existential confrontation with the illness. The authors speak of the stress of the „disabled child“.

Dealing with this burden and overcoming it is referred to as acceptance of the situation [4]. Phase models play an important role in the discussion of understanding the process of overcoming the birth of a child with a disability. These include the phases of shock, denial, disorganization, depression, active processing and acceptance. Although these phases thematize temporal changes, they are more critically viewed today. We observe problems in reaching the final stage, insufficient criteria for transition from one stage to another, etc. Today, the discontinuity of the process, which is constantly influenced by the changing conditions in the family and thus the demands placed on it, is rather accepted.

There are points of contact in how parents cope with their child's disability. In order to understand the process, coping programmes, a concept of coping with a difficult situation, are offered. This concept is closely linked to stress theory, which also focuses on the analysis of the processing process as well as the forms of processing. Coping can be defined as the sum of all cognitive and practical efforts that are aimed at coping, tolerating or reducing external and internal demands and the conflicts that exist between them. A distinction is often made between coping and defensiveness (defence mechanisms). Here, coping behaviour is considered adequate, constructive and justified, while rejection mechanisms are considered inadequate, destructive and distort reality. Other authors already understand every response to a stressful situation as coping. This would then mean that the notion of coping, a strategy of overcoming problems, does not seem to be appropriate by definition if we want to describe coping behaviour accurately, because coping contains within it a kind of end product of the thing. It seems more convenient, therefore, to talk about coping and processing.

#### **A child with a combined disability in the family**

Combined disability is caused by the joint meeting of several factors impeding development. The clinical picture we encounter in a pupil influences our actions. In the context of inclusion, it is not only about so-

cial participation and educational participation of these pupils, but, it is also about meeting their entitlement to an education adapted to their individual support approaches and needs [5]. Who is considered as a child with a combined disability? The description of this group of children is multifaceted, as it is not a homogeneous group. The disabilities show very diverse and different characteristics and consequences. Based on the complexity of the limitations, it is not easy in practice to distinguish between physical and severe disabilities. Different perspectives, whether medical, educational or legal, use differentiated concepts and definitions, depending on the objective associated with the perspective in question. No consideration is given to the need for segmentation by core symptoms, norms, or tolerance limits for students with combined disabilities [6].

The combinations resulting from multiple constraints are significant. For a teacher of a pupil with a combined disability, this means that they need to be very familiar with the relevant support options. Depending on the form of disability, teachers specialise in multiple special education disciplines, whether they relate to mental, physical and motor development, behaviour or sensory impairment. A deficit-oriented description of limiting and hindering factors in the pragmatic context of school inclusion is not helpful. However, we could accept that each child is individual and different - in his/her competences and at the same time in the need for appropriate support, regardless of the degree of the stress factors [7].

*Example: a family has three children. The oldest boy Peter is healthy, he is 10.5 years old. Lukas is 8.5 years old and has been diagnosed with Asperger's syndrome and ADHD. He is now in the first grade of a primary school where a teaching assistant is present. The youngest, Tomas, is 4.2 years old and has been diagnosed with infantile autism, moderate intellectual disability and ADHD. The boys spend most of their time with their mother. She is constantly trying to prepare some activities. She motivates the boys to work activities. They like to help with the work, with cooking, but Lukáš endures this activity for a little while and again goes to bed with his favourite cuddly toy. The youngest Tomas likes to help because he can work with the kitchen utensils. However, it is very necessary to keep a much closer eye on him, because his hyperactivity knows no bounds here either. He will climb up on the kitchen counter in a second and so on. When helping in the kitchen, he responds very positively to praise. The mother also offers the boys work in other household activities.*

### **Active work with parents**

The challenge of working effectively with parents is to focus on ensuring that the school does its work transparently, keeping parents active and clarifying the quality of the school's work. Parents of children with severe and combined disabilities often have a strong stake in this in inclusive settings. Successful work with parents is essential for all involved. Cooperation with parents is realistic, systematic and effective with the support of all involved. In doing so, it is important that the collaboration is not only related to crisis and problem situations, but is focused on intensive collaboration [6].

*The work with parents is organized in a team* – the team is kept informed of all important meetings and supports the teacher. To avoid communication noise, one of the team members always speaks for the team. Very good teamwork facilitates cooperation and strengthens parents' trust.

*The work with parents takes place on a regular basis* – a routine in regular contact that is adapted to the specific characteristics of each family. It is important that meetings are held in school at a time when parents can attend. Regular contact also includes feedback on positive events.

*Work with parents is organisationally linked to the school* – calls with parents are a fixed part of the daily timetable but can be flexibly moved out of school hours.

*Work with parents is carried out on the basis of a professionally conducted interview* – professional interviewing promotes empathy and respect. This method of communication is closely tied to the personality of the teacher, and reflection and supervision are always needed. The combined disability of the parents' own child plays a crucial role. A fully respected treatment of these specific experiences is needed.

*Working with parents takes parents' wishes and goals seriously* – not only diagnosis, but also planning and information about the children are important for teachers. Parents' wishes and goals for their child are also crucial for supportive planning. The parent and the teacher work together to develop realistic goals. Educators build on the parents' wishes and plans. In long-term support measures, the agreement between the school and the parents is particularly important (even in the stagnation phase they experience a sense of mutual cooperation).

### **Suggestions for successful work with parents**

Successful work with parents is carried out in three ways. Educators can advise, inform and offer co-responsibility to parents. They can

choose to communicate directly with the parents of an individual pupil or they can reach out to all parents in the classroom. In an inclusive environment, educators should take into account that parents of children with and without disabilities should first and foremost get to know each other. Unspoken and voiced misinformation or ignorance of the issues can lead to misunderstanding [8, p. 201].

Good and constructive joint working is essential to extensively support a child, a pupil with a combined disability. It applies to different actors who work together in some way.

- Collaboration with parents – active, diverse, stimulus-driven, strengths-based, feasible, achievable, respectful.
- Collaboration with mobile services – disability-specific, regular, focused on diagnosis and counselling, accepted in the long term.
- Collaboration with teaching teams – constructive, professional, interpersonal, mutually supportive, class/student related, joint support planning.
- Collaboration with school support staff – informative, with clear division of tasks.
- Collaboration with therapists – multiprofessional, student-centered, meaningful connected.

Working with parents in an inclusive school environment brings some specificities that teachers need to be aware of. [9]. Parents of children with disabilities have certain expectations that teachers need to take into account. Concepts and methods for dealing with diversity in the classroom, such as alternative forms of performance assessment, weekly work planning, or competency work, are new to many parents and should be introduced using video material from the classroom. Effective communication between the family and the school can improve parents' involvement in their children's education at school and at home. Home preparation and improvement of school skills for pupils with combined disabilities with the help of parents is very important. Barriers to family involvement may include parental income and educational attainment, parental responsibility for childcare, and inflexible working hours. These can interfere with parents' positive communication with the school and involvement in their education. The results of studies conducted confirm that parents of pupils with special educational needs are less involved in educational activities at home and at school. This may be due to previous negative experiences, criticism from teachers, or feelings of social exclusion due to their child's diagnosis. Knowledge

of empowerment strategies and defensive processes helps to understand parents' thoughts and respond appropriately [10].

Parents benefit from effective communication between them and the school. They become more involved in school activities at home if they perceive that communication with teachers is effective. More educated parents are perceived as more effective in communicating with teachers. Feelings of exclusion are particularly significant; the greater the sense of exclusion felt by parents, the lower their involvement in school [11]. Teachers can also benefit from effective communication between the family and the school. When parents are supported and collaborated with, their satisfaction with the school increases. Some authors recommend strengthening family-school relationships through a welcoming culture in the school community, respectful communication between parents and teachers, cooperative learning, and parent participation in school life [12].

### **Teamwork**

For inclusive education, but also special education, the cooperation of different professional groups is absolutely necessary. Teachers, teaching assistants and therapists work closely together as a team. Together, they develop the curriculum, taking into account the specific competences of the professions concerned. Pupils with combined disabilities encounter a range of professional professions in the course of a normal school day. The needs of these pupils require the interaction of different professions in order to provide optimal support [13]. A multi-professional team places high demands on the cooperation of all involved, as well as on the competence of each team member. On the basis of the special-pedagogical diagnostics, an intervention plan is set and the related possibility of borrowing special aids [14]. In an inclusive setting, the question is asked what experience each team member has gained with pupils with combined disabilities. The less experience that is available, the more time the team needs to ensure that all members have the same level of information and have acquired basic (special) pedagogical thinking and behaviour. Here, support from the school leadership also plays an important role [15].

The special educator assists the mainstream school in expanding competences with regard to inclusive teaching. The aim is to strengthen the inclusive environment. For pupils with combined disabilities, the set guidance support, early support is taken into account. The nature of the underlying issue decides which services must be involved [16].

An essential characteristic of an inclusive environment is the collaboration between two qualified mainstream teachers and a school for pupils with disabilities in different inclusive models such as tandem, cooperative classroom and partner class. Teamteaching starts from an intact base of trust between the two teachers, from regular exchange and mutual guidance. Mutual cooperation is perceived very positively. Open teaching forms such as differentiation are easier to change, classroom rules are easier to enforce.

Individual approach to pupils with combined disabilities is possible more often and in a more targeted way. In order to take advantage of the positive aspects, both teachers, especially at the beginning, need to train intensively in cooperation. Positive communication and appropriate timing can eliminate potential barriers. Both teachers are equally responsible for all pupils. This means not only the special educator takes over the support of pupils with combined disabilities, but also the regular teacher feels responsible for them [17]. The existing fears gradually disappear when both teachers can work competently and educate the pupil and here they benefit from each other.

The position of teaching assistant also plays an important role in the education of pupils with combined disabilities. The work of the teaching assistant can be perceived on the basis of three approaches. The first approach is based on individual work with the pupil. The individual work of the teaching assistant is the least desirable. Its individuality does not support the inclusive trend in education because of the social isolation of the pupil from the collective.

The shared assistant approach is becoming more and more common in Czech education. It is about the assistant supporting the whole class, not the individual. The latter approach characterises the assistant's work with all different pupils, teachers and classes [18]. Positive communication and transparent communication between parent and teaching assistant play an important role.

### **Summary**

For parents, the birth of a child with a disability represents a severe interference with their personal identity. It is a situation for which they were not prepared, for which they did not count. A child with a disability cannot meet the expectations and ideas of his or her parents that they had formed about the child before his or her birth. Therefore, the parents' predominant feelings include a sense of their own failure, their inability to have a healthy child, which is reflected in self-esteem as a

sense of inferiority and in emotional experience leading to increased anxiety.

Good and constructive joint working is essential to extensively support a pupil with a combined disability. It involves different bodies working together in some way. Communication can be thought of as communication with parents or guardians. The help and individual support is aimed at the pupil with a combined disability, but also at his/her parents. It is adapted to the individual needs and requirements of the pupil. The support from the assistant does not have to be provided only individually to one pupil, but can also be focused on a group [19].

Well-functioning collaboration is central to normal teaching and requires long-term care. We recommend that school leaders of schools with pupils with combined disabilities take note of the various observations in teacher-pupil-parent communication and provide suggestions for improvement through regular teacher training and regular support for teachers and pupils, thus creating a welcoming school environment based on the findings presented. School leaders and teachers need to work on the relationship and effective communication between the school and the family of the student with a combined disability.

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# THE USE OF SNOEZELLEN AND THE MULTISENSORY ROOM FOR CHILDREN WITH INTELLECTUAL DISABILITIES IN THE CENTER FOR CHILDREN AND FAMILIES – CASE STUDIES

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**Abstract.** In the article, we present through case studies the experience of using the therapeutic and interventional approach of Snoezelen and multisensory rooms. We monitored the use of this approach for specific mentally disabled children in a specific Center for Children and Family.

**Key words:** snoezelen, multisensory room, individuals with intellectual disabilities, case studies, Center for Children and Family (children's home).

## **Introduction**

In the post, we describe the possibilities of working with mentally disabled children in the multi-sensory snoezelen room located in the Center for Children and Families (CCF), formerly known as the children's home. The goal is to describe how the multi-sensory room snoezelen works for mentally disabled children living in an orphanage, its use and material equipment. The secondary goal is to submit proposals for work in a multisensory snoezelen room with mentally disabled children living in an orphanage.

## **Research methodology**

The goal of the qualitative research was to find out the possibilities of using the multisensory snoezelen room for mentally disabled children living in CCF – a children's home based on the completion of ten therapeutic intervention units. With regard to the aim of the research, we have formulated the following sub-goals: Sub-goals G1: monitor the specific use of the snoezelen multisensory room G2: investigate the meaning of staying in the snoezelen multisensory room G3: investigate the application of therapeutic methods when working in the snoezelen multisensory room G4: identify the benefits of using the snoezelen multisensory room G5: identify the disadvantages of using the snoezelen multisensory room G6: identify the most frequently used objects in the snoezelen multisensory room.

Based on the above data, we formulated the following research questions.

### **Research questions**

Q1: What was the use of the snoezelen multisensory room for mentally disabled children living in an orphanage? Q2: What was the significance of staying in the snoezelen multi-sensory room for mentally disabled children living in an orphanage? Q3: What therapeutic methods did the staff use when working in the multisensory snoezelen room with mentally disabled children living in the children's home? Q4: What are the advantages of using the snoezelen multisensory room for working with mentally disabled children living in an orphanage? Q5: What are the disadvantages of using the snoezelen multisensory room for working with mentally disabled children living in an orphanage? Q6: What objects did mentally disabled children most often use during their stay in the multisensory snoezelen room?

**Research methods: we used the content analysis of texts, the literary method, we implemented a non-quantitative method of content analysis.** When working with documents, we studied various sources: the Internet, monographs, brochures, children's personal documentation. It was primarily a social file of children. Furthermore, the child's individual educational plans, documents testifying to the fulfillment of the individual educational plan with a subsequent assessment of mastery of the planned scope. Documentation of the special pedagogic center, which contained a special pedagogic diagnosis. As part of the **observation**, we deliberately watched the children during their visits to the snoezelen multisensory room. It was about observation during activities with others or when accompanying us. We observed the choice of activities, children's behavior, their focus on objects, experience, structure of the visit itself, etc. **The interview** represents a mediated and highly interactive process of data acquisition. We used the semi-structured interview technique to obtain information about the possibilities of working in the snoezelen multi-sensory room. It is an exploratory method. We spoke with special educators, psychologists who work in the multi-sensory room of the snoezelen, but also with children who have visited or are visiting the snoezelen. We chose open and closed questions. In interviews with children, we found out how often and with whom they visit snoezelen, whether they look forward to staying in snoezelen, what they like about snoezelen. In interviews with workers, we were interested in what methods they choose and what they draw from. Within the application of games and activities, it was necessary to use a **natural experiment** and, based on knowledge and experience, choose ac-

tivities that were adequate to the individuality of each child. Based on the experiment and the subsequent result, it is possible to determine the preference of activities. Case study – Special-pedagogical casuistry is mainly a qualitative method, a method of description and analysis of a special-pedagogical problem and a process in which all available written materials are collected and analyzed, supplemented by interview, observation, self-research, analysis of the results of the individual's activity. Based on the children's documentation, we created case reports. In the case reports, we present information regarding the family and personal history of the children. We provide information from medical and psychiatric reports, focusing on the child's communication and behavior. At the end of the case study, we provide a description of the course of visits in the multisensory room, a sample of the visit and an evaluation of regular visits in the multisensory room. For reasons of personal data protection, we do not disclose children's names and dates of birth.

### **Characteristics of the research subjects**

We carried out the research in CCF – a children's home called Children's Small Town. It was founded in 1973, on the basis of the already functioning Children's Town in Fót, Hungary, as a social, educational and educational facility that was guided by a unified plan and tasks of pedagogical and economic development. From the beginning of the children's home, educators worked here – married couples who lived here together with their families. Currently, there are seven separate groups in this CCF – children's home, two specialized separate groups for children with mental disorders, one specialized separate group for children with medical disabilities and one separate group for minor mothers with children. Furthermore, two separate groups and two apartments are created for young adults preparing for independence. In Children's Town, substitute family care is provided to abandoned children or children who, for various reasons, cannot grow up in biological families.

### **Limits of investigation**

During the creation of the research project and the selection of the group respondents, we considered whether ten units in the snoezelen multisensory room would be sufficient to be able to describe its use. Furthermore, we asked ourselves whether it would be sufficient to describe two case studies of mentally disabled children living in a children's home who completed ten units in the multisensory snoezelen room. We drew knowledge primarily from practice at CCF, – in the children's home where the snoezelen is built.

In the children's home, substitute family care is also provided in the form of professional families. Seventeen professional parents are employed in the facility, who perform their work in the premises of their own house or apartment. There are three to four children per professional parent. 42 children are placed in professional families.

The multisensory room and Snoezelen are currently visited by mentally disabled children, children with multiple disabilities, learning, behavior and attention disorders, a total of 21 children. Trained psychologists, special educators, and social workers work in the multisensory snoezelen room. Each child completes ten units, after which they have a two-month break. If necessary, ten more units follow. Group activities are not implemented in snoezelen.

### **Case studies**

For the research, we selected two children who had completed ten therapeutic units in the snoezelen multisensory room. They are two boys between the ages of 7 and 13. All children attended snoezelen in the afternoon, each with a different worker (special pedagogue, psychologist, social worker). The visits were not conducted purely therapeutically, because the accompanying staffs are not therapists, but they were designed in such a way that they applied elements of therapeutic procedures together with special-pedagogical ones.

#### **Case study no. 1**

Boy, 13 years old, pupil of the 5th grade of a special elementary school, variant A. Intellect in the range of mild mental retardation. He comes from an incomplete family, his father took care of him, his mother is illiterate, he lives a wandering way of life. After the death of his father, he and his siblings are in institutional care. None of the relatives have contacted the boy. Personal history The boy comes from the first pregnancy. The birth was spontaneous, cephalad, without complications (2555 g/49 cm). Child neglected since birth. He experiences feelings of loss related to the death of his father and blaming himself for his death. He has problems making contacts, even if he would like to make himself known, he tries to impress people in superficial ways. He is excessively self-critical of himself, everyone, even the smallest failure, angers him. He behaves respectfully and carefully towards adults. He is hardworking, he will do the job consistently. He is strongly emotional, he likes to receive praise. Strong emotional bonds are formed between the boy and his siblings. In her free time, she draws, embroiders, likes to go to the dance club and takes care of the garden.

### **Case study no. 2**

Boy, 10 years old, student of the 2nd year of the Special Elementary School, variant C – autistic class. Intellect in the zone of moderate mental retardation. The boy has been in institutional care since he was little, as his mother gave him up before giving birth. None of his relatives report to him. It is a child that is adoptable. Personal history The boy comes from the fourth pregnancy, on time, by section. Birth weight (3100g/48 cm). A congenital developmental defect of the brain detected before birth – hydrocephalus. Child repeatedly hospitalized for respiratory problems. In 2007, he underwent an operation on his lower limbs – Achilles tendon. The child is monitored in regular pediatric (dg. developmental brain disorder, echolalia), pedopsychiatric (dg. organic psychosyndrome with autistic and hyperkinetic manifestations), orthopedic (dg. central quadriparesis with a predominance of the lower limbs) and ophthalmological care (dg. strabismus). The health condition requires regular use of medication, rehabilitation and constant supervision by an adult. Eyesight – the boy was diagnosed with strabismus by an ophthalmologist. The boy was diagnosed with a pervasive developmental disorder – childhood autism F 84.0 with respect to the etiological, organic basis. In the field of communication skills and verbal expression itself, a significant disturbance can be observed. Immediate and delayed echolalia can be seen in verbal expression (memorization of poems, texts, questions). The speech is partly inflexible. Understanding linked to real context.

### **Research conclusions and recommendations for working in a multisensory room**

Objective: To determine the use of the multisensory room snoezelen for mentally disabled children living in an orphanage. Research question: What was the use of the snoezelen method for mentally disabled children living in an orphanage? Snoezelen was built in the children's home based on the requirements arising from the needs of children and employees. Snoezelen is primarily visited by mentally disabled children, for whom it was primarily established. From the interviews with the workers, it emerged that every child looks forward to the snoezelen and likes to go there. During practice, they never had a child refuse a visit to the multi-sensory room. Children visited snoezelen in the afternoon, mostly after coming from school, always at the same day and time. The same person accompanied them at each meeting. Each child completed ten multisensory units, each lasting approximately 45 minutes. The goal resulted from the individual needs of the child.

Objective: To find out the importance of staying in the multisensory room *snoezelen* for mentally disabled children. Research question: What was the significance of staying in the multisensory *snoezelen* room for mentally disabled children? Children's home workers (psychologist, special pedagogue, social worker) assessed visits in the multi-sensory room as beneficial for each child. They evaluated the goal on an ongoing basis (at least once a month), handed it over to a specialized group where the child lives and the educator had the task of cooperating on the goals. After reaching ten units, the worker compiled specific recommendations for the educator's further work with the child. If necessary, the therapeutic experience was repeated again after two months. After completing ten units, a partial result of the work could be seen. Mentally disabled children in the environment of the multisensory room began to make progress. The girl who came in the beginning could not speak. Thanks to the work in the *snoezel* and various stimuli, after completing ten units, she said one sentence coherently. A boy whose enuresis persisted for a long time stopped urinating thanks to work in the *Snoezelen*. During his stay in the multisensory room, the autistic boy was able to relax for a long time, which was impossible for him until then. The most difficult thing when working with mentally disabled children in the multi-sensory *snoezelen* room was the preparation for each unit. In order for the work to be meaningful, they needed to set goals and at the same time maintain the continuity of the given units. It was difficult to adapt it to meet the demands and needs of a particular child. At the same time, the work required flexibility from the workers to reorient themselves to the current needs of the child.

Objective: To name the applied therapeutic methods when working in a multisensory room in a *snoezelen* with mentally disabled children living in an orphanage. Research question: What therapeutic methods did the staff use when working in the *snoezelen* multisensory room with mentally disabled children? The workers in the *snoezelen* multi-sensory room followed the principle "nothing is required, everything is allowed". They gave the children the opportunity to bring their own CDs with their favorite music. In their work with mentally disabled children, they preferred the following methods: observation, relaxation, verbal and sensory stimulation, play therapy, drama therapy, music therapy, art therapy, dance and movement therapy, psychodrama and imaginative approach. They mostly used professional literature and their personal experiences from therapeutic work. Furthermore, they drew on

the topics for the work from the training for work in the snoezelen and from the exchange of experiences with each other.

Objective: To find out the benefits of using the snoezelen method for mentally disabled children living in an orphanage. Research question: What are the advantages of using the snoezelen multisensory room for working with mentally disabled children living in an orphanage? The following advantages result from working in the snoezelen multisensory room with mentally disabled children: the mentally disabled experience a feeling of complete safety, they experience a sense of intimacy, they experience comfort that is not possible for them in specialized groups due to the equipment, they are in an environment that it is unusual for them, it is a place of complete trust and openness for them, they have a choice of several stimuli in a relatively small space, they experience an individual approach, they have the opportunity to develop fine and gross motor skills, they learn to relax, with the help of experts they stimulate the senses.

Objective: To find out the disadvantages of using the snoezelen method for mentally disabled children living in an orphanage. Research question: What are the disadvantages of using a multisensory snoezelen room for working with mentally disabled children living in an orphanage? The following disadvantages arise from working in the snoezelen multisensory room with mentally disabled children: the risk of a healthy worker being threatened by a child within the multisensory unit of the unit, a dark room for some children acts as darkness, bringing up memories from the past, especially for traumatized children, the worker must react promptly and be ready to refuse a certain pre-prepared activity for the child, short time span of the unit, a large number of children in the orphanage requiring therapeutic work.

Objective: To name the most frequently used objects by mentally disabled children during their stay in the multisensory snoezelen room. Research question: What objects did mentally disabled children most often use during their stay in the snoezelen multisensory room? During the therapeutic experience, the children most often tended to their favorite and pleasant objects, mainly: water bed, fibers on the bed, ball pool, swing in the shape of a leaf, water cylinder, loudspeaker.

### **Suggestions for working in a multisensory room**

It is advisable to apply all activities in the multisensory room non-violently, voluntarily, motivationally, let yourself be inspired by the child, move smoothly to the activities and leave in a positive mood. Based on

the research findings, we suggest that when working with mentally disabled children in the multisensory room, you should pay attention to the following activities: create a pleasant atmosphere for the children in the environment of the multisensory room, use aromatherapy while working, teach children to define their current mood, teach children to relax using proper breathing – deep inhalation and exhalation, teaching children to perceive the breath using play, learning to express their own feelings using it, teaching children to relax using imagination, teaching children to relax to music, teaching children to be aware of their own body, teaching children to perceive heart activity .

The conclusions of the investigation show that the use of the multi-sensory room *snoezelen* for mentally disabled children living in an orphanage makes sense, is beneficial and enriching for them.

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# DIAGNOSTIC ACTIVITY AS A PART OF THE COUNSELLING SYSTEM IN SLOVAKIA IN THE ENVIRONMENT OF COUNSELLING AND PREVENTION FACILITIES

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**Abstract.** This article focuses on describing the diagnostic process as a part of the counseling system in Slovakia. The counseling system in the Slovak Republic is undergoing changes in its organization and division of counseling competencies into five levels, which are provided at the level of schools and specialized counseling facilities. The article provides a detailed description of the diagnostic activity carried out on the third to fifth level of support by various specialized professionals. The final part of the article also discusses possible new trends and visions in the field of special education diagnostics carried out at the counseling facilities, which could bring further progress in this area.

**Key words:** the counseling system in Slovakia, diagnostic competencies of professional staff in counseling centers, special education diagnostics, psychological diagnostics, pedagogical diagnostics, speech and language diagnostics, child/student with special educational needs, counseling and prevention center, specialized counseling and prevention center

## **Introduction**

Currently, there is a transformation of the counseling system of the Ministry of Education of the Slovak Republic, which aims to adapt counseling to the needs of students. The changes affect the organizational structure and redistribution of counseling competencies into five levels provided at the level of schools and specialized counseling facilities. The amendment to the Education Act No. 415/2021 includes the transformation of the counseling system and introduces new standards for professional activities provided by counseling facilities, which are intended to ensure the same level of quality in individual counseling centers. Counseling activities are carried out at five levels, which include teachers, school support teams, counseling and prevention centers, and specialized counseling and prevention centers (Decree of the Ministry of Education of the Slovak Republic No. 24/2022 Coll. on Counseling and Prevention Facilities). The aim of professional activities, which include counseling, psychological, pedagogical, special education, speech therapy, therapeutic-pedagogical, and social-pedagogical activities, is to optimize the educational, developmental, psychological, social, and career

development of children from birth to completion of vocational training. Counseling services can be used by legal representatives of children and students, representatives of facilities, educational and professional staff.

**Support levels 3 and 4 (Counseling and Prevention System. Support levels 3 and 4, 2022) [1]**

The team of expert staff from the counseling and prevention center focuses on providing professional help for children/students who face obstacles in accessing education and who need assistance in fulfilling their educational potential, as well as those who exhibit symptoms of developmental risks such as cognitive, emotional, social, or career obstacles. The team also deals with children/students with special educational needs and helps ensure care and guidance for their legal representatives. These support levels are carried out and provided at the counseling and prevention center and serve to support the overall development of the child/student.

The team of expert staff from the counseling and prevention center provides various services at support level 3, including **basic, partial, or comprehensive diagnostics**, counseling, prevention, intervention, crisis intervention, therapy, rehabilitation, and reeducation. Their work also includes methodological guidance and supervision for educational and expert staff in schools and educational facilities, as well as participation in expert councils. They provide expert advice in working with the child/student, coordinate work between educational and expert staff and the school support team, and participate in case resolution in schools. They also help create conditions for cooperation between educational facilities and experts from other fields, such as doctors or social workers, and provide the expert side of expert councils in accordance with the standard. In addition, they carry out expert activities at schools in relation to the educational needs of children/students.

Professional employees at the 4th level of counseling and prevention centers provide comprehensive multidisciplinary care for children/students, which complements and builds upon the specialized work at lower levels. Children/students without prior specialized care at lower levels can also enter this level of care. If professional employees determine that collaboration with lower levels is necessary, they will ensure it. This care is also provided to children/students with special educational needs who require comprehensive multidisciplinary care or specialized professional care, even if they have already received specialized care at

lower levels. These children/students receive additional specialized care that focuses on adjusting the method, form, scope of education, school environment, approach of pedagogical employees, and professional care.

Within the 4th level of support, professional employees of counseling and prevention centers provide a wide range of specialized activities, including specialized diagnostic procedures, preventive and advisory activities, therapies, rehabilitation, and re-education. These activities are based on **comprehensive, differential, and specialized diagnostics**. In addition, they provide comprehensive multidisciplinary care for children/students and advice to their legal representatives. Professional employees also perform methodological and supervisory activities in connection with pedagogical or professional employees, school support teams, legal representatives, and facility representatives.

Children and students from birth to the end of vocational preparation, along with pedagogical and professional employees, school support teams, legal representatives, and facility representatives, form the target group within the 3rd and 4th level of support.

Support level 3 and 4 are provided at the counseling and prevention center, as well as in the child/student's school or family environment if necessary. Support is provided by professional staff from the counseling and prevention center, who may be psychologists, special education teachers, therapeutic pedagogues, social pedagogues, speech therapists, or career advisors.

Support level 3 focuses on diagnosis, re-education, rehabilitation, and stimulation programs that are applied by professional staff to a selected group of children/students with specific difficulties. **Basic, partial, and comprehensive diagnostics** are provided to better understand the needs and possibilities of the children/students and to establish recommendations for further procedures. Crisis intervention is provided in the event of an unexpected tragic event or traumatic experience when rapid assistance is needed. Therapeutic activities are provided to correct the difficulties of children/students that affect their educational process. Professional staff provide methodological activities to pedagogical and professional staff to support them in their work with the child/student. They also provide advice to the school's pedagogical and professional staff and the school's support team and ensure the implementation of professional consultations.

Support level 4 focuses on providing specialized professional activities. Comprehensive diagnostics at this level focus on identifying the most significant characteristics and traits of the diagnosed child/student, as well as their broader and narrower social environment. The aim of this diagnosis is to determine the best options for the child/student's education, stimulation, or therapy. This diagnosis includes conclusions from medical diagnosis, as well as psychological, social, educational, therapeutic pedagogical, speech therapy, and special educational diagnosis. Diagnosis can also be based on previous levels of support.

The results of the **comprehensive diagnosis** at the 4th level of support provide important information about the diagnosed child/student and their environment, allowing professionals to properly identify their needs and propose effective solutions to meet their emotional, social, and educational needs. The diagnostic conclusion is a comprehensive summary of the results of diagnostic tests and observations, which enables professionals to accurately identify the most significant characteristics and features of the child/student and their environment.

**Differential diagnosis and specialized diagnosis are important complements to comprehensive diagnosis** in the process of identifying the needs and individual characteristics of the child/student. Differential diagnosis allows for the differentiation between different possible diagnoses based on their symptoms and manifestations. This type of diagnosis allows for the exclusion or confirmation of existing assumptions about the diagnosis and facilitates decision-making regarding the most appropriate therapeutic measures for the individual.

**Specialized diagnostics** focus on specific areas of a child/student's needs and development that require special attention and expert care. This type of diagnosis involves specialized tests, examinations, and methods that are aimed at certain areas such as speech therapy, special education, or psychology. Specialized diagnostics allow for more precise information about specific areas of a child/student's development and help in creating personalized intervention plans.

Together, **comprehensive, differential, and specialized diagnostics** form an important part of the process of determining a child/student's needs and creating a personalized approach to their education, stimulation, and therapy. Based on the diagnostic conclusion, professionals provide recommendations for the wider and narrower social environment of the child/student and their education, stimulation, or therapy. These recommendations are focused on adjusting and setting the educa-

tional process, applying professional activities of educational and professional staff in schools, as well as setting the application of professional activities of professional staff in counseling and prevention centers.

In addition, at the 4th level of support, professional staff are able to carry out re-education of difficulties arising from health disadvantages. This includes the application of indicated preventive and stimulative programs with selected groups of children/students with problematic manifestations, such as speech therapy, special education, or psychological programs. Professionals also provide individual, group, and family therapy.

In the counseling and prevention center, advice is also provided to increase the competencies of legal representatives, educational and professional staff, and school support teams who are involved in the education and upbringing of the child/student. The professional staff member also collaborates at the interdepartmental level with health-care facilities, doctors, courts, and police.

### **Competencies of psychologists in diagnostic activities**

Psychodiagnostics is a process that focuses on many areas in order to gain a comprehensive understanding of a child/student and their needs. These areas include examination of general cognitive abilities, psychomotor and neuromotor development, executive functions, school readiness, specific skills, personality and socio-emotional development, the child/student's relationship with others, and career guidance.

Within general cognitive abilities, it is determined how well the child/student can adapt to new situations, solve problems, remember information, and other learning-related skills. Psychomotor and neuromotor development is assessed through tests that evaluate motor skills and movement coordination. Executive functions relate to the ability to control behavior, make decisions, plan, and monitor one's own behavior.

School readiness examines how well the child/student can adapt to the learning environment and meet the requirements of the educational process. Specific skills include reading, writing, and math, which are key to successful education. Psychodiagnostics also focuses on personality and socio-emotional development, which is evaluated through psychological tests and behavior observations.

The relationship between the child/student and their surroundings, including family and school, is also an important area that is examined in psychodiagnostics. Career guidance focuses on determining a diag-

nostic conclusion and providing recommendations for further interventions, support, and special educational procedures for the needs of the child/student, their legal representatives, and the school or other institutions. All of these areas are important for understanding the needs and development of the child/student, and provide detailed information about their strengths and weaknesses, which allows professional staff in schools and educational counseling centers to create an individualized education plan that best meets the needs of the child/student.

Psychodiagnostics also helps to identify and address possible disorders and problems in the psychological and social development of the child/student, thereby contributing to improving their overall health and quality of life.

### **The competencies of a special educator in diagnostic activities**

Special education diagnosis is a key part of the process of identifying difficulties and partial weaknesses in a child/student. This process includes an initial screening of school readiness, which assesses speech, motor skills, graphomotor skills, laterality, partial function weaknesses, and pre-numerical/mathematical concepts. In addition, social skills, play, self-care abilities, and difficulties related to learning and educational processes, as well as specific developmental disorders and pervasive developmental disorders, are also studied. The child/student's career development is also taken into account. The goal of diagnosis is to identify the special educational needs of the child/student that arise from their health impairment/disadvantage and to establish recommendations for further interventions, support, and special educational procedures, as well as to apply compensatory aids necessary for the optimal development of the child/student in the educational process. The results of the diagnosis are useful for legal representatives and professional and educational staff of the relevant school, as well as for other institutions involved in the educational process.

### **Competencies of a therapeutic educator in diagnostic activities**

Diagnostic methods are focused on qualitative analysis and are carried out through natural activities, in free play and interaction with the child/student. They include diagnostics of neuromotor maturity, complex psychosocial and emotional development, sensory functions and their coordination, functional ability and participation, identification of strengths and barriers in the context of the child/student's development (sensory, motor, play, drawing, interaction, behavior, learning). In addition, analyses of social interactions, diagnostics of self-organization

of the child/student's behavior (motor planning, motivation, concentration, emotional regulation), and creativity and spontaneity (use of projective and creative techniques) are included.

#### **Competencies of a speech therapist in diagnostic activities**

Speech therapy diagnosis is intended for children/students who do not achieve an appropriate level of verbal communication relative to their age and when there is suspicion of a disrupted communication ability. This diagnosis evaluates individual language levels and areas of communication, including verbal, non-verbal, graphic, grammatical aspects, as well as fluency, speech production, and pronunciation. It is focused on differentiating a disrupted communication ability from other health issues and identifying disorders in specific areas/functions of speech.

#### **Competencies of a social pedagogue in diagnostic activities**

The diagnostic process involves obtaining anamnestic data on personal, family, and school environments to identify social aspects of personality development, deviations in social expressions and behavior of the child/student, with a focus on relationships and the school environment. This diagnosis is carried out with the aim of optimizing relationships in the classroom and improving the social development of the child/student with risky behavior.

#### **Competencies of a career advisor in diagnostic activities**

Diagnostic procedures in the field of career development and skills development focus on identifying individuals' strengths and potential in career development. The aim is to determine their academic performance, motivation, interests, values, motor skills, creativity, communication skills, social skills and competencies, their position in the group, work autonomy, and the degree of function loss due to health disadvantages. Diagnostics use various methods, such as observation, SWOT analysis, analysis of schoolwork and creations, portfolio, self-evaluation scales, and questionnaires (such as RIASEC or career anchors), interviews about career and personality construction, decision-making, and others. The goal of these procedures is to optimize individuals' career development and skills development and help them find the most suitable place in the work environment.

#### **Support level 5 (Counseling and Prevention System. Support level 5, 2022) [2]**

Support level 5 focuses on providing professional services to children/students with disabilities who require adjustments in their learn-

ing methods, school environment, and support personnel, such as teachers, staff, and the school support team. This support level is provided in a ***specialized counseling and prevention center*** and focuses either on a specific type of disability from birth to the end of vocational preparation or on comprehensive professional services related to the high-risk development of children up to the age of five.

At support level 5, specialized professional activities are available that focus on providing comprehensive assistance for children/students with disabilities. These include complex and ***highly specialized differential diagnosis***, therapy, rehabilitation, compensatory and re-education aids, and professional support for teachers, staff, legal representatives, and facilities. These activities are fully tailored to the child/student's health status and socio-cultural environment and are provided in a specialized counseling and prevention center. The center provides multidisciplinary professional care for children/students.

***Comprehensive diagnosis*** focuses on a detailed examination of a person with a disability in order to identify all factors related to the particular disability. This process may involve various types of tests, examinations, and observations that allow for a better understanding of the person's health status.

***Highly specialized differential diagnosis*** is concerned with identifying the causes of a person's disability or illness, excluding other possible causes and comparing symptoms and manifestations. This process is usually performed in cases where the diagnosis is unclear or when there are symptoms that may be caused by multiple conditions.

Support level 5 is focused on providing support to children with disabilities, including those with visual, auditory, mental, physical disabilities, autism/spectrum disorders, disrupted communication abilities, and multiple disabilities. This support is also intended for legal guardians, educational and professional staff, and school support teams in schools where these children are educated. If a specialized counseling and prevention center is focused on professional activities for children up to the age of five, it also provides professional support to children with disabilities or children at risk of developing disabilities who have not yet been diagnosed.

Various forms of support are available for children with disabilities or those at risk of developing disabilities without a diagnosed condition at a specialized counseling and prevention center. These forms of support can be provided on an outpatient or field basis and may be one-

time or repeated. In addition to the specialized center, support may also be provided in various facilities such as kindergartens, primary schools, secondary schools, social service homes, centers for children and families, or directly in the child's family.

The specialized counseling and prevention center employs professionals from various fields, such as special education teachers, psychologists, social pedagogues, therapeutic pedagogues, speech therapists, and career advisors. These professionals focus on providing individual assistance and support for children with various disabilities or developmental risks.

Support level 5 focuses on **comprehensive diagnosis** and expert support for children with disabilities and children at risk of developmental delays. The goal is to minimize the impact of the disability on the child's development and education, and to improve their quality of life. It is provided through a multidisciplinary approach and includes training in the use of compensatory aids and counseling for legal guardians. Prevention is an important part of support and includes preventive programs to prevent deterioration of the physical and mental health of the child. Expert activities at this level include assessing developmental level, designing and supporting the implementation of individual stimulation programs, lending specialized aids, and supporting the family in caring for the child. Psychosocial support for legal guardians and assistance in accessing available services are also part of the support.

#### **The competencies of a psychologist in diagnostic activities**

**Comprehensive psychodiagnostics aims** to identify individual characteristics of the psychological development of a child/student using standard psychodiagnostic methods. It focuses on specific cognitive abilities, intelligence, personality, socio-emotional development, and social-communicative skills. Part of the psychodiagnostic assessment is a diagnostic interview that seeks to determine the family and personal history of the child/student (including socio-economic factors and health status - course of illness) and identify protective and risk factors in the child/student's life history. An important part of the psychological assessment is also observing the child/student's spontaneous and elicited behavior during play, communication, and social interaction. Analysis of acquired anamnestic, diagnostic, and other data from medical and educational records and their interpretation form the basis for further specialized care provided to children/students in a specialized counseling and prevention center.

### **Competencies of a special educator in diagnostic activities**

**Comprehensive diagnostic** activities aimed at children/students with disabilities utilize special educational methods and procedures designed to identify their special educational needs. This activity is performed in relation to diagnostics from other disciplines and is targeted at identifying children/students at risk of academic failure or problems in personality and social development.

The special educator who performs this activity gathers data about the child/student and subsequently analyzes the obtained data. From this data, they evaluate the child/student's special educational needs and determine the best methods for meeting those needs. In this way, it is ensured that children/students with disabilities receive educational programs that are tailored to their individual needs.

If the special educator identifies any special educational needs that may be unmet, they try to find a suitable solution and apply it in practice. The goal is to ensure that children/students with disabilities have equal chances of success in school as their healthy peers and to provide them with an equal chance to fully participate in society.

### **Competencies of a speech therapist in diagnostic activity**

A speech therapist is responsible for carrying out comprehensive speech and language diagnostic assessments, which focus on identifying various forms of communication disorders in children/students. In addition to common problems such as dyslalia and dysphasia, the diagnosis also deals with severe forms of communication disorders in children/students with intellectual and multiple disabilities. The speech therapist is able to provide diagnosis for children/students who do not reach the level of verbal communication and therefore have difficulties in understanding. The speech therapist identifies the causes of these problems, gathers necessary information about the child/student, and based on the obtained data evaluates the disrupted communication ability and suggests appropriate therapeutic procedures that could help improve the child/student's communication.

### **Competencies of a therapeutic educator in diagnostic activities**

A therapeutic educator aims to identify the difficulties a child/student with a health impairment may have. They examine various information about the child/student, such as their behavior, motor skills, sensory development, and communication. Using this information, they determine a diagnostic conclusion and look for ways to help the child/student. With children with severe disabilities and pervasive de-

developmental disorders, they also focus on other areas such as play skills, social behavior, and sensory perception. The therapeutic educator aims to identify the child's/student's problems and weaknesses, but also their strengths and coping resources. They regularly adjust their conclusions and help solve the child's/student's problems.

### **Competencies of a social pedagogue in diagnostic activities**

A social pedagogue deals with the diagnosis of social factors related to the upbringing and development of a person with a disability. Their interest is in the relationships and activities of the child/student with a disability within the socio-educational environment. They also examine deviations in the social expressions and behavior of the person with a disability. The social pedagogue identifies the individual characteristics of the child/student with a disability through socio-pedagogical means, analyzes their socio-cultural environment, and the specifics of their social development and behavior.

### **Competencies of a career counselor in diagnostic activities**

Within comprehensive diagnosis, a career counselor focuses on the potential of a student with a disability in terms of career development and employment. Their goal is to determine the level of career development and skills necessary for managing one's career. In this process, the counselor also assesses the level of cognitive functions, manual skills, life skills, motivation, and values of the student with a disability.

In the field of special education counseling and diagnostic support at support levels 3 to 5, we observe some **current trends and discussions** that may indicate what changes could occur in these areas in the near future [3, 4]:

- Improving accessibility and availability of counseling services for children and youth. Many children and young people still do not have access to the necessary support and treatment because they are not available in their region or are too expensive.
- Increasing the quality of counseling services and the expertise of counselors. This may also include increasing the number of specialized counselors who have experience with specific problems, such as certain types of disabilities.
- Introducing new technologies and digital solutions that will enable better monitoring and coordination of counseling services and provide new opportunities for online consultations and interventions.
- Greater collaboration and coordination among different facilities and providers of counseling services to ensure a comprehensive and integrated solution to the problems of children and young people.

- Introducing new methods and approaches to counseling and diagnostic activities that will take into account current trends and research in the fields of psychology, pedagogy, social work, and similar areas.

Special education diagnostics is likely to move towards a more individualized approach to students with special educational needs in the future. This means that more sophisticated diagnostic tools will be used to enable more precise identification of individual students' needs and adaptation of the educational process to their individual needs.

In addition, there is an expected emphasis on early intervention, meaning the earliest possible identification and addressing of the educational needs of individual children/students. This could mean that special education diagnostics will be part of the educational process from the very beginning, and that new tools will be developed for faster and more accurate identification of educational needs.

Another direction that special education diagnostics can take is the introduction of new technologies and methods. These technologies could help special educators and diagnosticians better understand the needs of individual students and create a more effective and adaptable educational environment.

### **Conclusion**

In conclusion, it can be stated that the diagnostic process represents an important part of the counseling system in Slovakia and a significant tool for adapting counseling to the needs of students. The changes currently being implemented in the organization and distribution of counseling competencies may contribute to more effective provision of professional assistance and better utilization of available resources. The article highlights the need for constant development and improvement of the diagnostic process to adapt as efficiently as possible to the changing needs of children and their families. At the same time, new trends and visions are being discussed that could contribute to even greater progress in the field of special education diagnostics and support for children with special educational needs in the future.

### **Summary**

The article focuses on the diagnostic process as a part of the counseling system in Slovakia, specifically on the third to fifth level of support. It describes changes in the organization and distribution of counseling competencies and emphasizes the need for continuous development and improvement of the diagnostic process. The article discusses new trends and visions that could contribute to even greater progress in the

field of special education diagnostics and providing support for children with special educational needs in the future.

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# THE CARE FOR ADULTS WITH MENTAL DISABILITIES AS SPECIAL PEDAGOGICAL PROBLEM

*Andrea Prečuchová Štefanovičová*

**Abstract.** The paper deals with the issue of current approaches to adults with mental disabilities. This is a specific group of individuals who require an individual and comprehensive approach. In order to improve their quality of life, it is necessary to look for new opportunities for their lifelong development.

**Key words:** adults with mental disability, socialization, comprehensive rehabilitation, development and education of adults with mental disability

## **Introduction**

At present, there is an increasing emphasis on improving the care of adults with mental disabilities. The issue of adult mentally handicapped is all the more current now that this population is aging and while in the past the mentally handicapped lived to a young age, today it is different. Especially thanks to better medical and comprehensive care, their age is gradually increasing. It is no longer the case that an individual with a mental disability lives to be 50, 60 or 70 years old, in some cases even more. This group of individuals therefore requires our attention and a special approach.

## **Characteristics of adults with mental disabilities**

The adulthood of individuals with mental disabilities is characterized by certain specificities that are important to consider and accept. According to Jakabčič [3], adulthood is generally characterized by the following features:

- realistic plans for the future that match his abilities, interests and inclinations,
- purposefully expanding orientation in the environment in which he lives and works,
- performing productive work,
- ability to work without conflicts, fluctuations,
- ability to receive advice and suggestions,
- ability to act and act against authorities,
- ability to manage independently,
- ability to live independently,
- ability to spend your free time alone and with friends,
- ability to interact and communicate with the opposite sex without any problems and shyness,

- build long-term relationships,
- readiness to start one's own family, to take care of its well-being,
- take care of the satisfaction of friends and society.

Maturity is represented by the following types of maturity:

- social (one is economically independent),
- emotional (one is not dependent on parents),
- biological (physical maturity, ability to start a family),
- mental (ability to take responsibility)
- psychological (stability of expressions, forms of behavior, thinking),
- sociological (accepting a social role, satisfying one's individual needs),
- legal (acquisition of rights and obligations).

In most cases, adult individuals with mental disabilities do not achieve the stated goals, resp. maturity. Nevertheless, they need to be considered as adults who have reached adulthood and are able to move closer to or achieve these goals.

In the following section, we will present the basic characteristics of adult individuals with mental disabilities, with emphasis on the socialization of these individuals, which is closely related to the issue of independence and quality of life.

Adult individuals with mental disabilities can be defined in accordance with Švarcová [20] so that every citizen with mental disabilities is a subject with characteristic personal traits. In most of them, to a greater or lesser extent, common features are demonstrated, their individual modification depends on the depth, extent of mental retardation and the degree to which the individual mental functions are affected.

Most often we can characterize the mentally handicapped according to degrees. In the case of adults with mental disabilities, we present the following division:

*Mental retardation borderline (71 - 85 IQ)*

It forms the boundary between mental retardation and average intelligence. We cannot classify such individuals in the category of mental retardation, even in the worst case, but even in the best case they do not reach the average mental level.

Adults in the borderline of mental retardation are usually very well socialized and able to integrate into normal life in society without major restrictions.

*Mild mental retardation (IQ 50 - 69)*

In adults, the mental age is 9-12 years. There is the least amount of damage. Developmental delays may not be noticeable, but they are obvi-

ous compared to healthy individuals of the same age - motor, neuropsychic development, mental processes and speech are quantitatively and qualitatively different from the norm. Individuals with mild disabilities are able to use speech, keep the conversation going and have a conversation. They are usually able to be independent in personal care, they manage self-service (hygiene, dressing). Many adults are able to work, maintain good social relationships and be beneficial to society.

*Moderate mental retardation (IQ 35 - 49)*

In adults, it is represented by a mental age of 6-9 years. Such a disability means disruption and limitation in all components of the complex personality of the individual. Motor and sensory development lags behind the norm. Associated physical, sensory and other disabilities are common. Most are able to gain some degree of independence. They are mostly mobile, active, have the ability to make contacts and communication. A citizen with this degree of disability is able to perform work under professional supervision.

*Severe mental retardation (IQ 20 - 34)*

In adults, it is characterized by a mental age of 3-6 years. It manifests itself in disruption in all areas - communication, motor skills, sensors, self-service, cognition, social adaptation. The shortcomings are manifested mainly in gross and fine motor skills and require constant care.

*Deep mental retardation (IQ below 20)*

In adults, the age is less than 3 years. This is the most severe degree of mental retardation. Individuals affected in this way are often immobile. For others, there is a noticeable lag in motor skills, manifested in delays and disturbances of sitting, standing, locomotor movements. They also reach a low level in the field of social adaptation, self-service and cognition. They use only vocal expressions of instinctive and effective reactions. All their lives they depend on the help and care of others [1, 20, 23].

**Socialization of adults with mental disabilities**

Socialization is intricately characterized by social psychologists [4, p. 134] as „a set of processes of mutual interaction between society and the individual, in which society influences the individual so as to create the inner psychological preconditions necessary for participation in society. both as a member of the company and as a relatively independent person able to manage and be responsible for its actions; as a result, the individual gradually changes from a newborn's biological organism to an adult cultural person who is integrated into society in some way and

who then gradually changes this way of integrating into society in adulthood and old age, and constantly changes in accordance with it.“

According to the Defectological Dictionary (1984, p. 367 - 368), we can understand socialization in the socio - psychological sense, as „the involvement of the individual in the human community in terms of work (education), social and subjective (in terms of self - fulfillment and self - satisfaction). Socialization is completed by passive or active participation in the cultural life of society; is conditioned by sociability. The degree of socialization achieved by people with disabilities depends on whether and to what extent the defectivity has been overcome.“

Depending on the severity of the disability and their ability, an adult with a mental disability can integrate into social and working life to achieve one of the following four possible degrees of socialization [6]:

1. Integration - complete, total fusion of the disabled with society, both in education, training and work and social use. Attributes of integration also include autonomy and independence - this is difficult to achieve for the mentally handicapped. At best, they will differ in education, the limited range of professions for which they can prepare and pursue them with altered working ability. In some ways, however, the mentally handicapped in the upper part of the mental retardation and, of course, the population in the upper part of the mental retardation border zone can approach and sometimes even out the mentally intact peers through special education.
2. Adaptation - adaptation of the mentally handicapped to the normal social environment, which is possible only under certain conditions, certain considerations of individual possibilities, abilities, characteristics and needs of this individual. The affected person is independent, but only under certain conditions, under certain circumstances and already mentioned considerations. These include people with mild mental retardation.
3. Utility - social usability. Work and social employment of mentally handicapped people is possible under the supervision and guidance of mentally intact people. Thus, the affected person is not completely independent, he is basically permanently dependent on others. This includes most of the moderately mentally handicapped and part of the lower band of mental retardation.
4. Inferiority - social inapplicability. This includes completely independent, fully dependent persons, mostly from the zone of severe

and deep mental retardation or from the lower zone of moderate mental retardation. They are mostly unable or only to a limited extent able to perform simple manual work.

Currently, the term “transition” is used, by which we mean the whole process of preparation, orientation and provision of all needs for adults with mental disabilities. To this end, a network of experts is created who provide all specialized services. Thus, the bridge of the transition from childhood to adulthood is the creation of a whole range of standard procedures, which should result in a more independent life of people in adulthood [19].

The socialization trainings for adults with mental disabilities included the development of not only positive interpersonal relationships (parents, peers), but also the acquisition of appropriate behavior in various social situations. Such adaptive skills training generally falls into three categories:

- socialization,
- personal appearance
- use of free time.

The process of socialization and the achievement of its certain degree are the result of multifactorial, professional comprehensive rehabilitation.

### **Comprehensive rehabilitation as a tool for humanization and personality development of adults with mental disabilities**

According to Vašek [25, p. 109], comprehensive rehabilitation of individuals with mental disabilities is “a set of activities of a multidisciplinary nature aimed at preventing, mitigating or eliminating the adverse consequences of disability or disruption, especially in favor of optimal socialization.” Comprehensive rehabilitation is mutually coordinated and follow-up, in a planned sequence or simultaneously carried out a series of activities of all participating experts in the interest of socialization of an individual with a mental disability.

As stated by Vančová [23], comprehensive rehabilitation is a process in which a set of activities and measures is implemented leading to the socialization of disabled individuals and ultimately to their integration and inclusion in the community and intact society in a broader sense.

Comprehensive rehabilitation activities should be characterized by an individual approach and specific address, as well as flexibility and moment of motivation. They should support the transition from segregation to integration and inclusion, from passive reception to active

existence, participation, independence and self-determination of individuals with disabilities and disabilities [24].

The components of comprehensive rehabilitation are, as we have already mentioned:

- Educational rehabilitation
- Medical rehabilitation
- Work rehabilitation
- Social rehabilitation

Vašek [25, p. 110] characterizes the components of complex rehabilitation as follows:

„Medical rehabilitation consists in the application of treatment methods in order to achieve the state of relative health of the individual, mitigate the consequences of disability, also in the prevention of disabilities and disturbances.“

„Social rehabilitation is a multidisciplinary, coordinated action (direct or indirect) on an individual and his narrower environment in order to achieve the highest possible level of socialization, i. coping with disability, living a relatively quality life, creating suitable external and internal conditions and thus achieving relatively personal satisfaction [25, p. 110].“

„Work rehabilitation is a set of activities (work movements, work tasks, work operations) in order to use work as a means of self-realization of the affected and disturbed individual, creating positive habits, skills and abilities [25, p. 110 – 111].“

„Educational rehabilitation is implemented by achieving positive changes in the upbringing and education of the disabled person, by applying special methods of education, reeducation, stimulation, correction and more [25, p. 111].“

As Vančová [23, p. 182] states, „educational (re)habilitation of the mentally handicapped is a discipline in the system, which deals with theoretical justification and practical implementation of intentions, content and process of direct and indirect intentional special pedagogical action on people with mental disabilities. and their environment in order to achieve positive changes in the process of their socialization.“

### **Institutional care for adults with mental disabilities**

At present, in the context of the transformation of institutional care for the mentally handicapped, it is important that these changes are in the interests of the individual and enable him to live the best possible life.

Although there are no conditions for adult education in social services homes, it is extremely important that these individuals also receive lifelong learning. At present, there are several educational opportunities through hobby groups and the like. According to Brnová [7], lifelong learning for the mentally handicapped means:

- Be integrated into society.
- Be independent and independent.
- To be able to present oneself and to be able to have control over every day, over one's future.
- In a word, to be able, justified.
- Lifelong learning is:
  - The process towards the citizen.
  - The process towards equality.
  - The process of developing oneself.

Šustrová [19] states that young people with mental disabilities, who are now 20 to 25 years old, had the opportunity to support and receive appropriate education thanks to better educational programs, as well as thanks to the help of many integrative offers and could develop into more or less independent competent people. However, older people with a mental disability over the age of 30 did not have such good educational conditions during their childhood and youth. It is becoming a reality that the mentally handicapped population is aging, due to the fact that they are living to an older age than in the past. This is mainly due to better comprehensive care for these individuals.

Given these facts, we must pay our attention to them, because, as Šustrová [19, p. 82] and we agree with her, „people with mental disabilities can continue to develop in adulthood, so a concept must be prepared for them as well. lifelong learning. This includes, for example, an adequate offer of leisure activities.“

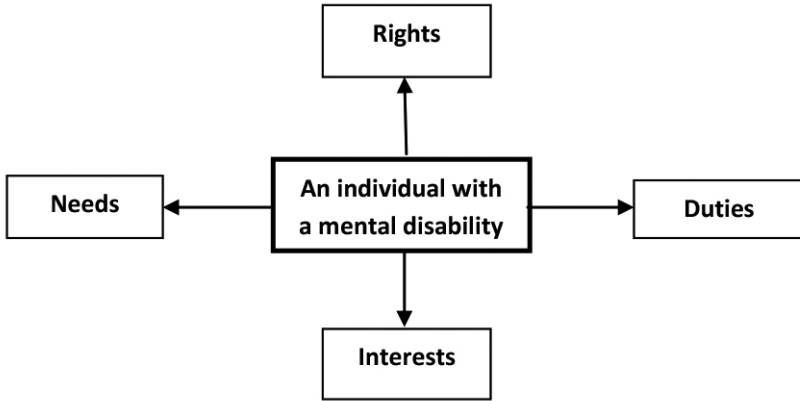
### **Needs, rights, obligations and interests of adults with mental disabilities**

In relation to the quality of life of adults with mental disabilities, it is important to respect them:

- needs,
- rights,
- duties,
- interests.

We assume that the goal of our work with the mentally handicapped is to enable them to live as full a life as possible. That is why it is ex-

remely important for the disabled themselves to be involved in achieving this goal. In addition to saturating basic needs, respecting rights, promoting and fulfilling interests, an adult with a mental disability must feel responsible and have reasonable responsibilities to fulfill in order to feel like a full member of society.

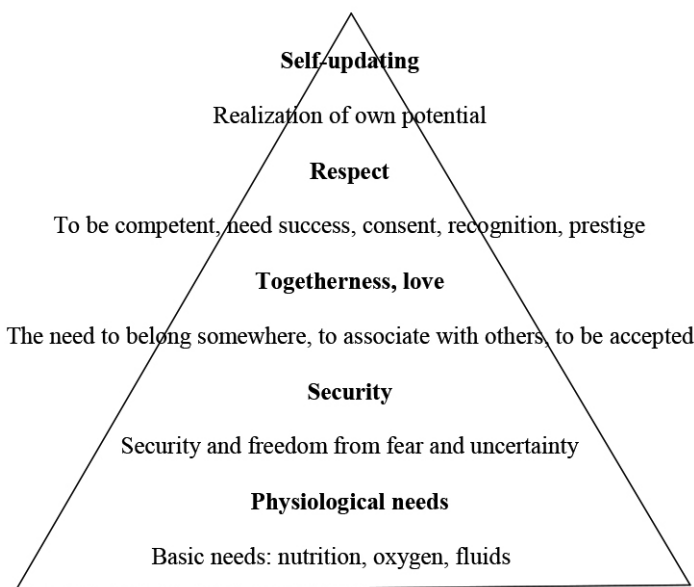


*Figure1 Components of the quality of life of an individual with a mental disability in institutional care*

*Source: own*

Needs in general are one of the motives, the driving forces behind our behavior and activities.

It is known as the so-called Maslow's hierarchy of needs, which is based on the assumption of the existence of a hierarchy of needs from biological to more complex motives, which become important only when basic needs are met. The highest motive can be fulfilled only after all other needs are satisfied [16].



*Figure 2 Maslow's hierarchy of needs*

*Source: Pružinská, 2005*

These needs are inherent in all individuals, regardless of whether they are intact or disabled.

Kvapilík and Černá [9] state that compliance with the following principles in the care of them helps to meet the specific needs of individuals with mental disabilities:

- participation and partnership (participation of people with disabilities or their parents in all activities that concern them);
- integration (full involvement of the disabled in society);
- personalization (meeting individual needs);
- decentralization (providing as many different services as possible according to the needs of people affected in different localities);
- interpersonal coordination (management, directing the cooperation of various departments, bodies and organizations working for the disabled).

Individuals with mental disabilities have the same rights as intact. However, these rights are not always respected and respected. Vančová

[24] states that the rights of disabled and disadvantaged people have been declared in several international documents, the most important of which are:

- Universal Declaration of Human Rights (UN, 1948)
- Declaration of the Rights of the Child (UN 1956)
- European Social Charter (1965)
- Standard rules for creating equal opportunities for people with disabilities (UN, 1993)
- Helsinki Declaration on Equality and Services for People with Mental Disabilities (1996)
- Basic documents of states, in our country the Constitution of the SR

The basic premise is the Universal Declaration of Human Rights, which was proclaimed as “a common goal for all nations and all states, so that every individual and every organ of society, always with this declaration, strives to increase respect for these rights and freedoms through teaching and education. and to ensure, through successive national and international measures, their general and effective recognition and preservation both among the peoples of the Member States themselves and among the peoples of the territories under their jurisdiction.

On 1 December 2006, the UN General Assembly adopted the Convention on the Rights of Persons with Disabilities and its Optional Protocol (“the Convention”). The President of the Slovak Republic signed the Convention and the Optional Protocol on 26 September 2007. The Slovak Republic has hereby expressed its willingness to become a party to the Convention in the future and to ratify this Convention. The purpose of the Convention is “to promote, protect and safeguard the full and equal enjoyment of all human rights and fundamental freedoms by all persons with disabilities and to promote respect for their dignity.” existing barriers that prevent people with disabilities, whether physical, mental or mental, from participating in a full life. Simultaneously with the text of the Convention, the Optional Protocol was adopted, which regulates the possibility of filing complaints and the procedure for investigating violations of the state’s obligations arising from the Convention (UN Convention on the Rights of Persons with Disabilities, 2009, p. 3-5).

Duty as a component of the quality of life of individuals with mental disabilities must be understood as an activity, an activity that enables the disabled person to make real use of their abilities for the benefit of society by taking them for granted. Every intact member of the company is confronted with the daily duties they have to fulfill. If we want an

individual with a mental disability to live the most normal and quality life possible, he or she should be involved in the functioning of society (of course, given the severity of the disability).

According to Šprunk [18], the term obligation has two meanings:

1. indicates what is mandatory, i. conduct, an act which has the property of “being obligated”, resp. is subject to duty.
2. indicates a property that makes something mandatory.

According to Pružinská [16, p. 68], interests can be characterized as a tendency to selective activity. According to the author, we can divide the interests into three groups:

- interests in ideas (ideas, scientific, literary, aesthetic perception and expression);
  - interests in people (contact - meeting people for some profit, social - interest in people as such);
  - interests in things - collecting and sorting material, handling things, handling animals, plants).
- In the practical assessment of human interests, it is important to find out:
- breadth (broad - narrow interests);
  - depth (shallow - deep);
  - durability (permanent - transient);
  - activity (active - passive);
  - isolation - connection with other aspects of personality (with abilities and temperament) [16, p. 69].

Despite their disability, individuals with a mental disability have a right to their interests and their realization. It often happens that they are interested in activities that are not suitable for them due to the type or degree of disability. Here, the role of parents, social therapists, personal assistants or, in the case of children, teachers and educators, is important to help a person with a mental disability to choose an appropriate activity that will enable him or her to adequately fulfill his or her interests.

### **Individual personality development program**

Ivanická, Zacharová and Zjavková [8] present the following basic steps in the process of creating an individual plan:

1. Phase of skills and skills mapping - obtaining information about the client in all areas of his life, eg: the level of knowledge and intellectual abilities of the client, speech and communication of the client, gross and fine motor skills, sociability, self-service, interests.

2. Goal definition phase - a purposeful process that determines the path we want to achieve.
3. The phase of choosing appropriate methods - this is the choice of ways in which the client should achieve the set goals as soon as possible and as adequately as possible.
4. Development of a precise plan of activities - this section sets out and characterizes the activities in which the client will participate and their time schedule.
5. Evaluation of the success of the plan and the effectiveness of the chosen methods, which also goes into the first phase of mapping skills and abilities to define other goals - evaluation, which should take place at regular intervals, allows us to continuously evaluate success, respectively. failure of the chosen method, lack of information, wrong plan of activities, chosen unsuitable environment, unsuitable worker, training time, etc. reveals new findings, draws attention to situations that we did not notice or did not realize in previous parts of the process.

One of the starting points for the creation of individual programs for the development of the personality of adult individuals with mental disabilities is the global trend, which focuses on constantly improving the quality of life of these individuals.

Finally, we present some aspects of lifelong learning for adults with mental disabilities from the perspective of Slovak experts [7]:

1. Current state

- There is no education system for adults with mental disabilities.
- Lifelong learning for adults with mental disabilities takes the form of time-limited project activities. There is a lack of a comprehensive and long-term solution to the issue of continuing education for adults with mental disabilities.
- Apart from the inhabitants of Bratislava, people with mental disabilities living in a home environment have almost no opportunity for further education.
- The vocational training of people with mental disabilities does not respect their needs as well as the market offer. Young people are unable to find employment, they need retraining or supplementing their social skills education.

2. Causes

- Lack of funding to support lifelong learning.
- Lack of qualified professionals able to create educational pro-

grams for adults with mental disabilities. University education departments do not satisfactorily and sufficiently prepare their graduates for work with adults with mental disabilities.

- There is no legislative framework for the lifelong learning of people with mental disabilities.
  - Ignorance of the educational needs of people with mental disabilities.
  - Low level of awareness of educational potentials and the interest of people with mental disabilities in education.
  - The absence of so-called tertiary education of adults with mental disabilities.
3. Suggestions
- To cover the education of adults with mental disabilities with a single organizational unit, which would be established in any part of the Slovak Republic.
  - Create a network of these training units.
  - Create educational programs for people with mental disabilities. From this point it follows:
    - a. Mapping of educational needs in the region.
    - b. Creating educational programs that will respect these needs.
    - c. Dissemination of good practice in existing educational programs.
  - Identify specific competencies and responsibilities for educating people with mental disabilities.

### **Conclusion**

The issue of comprehensive rehabilitation and care for adults with mental disabilities is extremely broad and should be a separate research and scientific area, which can improve the quality of life of these individuals and enable them to socialize and live a relatively full life as much as possible. On the other hand, it is necessary to humanize the whole society, which will create suitable conditions for the quality of life of adults with mental disabilities. The paper presents partial outputs of the project KEGA 027UK-4/2023 New approaches in the sexual education of youth with mental disabilities in the context of their inclusion in an intact society.

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# CONTEMPORARY ALGORITHM FOR DESIGNING EDUCATION SETTING FOR CHILDREN WITH SPECIAL SPEECH AND LANGUAGE NEEDS IN UKRAINE

*Eliana Danilavichiutė*

**Abstract.** The article is dedicated to the strategy to meet special speech/language needs in inclusive educational setting. The necessity of uniform set of pedagogical tools that should be used to identify speech/language disorders, determine their causes and select differentiated practical activities to help overcome them in any school setting is proved in the article. It is emphasized that it will enable providing speech/language therapy support to students with severe speech/language disorders both in therapy sessions and in classroom or, alternatively, in the course of home schooling, as the learner gradually masters phonological, vocabulary, morphological and syntactic skills of speaking and writing. Hierarchical structure of special educational needs, the place of special speech/language needs in it and practical application of the ICF-CY in inclusive context that helps to *detail child's functioning needs, describe his/her limitation* and makes it possible to employ a **generic algorithm** of pedagogical support for children taking into consideration the necessary **“accommodations”** are represented in the article.

**Key words:** special speech and language needs, special educational needs, education setting, ICF-CY, education services, learning difficulties, the technology for measuring.

Studies of the current education provision for learners with speech and language disorders in Ukraine are based on systemic approach to identifying speech/language disorders and ways to overcome them based on multiple interrelated components and elements interacting with each other and with the external environment. These studies help determine the main ways how learners with various speech/language development disorders **demonstrate their needs** for special educational services; compile a list of settings that offer such services; and start to explore specific strategies for providing appropriate support depending on the type of the speech/language disorder.

This approach requires a model to standardize curriculum provision for younger students with severe speech/language disorders pursuant to the national regulatory documents, such as the new National Education Standard for primary school (approved by the Cabinet resolution No. 87

of 21 February 2018 to implement the New Ukrainian School Framework starting from September 2018); the Model Education Curriculum for special comprehensive secondary schools for students with severe speech/language disorders (approved by the Ministry of Education Order No. 693 of 25 June 2018) in line with the model education programme for students with special educational needs. This model should ***draw on the modern understanding of the mechanisms of speech/language disorders, which means using a psycho-linguistic approach to analyze these disorders and apply classroom-based strategies to overcome them.*** The structure and functional content of this model needs to be consistent with structures and methods of inclusive resource centres that are governed by the Cabinet resolution to approve the Regulation on Inclusive Resource Centre (no. 545 of 12 July 2017). This consistency will enable different professionals to design an Individualized Development Programme [4] using recommendations for specific areas of knowledge, make the necessary adaptations/modifications of learning activities ***based on the specific nature of speech/language development and needs and irrespective of the setting where a child receives education services.***

Thus, the purpose of further academic and methodological research is to outline the content of ***a uniform set of psychological and linguistic strategies***, and specifically to develop its assessment and compensatory components. This uniform set of strategies will be used to identify speech/language disorders, determine their causes and select differentiated practical activities to help overcome them in any school setting. It will enable providing speech/language therapy support to students with severe speech/language disorders both in therapy sessions and in classroom or, alternatively, in the course of home schooling, as the learner gradually masters phonological, vocabulary, morphological and syntactic skills of speaking and writing.

As step 1, the content of the assessment component needs to be determined, i.e. the ***indication method*** should be developed. In the light of above views, the need to create a supportive environment for learning and development remains relevant for any type of setting, whether it is supposed to serve children with identical special needs or not, so this method should be designed ***to indentify child's individual strengths and weaknesses in terms of his/her speech/language competency "separately" (i.e. traditional approach), and also in relation to the system of environmental factors that surround the child.*** Therefore, a highly specialized professional, e.g. speech/language therapist-teacher as a

member of the professional team based at the Inclusive Resource Centre identifies these strengths and weaknesses purely in relation to the speech/language competency by assessing the speech/language dimension of the child's development, whereas other professionals focus on cognitive, physical, emotional-volitional and social components. Further, a comparison of results enables a qualified transition from determining individual **developmental needs and strengths**, i.e. specifics of the child's functioning in different areas of life, to identifying **barriers** that impede successful learning of linguistic skills. Identifying the latter automatically makes the community (represented by the professionals involved) responsible for seeking ways to overcome these obstacles. Consequently, the team's **acknowledgement of these barriers indicates a shift in perspective, as certain developmental needs are now seen as special educational needs** that an educational setting must address in its curriculum provision, specifically by adjusting the educational environment to child's individual developmental needs. It should be noted, that developmental needs identified in the course of assessment that do not present any obstacles to learning the curriculum (which may be attributed to child's high adaptive capacity or enabling contextual factors in his/her environment present since his/her birth), are **not seen as special educational needs** and, consequently, do not require any special adjustments in the educational environment.

However, following the classification characteristics of SEN and groups of children with SEN [1], **all special educational needs may be divided into several types**: *intellectual*, i.e. which may be related to limited (to a varying degree) functioning of prerequisites to intelligence (memory, attention, thinking, speech, volitional processes, motivation, etc.); intelligence itself (ability to generalize, abstract, reason, generate thoughts, make judgments, draw conclusions, etc.); intelligence inventory (skills, knowledge); *functional* (sensory, motor), which may be related to limited (to a varying degree) hearing, visual, mobility (muscular-skeletal) or speech function; *physical*, which may be related to limitations (of varying degrees) in the development of child's organs and limbs; *learning*, which may be related to limitations (to varying degrees) in or specific nature of volitional activities (writing, mathematical problem-solving, etc.); *socio-adaptive* (personal, environmental), which may be related to difference (to a varying degree) or maladjustment as the child's response to changes in his/her social environment.

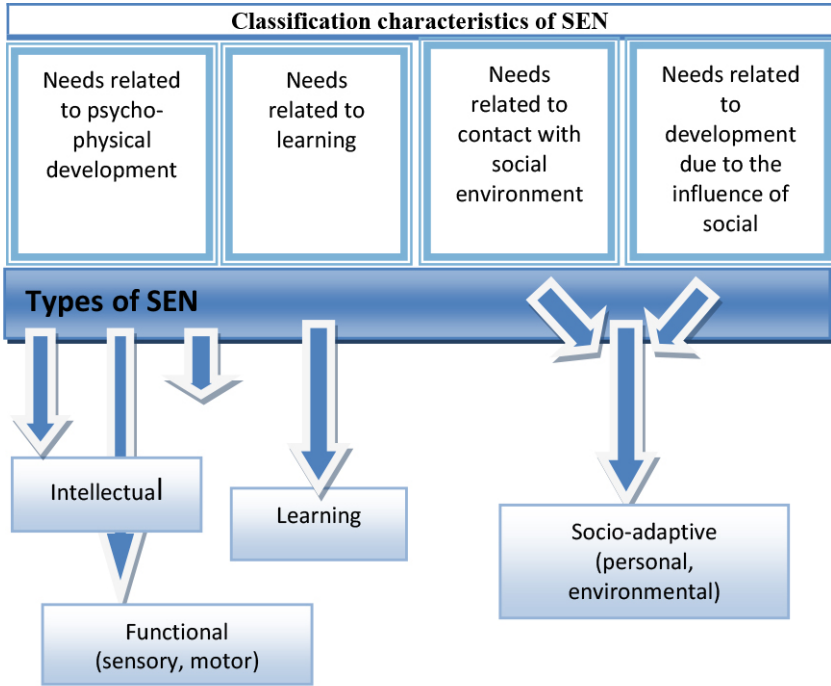


Figure 1 Classification characteristics of SEN

Clearly, each individual type of SEN requires a thorough **analysis**, which is the 2<sup>nd</sup> step of the integrated support system. Based on this analysis, a range of ‘adjustments’ (supports) are selected to **design** an adjustable educational and developmental environment for a **specific child** to make teaching and learning accessible for him/her. It is important to bear in mind, that one child, irrespective of his/her basic developmental needs and how these needs are demonstrated, may have different types of SEN, which calls for particular attention and drives further research.

Following from the above, it is essential that the typology of SEN has a **hierarchical structure** that is based on the bio-psycho-social model of child’s development [2]. *Intellectual, functional (sensory and motor) and physical special needs* are the bottom level of this hierarchy that represents psychological and physiological capacities of the child. A child with special speech/language development needs is a potential can-

didate for supports to meet functional (motor – phonetical, sensory – phonematic) needs. At the same time, he/she may also require special attention due to possible secondary intellectual developmental needs. *Special needs related to learning* form the middle level of the hierarchy. It is based on the lower level and indicates the ability to master volitional activities. In the majority of cases special speech/language needs at school age lead to specific ways of learning academic content in different subjects. *Socio-adaptive special needs* (personal, environmental) make up the top level of the hierarchy that reflects the quality of interactions between the child and his/her environment.

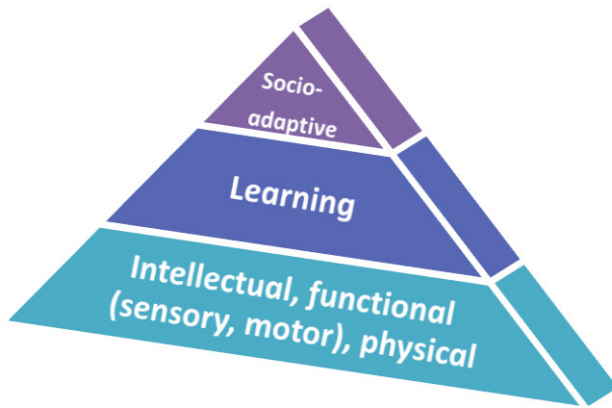


Figure 2 Hierarchical structure of special educational needs

Language is a crucial component of individual's social behavior, and therefore the specifics of its development will affect the quality of communication. Consequently, understanding of the hierarchy of needs enables us to determine a clear sequence of causes for limitations that impede effective learning. In turn, this guides a choice of appropriate teaching strategies and spares unnecessary steps when **designing the educational space**, which is the 3<sup>rd</sup> step in the organization of service provision.

Many countries use the **International classification of functioning, disability and health: children and youth version (ICF-CY)** [5]. It is based on the International classification of functioning, disability and health (ICF) (WHO, 2001) and serves as a modern resource for objective under-

standing of developmental specifics and needs based on the assessment of the child's development characteristics and relevant external influences.

The ICF-CY was developed in line with recommendations of international conventions and declarations that proclaim *children's rights*. The **UN Convention on the Rights of the Child (1989)** is a fundamental document designed with a focus on children and adolescents with disabilities. Article 23 of the UNCRC stresses that '*a mentally or physically disabled child should enjoy a full and decent life, in conditions which ensure dignity, promote self-reliance and facilitate the child's active participation in the community*'. The first version of the ICF was adopted as one of the **social classifications** of the UN where it is mentioned and incorporated into the Standard Rules on the Equalization of Opportunities for Persons with Disabilities [7], which is fully consistent with the **social model** philosophy.

The classification was approved by all 191 member states of the World Health Organization on 22 May 2001 during the 54<sup>th</sup> World Health Assembly, which confirms their interest and high appreciation for it.

**The Ukrainian Government approved the Action Plan to implement ICF and ICF-CY** on 27 December 2017, thus making the first essential step towards a reform of rehabilitation services and the system of functioning assessment.

The integration of physical, psychological and social indicators that describe the child's state using the ICF-CY aspects (*development, participation and environment*) helps focus on the child's **functional capabilities**, rather than his/her **diagnosis**.

The ICF-CY classifies "*components of health*", instead of "*consequences of a disease*". It reflects a neutral view on the *etiology* of health disorders. The classification is based on the **demographic approach** to preventing disability, and therefore it may be used to describe **health indicators, health-related indicators, and health conditions**. The **demographic approach** means using population data, i.e. its structure, physical mobility (migration) and development patterns. In this way the ICF-CY offers a universal tool both to *prevent* disability and create strategies to *eliminate* it. This means that the ICF-CY may benefit **all children and youth** under 18 without exception, specifically as foundation for organizing early intervention services, which is highly relevant for Ukraine.

The use of the ICF-CY offers extensive opportunities to promote an *inter-disciplinary approach* as an integral part of systemic efforts to sup-

port children with SEN through collaboration between different professionals. Notably, in the context of using the ICF-CY *educators, medical professionals and social workers* initiate improvements in the child's environment. The **team approach** [6] becomes even more relevant in inclusive education settings that rely on the ICF-CY indicators, e.g. services provided by each professional are more clearly differentiated, whereas the tasks involving all team members become more specific.

Practical application of the ICF-CY in inclusive context helps to *detail child's functioning needs and describe his/her limitations*. It also aids in organizing information in a convenient way. Thus, needs can be identified, analyzed and mapped on the hierarchy. This makes it possible to employ a **generic algorithm** of pedagogical support for children taking into consideration the necessary '**accommodations**', as shown below:

- identify and agree the aspects of teaching and learning that require special strategies, adaptation of activities, modifications of classroom environment, and a special schedule of learning activities **depending on the type and hierarchy of SEN**; determine the long-term goal and short-term objectives, assessment criteria and work plans for each previously agreed aspect; determine and agree the necessary support services (including integrated ones that involve professionals from special educational settings, rehabilitation centres, healthcare facilities, etc.); set and agree the date for the next meeting (for obligatory follow-up meetings with prior assessment, i.e. at the end of the first semester, end of the academic year, and possible interim meetings, where appropriate);
- determine the **school's capacity** to arrange the required support services, i.e. adapt the indoor and outdoor environment (architectural, equipment, transport, etc.); ensure teaching and learning materials and technical aids are available; deliver developmental and additional sessions (with speech/language therapist, psychologist, other professionals and in collaboration with parents) using the schools resources; provide opportunities for professional members of the team to share experience;
- assess the **need for external resources and expertise** to arrange related support services (e.g. that require special equipment, aids, etc.); organize collaboration (between the school and other institutions) by asking the education authorities and resource consulting services to facilitate cooperation with the relevant special schools, i.e. for children with visual disabilities, hearing disabilities, etc., and

with education and rehabilitation centres, healthcare facilities, that have the capacity to provide the needed support services; conclude agreements with the relevant settings (building alliances between regular schools that support inclusion and special schools that help promote it, e.g. by making their staff and resources available, holding joint events, etc.);

- select methods to **coordinate support services** (developmental and additional teaching sessions) with the overall instructional process (changes in the schedule, curriculum, finding the place where they are to be delivered, e.g. at the school or other settings);
- use self-assessment (reflection) to **monitor the dynamics of indicators that demonstrate how special educational needs are being met** at the school (by involving all stakeholders of the teaching and learning process and parents).

This generic algorithm of pedagogical support comprises all possible options for addressing special educational needs. It is flexible, as its components may be selected based on the child's need for adjustments and used in any combination.

Thus, pedagogical support for learners with SEN (including with special speech/language needs) in educational setting requires to clearly *identify the type(s) of the needs, determine the hierarchy of their development, assess the school's capacity* to provide 'adjustments' that are appropriate to the child's needs (in terms of physical environment, selection of materials, resources and teaching strategies or their accommodations), *involve external expertise*, where necessary, and *organize inclusive teaching and learning*.

This algorithm for designing educational space for children with speech/language needs has been successfully piloted. It proved its effectiveness in a project that focused on ICF implementation and was intended to strengthen professional skills of school staff and professionals of inclusive resource centres who work with children with SEN. The project was carried out in the framework of the collaboration agreement between UNICEF and the Ukrainian Government and as part of the UNICEF annual work plan in Ukraine. In this context one of the key areas of further research will be to develop national assessment tools following the requirements of the ICF-CY. Their content is focused on defining the typology of learning difficulties and the technology for measuring the degree of their manifestation. This approach makes it possible to identify barriers to successful learning based on difficulties-indicators

and offer a level of support in the educational environment, as well as to develop an individual system for creating the necessary adaptations and modifications of educational tools [3].

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# SPECIFICS OF WORKING WITH SNOEZELEN THERAPY WITH MENTALLY DISABLED CHILDREN IN THE CONDITIONS OF THE CENTER FOR CHILDREN AND FAMILY – THEORETICAL FOUNDATION

*Alica Vančová*

**Abstract.** In the article, we present basic professional information about the Snoezelen therapeutic and interventional approach, which is used in the conditions of the Center for Children and Families for mentally disabled children. We focused on presenting the theoretical starting points. In the following post, we present the results of the investigation.

**Keywords:** snoezelen, multisensory room, individuals with mental disabilities, Center for Children and Family (children's home).

## **Introduction**

The Center for Children and Family (old name Children's Home) is a place where suitable conditions are created for the harmonious development of the child's personality and its healthy development. He is given opportunities to grow up in a family environment (substitute personal care, foster care and international adoption). Since society is looking for healthy and gifted children, the mentally disabled have a smaller chance of being accepted into one of the forms of substitute family care. In such a case, the Center for Children and Families (CCF), formerly known as the children's home, tries to compensate mentally disabled children at least partially for what they are not getting. In addition to the Snoezelen and the multisensory room, other methods of working with the mentally disabled are also used in the CCF premises. The most preferred is occupational therapy. Another specific feature of working with mentally disabled children in CDR conditions is animotherapy, thanks to which mentally disabled children learn to recognize the laws of life of various types of animals (cat, dog, hamster) and how to behave in their presence. It is focused on the overall development of the child's personality (mental, physical, social). Through direct contact with a live animal in various games, the child's consideration, empathy and emotional side are developed. An important part of the center is the presence of a pony, which is cared for by mentally disabled children together with educators. Periodically, once a week, art therapy is implemented

in the children's home, where the mentally disabled, in the presence of a worker (psychologist), have the opportunity to make various products from clay, paper, fabric, wood, leftover material, decorative items from natural plants, artificial flowers and time-themed decorations.

A football, handball and volleyball ring is being implemented within the facility. Every year, children participate in sports days, the goal of which is to develop the sports talent of children from orphanages in Slovakia. The goal is to improve the children's physical condition thanks to their honest preparation and training for these games, a sense of belonging and a sense of satisfaction with sports success. Since the mentally disabled have a positive relationship with music and can express a lot through it, a dance club is organized where elements of music therapy are used. In addition, children have the opportunity to participate in dance parties. Some musically talented children learn to play the piano and recorder in the presence of an external worker. A special pedagogue works in the children's home, who is exclusively devoted to group art therapy and secondary prevention, sexual education, as the mentally disabled are strongly driven by impulse. The latest and highly specific method in this device is biofeedback, which enables self-regulation of the frequency of electrical activity of the brain (brain waves) through repeated training through a special computer program. In CCF, this method is carried out by trained staff - a psychologist and a special educator.

When applying therapeutic methods, it is very important to pay attention to the individual characteristics of the mentally disabled, while it is necessary to observe the effect of the methods on their personality. With children with mental disabilities, it is possible to achieve a certain independence in the practical needs of life through targeted therapeutic approaches. Teaching a child a certain degree of independence is very important not only for him, but for his entire immediate environment and at the same time for society. An educational therapeutic program is a long-term process of education and efforts of the entire group of people, an integral part of which are always the parents, in our case the educators in the children's home. "Based on the information, we develop an individual therapeutic plan for each child, in which we use elements of behavioral psychotherapy. We consult the therapeutic plan with colleagues, e.g. special pedagogues, school psychologists, who also participate in its implementation. Before proposing a certain strategy, we try to find out why the child's pathological behavior appears, what the child experiences and what behavior he presents on the outside" [38, p. 113].

The child learns to perceive his body through his own sensorimotor skills, experiencing his own body through touch and movement. That is why the child's development must be helped by perceiving his own body in motion. For the mentally disabled, it is possible to use several therapeutic methods such as art therapy, music therapy, drama therapy, animotherapy and ergotherapy.

### **Snoezelen as a therapeutic intervention approach**

Relaxation, relaxation, well-being, pleasant music and fragrance, peaceful atmosphere, soft light, cleanliness, intimacy, playfulness, crying, joy, trust, sensitivity, empathy, kindness, stimulation ... just a part of what comes to mind when he says snoezelen. "Dreaming about something green" could be translated by a layman in common colloquial speech. After the first personal experience with the snoezelen method as part of the training of professionals entrusted to work with this method, we were impressed by the first highly positive results. When working with children who were unable to talk about repressed negative feelings, traumas, injuries, they suddenly found a safe place to "pour out their hearts" and recognized the "clumsy willow" in the person of the teacher. From the ISNA (International Snoezelen Association) definition, it follows that "snoezelen produces a feeling of well-being and relaxes, brings people to rest, but also activates them, awakens interest, directs and balances stimuli, evokes memories, organizes a person, removes fear and brings security, it guides a person, initiates and supports relationships, simply brings joy". From the principle "nothing is required, everything is allowed" [47], which is characteristic of snoezelen, we feel a great breath of "healthy" freedom, which children need for their psychosocial development. And he continues: the principle applies to give the disabled person as much time and freedom as possible to choose for himself which of the stimuli he feels is pleasant, what he wants to do next and what he wants to focus on. "Snoezelen provides an opportunity to fill free time, as a means of relaxation, self-realization, respecting the interests of the mentally disabled or uses special support methods, such as prenatal and sensorimotor therapy" [33, p. 123]. Vításková, Fajmonová [58] state that snoezelen serves to develop verbal and non-verbal communication, to stimulate the senses, to reduce risk manifestations in an individual's behavior, it strengthens the ability to adapt, socialize, and pay attention, it leads to a reduction in behavioral disorders, to the reduction of impulsive reactions, to supporting the cognitive and emotional components of the personality, brings new experiences. The

snoezelen method is intended especially for children with the following types of diagnoses [56]: physical, mental, sensory and combined disorders, mental disorders, psychosis, depression, neurological disorders, parkinson's syndrome, multiple sclerosis, etc., dementia, behavioral and emotional disorders in children and youth (aggression), ADHD syndrome, ADD (attention, hyperactivity and impulsivity disorders), LMD and specific developmental learning disorders, diagnoses in geriatric issues.

**Snoezelen is a combination of two Dutch words “snuffelen” (to sniff, explore) and “doezelen” (to snooze, relax).** It is one of the newer concepts of care for individuals with different types and degrees of disability or impairment. The beginnings of the snoezelen method date back to the 1970s. In 1966, the American psychologists Cleland and Clark reported on the possibilities of supporting the development of communication and behavior in persons with mental disabilities, with delayed development and with autism. They created a place called “sensory cafeteria”, where visual, auditory, olfactory, tactile and kinesthetic perception was to be stimulated [28]. Finding new possibilities and activities for people with severe disabilities has been a problem for many facilities in the Netherlands. In the Haarendael facility, the first project and the name snoezelen was created in 1974, where the main idea of the activities was not the physical effort of the client, but relaxation and the possibility of experience. The goal was to be achieved with the help of sensory stimuli. Two civil service workers Niels Snoek, Klaasa Schenk and their colleagues Rein Stabsa and Ton Heine organized the first project. After their retirement from civil service, the project was temporarily suspended [29]. This idea was later continued by the facility in Piuoord and presented at a seminar in 1979 under the name snoezelen. The Dutch Ad Verheul and Jan Hulsegge took these ideas and further developed them. They built the so-called “sensory tent”, where there were aids for the development of sensory (visual, auditory, olfactory) stimuli. As during this period there were not enough activities for the severely disabled, it was received with great enthusiasm and gratitude by the parents of disabled children. The aforementioned authors applied snoezelen as a free-time “spontaneous activity” for the severely disabled [4]. Snoezelen began as a relaxing room concept providing a wonderful and unique sensory experience for adults with disabilities. It was later extended to children with special needs, especially with autism and other mental or physical disabilities. In the beginning, there was a lack of aids for

sensory stimulation. Over time, various organizations and companies were created that offered a wide range of Snoezelen products. One of the most famous is the organization Rompa, originating from Great Britain. Currently, snoezelen is widely used in several countries, especially in kindergartens and elementary schools, day care centers, hospices, rehabilitation centers, children's homes, mental health centers, integration centers, hospitals, as well as in crisis and early intervention. In Slovakia, interest in this method is growing, special rooms are being created, especially within ŠZŠ, DSS and other facilities for children, but also adults with disabilities [37].

**The whole concept of snoezelen is based on a holistic approach, it fulfills the needs of acceptance and understanding of the client in an atmosphere of trust and relaxation.** It is a relatively new non-traditional form of work with people with disabilities, which is based on their possibilities and abilities and tries to respect their interests. In snoezelen, therapeutic elements are combined with special and therapeutic-pedagogical elements, with the possibility of adapting them to a specific disability. More than other therapeutic directions, it requires a modified environment and specific equipment. Snoezelen is performed in a specially furnished room, in a calm, relaxed and pleasant atmosphere, where the senses are stimulated by music, light effects, light vibrations, pleasant smells, the possibility of positioning and basal stimulation.

### **Snoezelen goals**

The main goal of snoezelen is to improve the quality of life and develop the personality of people with disabilities. Since snoezelen provides stimulation of the senses without the need for intellectual understanding, it is an effective method even for people with a more severe form of disability, with disorders of sensory integration and a significant communication deficit. Truschková [49, p. 90-91] defines the main goal as follows: “the main goal is not to improve performance or to learn something new, but the value lies in the use of free time, in various activities, or it is just a pleasant relaxation. It combines the idea of dynamism with relaxation. The true meaning of snoezelen lies in a pleasant atmosphere, it evokes positive emotions, experiences and the possibility of obtaining real interpersonal contact”. Clients actively and passively experience new stimuli, which leads to expanding the horizon of their knowledge and supporting their self-awareness, self-reflection, as well as improving communication and social interaction (Ponechalová). The

term *snoezelen* is understood as a deliberately created environment in which there is an atmosphere of safety and trust. The main principle of the method of working in *snoezelen* is the creation of an environment that would offer the widest possible spectrum of sensory stimuli, the so-called sensory stimulation. Sensory experiences should be experienced deeply, while it is not necessary to offer a large number of stimuli. The equipment of the room offers the use of music, light stimulation, manipulative objects, visual, tactile and auditory stimuli [49]. It is in *snoezelen* that everything is allowed, where no one forces anyone to do anything, on the contrary, everyone does exactly what they want at that moment. Voluntariness in choosing options is very important here. Louise Haggard and Roger Hutchinson characterize the *snoezelen* philosophy as an “empowering approach”, that is, a sensitive and receptive, caring, non-directive approach in an atmosphere of safety and security that is encouraging. The attention is not primarily focused on the result, but rather the intention is to assist the client in obtaining maximum pleasure from the activities he or she engages in together with the therapist [37]. The emphasis is on the process (carrying out therapeutic and play activities) and not on the result. The teacher’s intention is to help (facilitate) the child’s personality in obtaining pleasure from the activities carried out.

**The basic principle of *snoezelen* is the aforementioned “niets moet alles mag”, “nothing is required, everything is allowed”.** A person with an intellectual disability can be himself here and do what he wants. The one who accompanies a person with a mental disability must adapt to their ideas and rules, must allow them more than usual [15]. The goal of *snoezelen* is the overall relaxation of a person, which can be helped by an accompanying person - a therapist, by giving the client freedom and creating a pleasant atmosphere. The accompanying person can be an expert in the field of psychology, psychiatry, a special educator, a social worker, but also a parent or family member. “The therapist enters the relationship with the client primarily as a person - not as an educational or professional authority. She lives with him for one part of his life and helps him realize his optimal state. The client has the opportunity to choose and make his own decisions regarding activities, which allows the therapist to find out what is pleasant for the client [48]. *Snoezelen* is not limited by age or any requirements. The client is an autonomous self-regulating subject who chooses from the prepared stimuli those that are relevant for him. No one can be just an object of assistance, they must be respected and require their cooperation. No one can learn

something without their own activity and will” [12, p. 24]. In snoezelen, it is mainly about creating an environment that presents sensory stimuli, the principle of appropriateness of stimuli (not overloading the senses), an individual approach, a holistic approach (a holistic approach to a person), orientation towards the client, the child and the creation of a mutual interpersonal relationship. In conclusion, we can summarize the important principles in snoezelen: a special environment controlled and influenced by the client, the possibility of choice, offering the client the option of choice, a safe and pleasant atmosphere, respect, an atmosphere of joy and well-being, voluntariness and freedom, without pressure to act and achieve result, emphasis on a confidential relationship between client and therapist, individual approach in care, creative therapeutic approach [37].

#### **Snoezelen methodology:**

According to the focus, target group and professional qualification, we theoretically distinguish four areas of the snoezelen application:

- **snoezelen as therapy** - in the narrower sense of the word, which is included in psychomotor therapy on a neurophysiological basis, is managed by a doctor and snoezelen by a therapist. Snoezelen therapy is also integrated in the therapeutic concept of ergotherapy and physiotherapy, especially in the methods of sensory integration and motor therapy,
- **snoezelen as a therapeutically oriented approach** - carried out by a special expert, when a clear initial diagnosis with targeted interventions is a prerequisite,
- **snoezelen as a pedagogic-supportive approach**, when it concerns support measures of the educational process, especially the support of cognitive processes (perceptions, expansion of cognition, increase of concentration) and integration,
- **snoezelen as a free-time activity** - snoezelen serves to induce calmness and recovery, gain strength and can, under certain conditions, be an offer for everyone without a directly pre-planned therapeutic or pedagogical intention. It is an offer of full-value free time that can be used by children, youth and adults.

If we offer snoezelen as a leisure activity, we offer new experiences, physical and mental relaxation, recovery, harmonization, gaining strength and a selection of pleasant activities. However, the most important principle is freedom of choice, freedom and enough time. The guide gives an impulse, presents the individual devices, observes and, if

necessary, intervenes in a dangerous situation. The client is motivated by the environment itself, objects, materials, technology and tools that lead to activation and stimulation. Depending on the possibilities, the client can choose for himself, e.g. sound backdrop, and thus create an individual pleasant atmosphere.

### **Snoezelen as therapy**

Snoezelen therapy is focused on providing wonderful unusual sensory experiences provided by a wide range of low and high technology products and devices that evoke sensory responses and reactions in clients. The goal can be independent therapy or support of the client's competencies. It is one of the most joyful and pleasant therapies. Snoezelen therapy consists of the following steps:

**1st assessment** - determination of the client's sensory potential and needs based on diagnostics, observation and questionnaires. Diagnostics is a very important and decisive prerequisite for establishing supportive and therapeutic measures. Other experts are also involved in the diagnosis (psychologist, speech therapist, physiotherapist, etc.), cooperation with the family is also essential. We focus our diagnostics on the main areas - the client's personal and family history, the development of the disability, we find out important information regarding motor skills, intellectual development, communication, the interaction of all senses, pleasant and unpleasant stimuli, the possibility of motivation and support. Based on the diagnosis, we set the goals we want to achieve, planning activities using the device in the context of play, calming, relaxation, stimulation and strengthening of clients through their senses.

**2. subsequent re-evaluation after a certain time (3-6 months)**, the Snoezelen environment offers many possibilities of use: stimulation (basal stimulation) - all the equipment and devices of the room have such a motivating effect on clients that they want to manipulate them and learn at the same time, stimulate individual senses or several senses at once - sensory integration, relaxation - the environment also induces a state of relaxation and several relaxation techniques can be used in it. Therapy and various forms of intervention carried out in snoezelen: psychomotor therapy, motor therapy, ergotherapy, music therapy, drama therapy, play therapy, bibliotherapy, art therapy, physiotherapy, animotherapy, education - especially Montessori pedagogy, memory and perception training, diagnostics, early intervention, motivation (support and encouragement), full-value spending of free time. Snoezelen provides an ideal environment for several supportive therapeutic activities. A pleas-

ant atmosphere contributes to the creation of a personal relationship and the possibility of communication and interaction occurs rather. The Snoezelen space can therefore be used for a large number of activities, such as getting to know your body, touching and being touched, using different materials as a source of tactile and auditory experience, light and sound meditations, various thematic stories such as life in the sea, life in Africa, boating and the like. In addition to light, sound, smell and taste stimuli, for the development of fantasy, interaction and communication, for example, reading fairy tales, retelling, playing a short etude, combining pictures with music are used. Various relaxation, relaxation and breathing techniques are used to develop concentration, which achieve a deeper state of relaxation. The use of the room also depends on who runs it. If the guide, he rather offers individual incentives and motivates the client. If the therapist, then a pre-formulated goal is needed based on information about the client from the previous diagnosis. His task is to select individual exercises or techniques, which, however, need to be changed or supplemented according to the current situation and needs of the client. This requires flexibility, imagination and creativity on the part of the therapist. His behavior should also be characterized by good observation skills, empathy, feeling and acceptance of the client. These suggestions serve as stimuli. Since the therapist works with an individual group of clients, exact procedures cannot be formulated. Several therapeutic methods can be used during visits to the snoezelen multisensory room.

**The material equipment of multisensory rooms** is different. The intention and target group of clients is important. With the correct use of aids, the entire personality can be developed. The multisensory rooms in which snoezelen is performed differ from others in their specific atmosphere, structure, layout and equipment. They are a place to get rich experiences that the normal environment does not provide. A big positive is that a mentally disabled person will never experience a sense of failure here.

**Tactile and vestibular stimuli** should not be missing in a multisensory room, as they are the easiest to process for people with mental disabilities. The basic equipment includes a carpet, which gives clients the opportunity to walk barefoot and adds a cozy atmosphere. For a feeling of intimacy, the windows are covered so that light from outside does not penetrate inside. An opaque film can be stuck to the windows. However, it is possible to put blinds or curtains that let light into the room when

they are drawn. The lighting of the room should be thought out in advance, it requires an appropriate selection of lighting effects with the possibility of incorporating several controllers and changing the light intensity and color.

**Spot lights, salt and floor lamps** are used in multi-sensory rooms. A very important part is the storage space in the form of a cabinet or shelf, which the client cannot reach. Here it is convenient to store aids for aromatherapy, music therapy, art therapy. Near the door or on the door, it is necessary to mark the room with a logo or a poster. It is necessary to secure the room with maximum security.

We include a water bed in the room's basic equipment, which serves for physical and mental relaxation and is also a suitable means of gaining new experiences. The surface of the bed is heated, movable, easily adapted to the body, which is very important for people with a severe degree of disability. The temperature of the bed is around 28 °C, which has a beneficial effect on clients with limited mobility and stiff muscles. A waterbed is ideal for those with little or no mobility. Every, even slight movement of a hand, a leg, a turn of the head shakes the water in the bed and the client has the opportunity to experience the success of having done something himself [15]. It is advisable to place the bed in the corner of the room or against the wall. While the client is lying on the bed, it is advisable to cover him with a blanket and put a pillow under his head, which increases comfort [41]. If it is not possible to obtain a water bed, an inflatable one is recommended, which is filled with air and easily gives way to a water bed with slight movements [8]. Blankets and scarves are used in case of complete comfort for the client, which are used not only for relaxation but also for more dramatic activities and games.

**Swings and nets** - swinging evokes pleasant feelings in many clients, because the receptors for the perception of position and movement develop during intrauterine development. Therefore, swings, nets or padded boards are installed in multisensory rooms, which allow swinging and movements in all directions [41].

**Relaxation bags** are usually filled with polystyrene balls. When sitting, they adapt to the client's body. It is possible to sit and lie on them. Relaxation pillows are also filled with polystyrene balls. They are of different shapes and sizes. They also adapt to the position of the body. Small pillows filled with fragrant herbs, spelled, or anatomical pillows are also used. Bags filled with rice, sand, fine gravel, and feathers are also an

attractive tool for clients. They should have an appropriate weight, be placed in boxes so that they are accessible to all clients.

The equipment of the room should also include various **plush and rubber toys**, balls made of different materials and surfaces that are close to the child. There are currently a large number of different toys on the market that can be used to stimulate and develop the client. With the help of toys, play therapy can be implemented in the snoezelen multi-sensory room, the aim of which is not to burden the child with complex rules and difficulty of the game, but the emphasis is on relaxation, rest and peace.

Different essential oils are used for **olfactory stimulation**, which are dropped into the diffuser and spread into the space. Scents complete the atmosphere in a room and have a calming or stimulating effect on a person. Aromatherapy can be used in the snoezelen room, i.e. therapeutic treatment that supports health, relieves strain and stress, strengthens the body's immunity and harmonizes physical and mental processes, while using the properties of natural essential oils. In its effect, aromatherapy has a preventive effect even in case of acute problems". "If we connect the art of touch with the art of using scented oils for relaxation and for the healing of body and soul, we will get a deeply effective therapeutic method that can solve problems for children, adults and whole families." The goal of using scents is to sensitize the sense of smell. A number of essences are used, either alone or in a mixed form. Even with a small amount, they can make a room smell good. The most proven fragrances are considered to be:

- eucalyptus – has a stimulating effect and helps with relaxation,
- lemongrass – has a refreshing, stimulating effect, promotes concentration,
- lemon – refreshes, brings lightness,
- vanilla – induces a feeling of security, suitable for small children,
- rose – activates the senses and harmonizes (Günther, 2002).

Smells and tastes are often associated with certain events (eg Christmas time its tastes and smells).

An integral part of a multi-sensory room is **music and acoustic equipment**. People with more severe mental disabilities often do not consciously listen to sounds, because their surroundings are crowded with a lot of sounds that they have trouble differentiating and selecting. The Snoezelen room becomes a place where a person with an intellectual disability receives simple sounds. He learns to consciously perceive

and differentiate them, learn new sounds and actively work with them. It is advisable to choose a high-quality and non-violent speaker system. It must meet the needs of room sound and good controllability. The offer of musical instruments is very wide today. For inspiration, we present e.g. chimes, triangle, bells, accordion, drums, bongos, etc. Toys that make sounds are also stimulating. Music has a relaxing and relaxing effect at a beat frequency of 60 beats per minute, which corresponds to the pulse of the heart in a state of rest [43]. Solf [43] further states that it is necessary to pay attention to the appropriate selection of music. Not to use music from other cultures, which can harm the client rather than help. Günther [8] highlights e.g. the music of the sea, flowing water, the sound of the forest, the singing of birds, dolphins and other animals that are close to the client. The client's favorite music can also be used during snoezelen. In the multisensory room snoezelen, elements of music therapy can be applied in both active and passive form. Music therapy is related to acoustic stimuli. The purpose of listening to music can be relaxation, or, on the contrary, activation and dynamic excitement. There are many CD carriers that allow the client to experience music. The therapist who accompanies the client can demonstrate music therapy with his own production on musical instruments. A client can feel joy while playing a musical instrument. Another option for use in the snoezelen multisensory room is dance and movement therapy. Elements of dance therapy can be applied and combined in different ways. Any movement activities, spontaneous movement, dance can help in the development of the perception of one's own body, the other person, the possibility to explore the space, touch individual parts in the room.

**Objects used in communication:** In the snoezelen room we can use objects and toys such as dolls with different faces of people or animals that can help in the development of communication, especially for clients with communication problems. Many aids and toys are used to develop haptic stimulation. There are haptic corridors used to collect tactile aids. They can be suspended (the child gets tangled up in it) or static. Aids for fighting aggression are also useful, e.g. punching bag, punches, etc. For comfort in the room, the aforementioned water bed, beanbags, etc. are used [57].

In the multi-sensory room as part of the **snoezelen optical stimulation**, the client has the opportunity to perceive a large palette of colors, mainly projection and light effects. Just as music calms a person, colors also have a calming effect or awaken to activity. We choose the red color

in snoezelen for relaxation. We use it to evoke the atmosphere of the period before birth. The green color calms and has a harmonious effect. In snoezelen, it is used to evoke the association of forest and nature. The blue color in snoezelen has a cool, calming effect. A touch of mysticism can be found in a purple snoezelen. Yellow is a bright color that enlivens the room, puts the client in a positive mood, arouses attention and maintains concentration [8]. Colors are most often used for concentration. They are part of a disc that is attached to the reflector and can be rotated slowly if necessary. The light from the reflector passes to the mirror ball and the light points reflected from the ball are projected on the walls, floor, ceiling of the room. Lava lamps (with melted wax), lamps with bubbling water with color effects (cylinder with bubbling water, lamp with fish, horses) are used for visual stimulation. The cylinder has the option of different lighting and color settings. It serves for relaxation, for visual sensations. The Fireball lamp (lamp in the shape of a ball) reacts to touch with quiet purple discharges, lighting that is directed from the central part outwards. It has two modes. In the first case, it responds to touch, in the second case, it responds to sound. Excellent for visual, haptic stimulation and when using the voice.

### **Conclusion**

From the amount of published professional data, research and experience of foreign authors, as well as from practical experience, we can conclude that the therapeutic and interventional approach of Snoezelen has a demonstrably positive effect on individuals with mental disabilities, even when used in the conditions of the Center for Children and Family. At the same time, this approach gained attention in Slovakia, and today many schools and centers are equipped with multisensory rooms and implement Snoezelen. At the same time, it is possible to combine Snoezelen with elements of basal stimulation, especially for individuals with severe and multiple disabilities.

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# COMMUNICATION WITH PARENTS OF CHILDREN WITH MENTAL DISABILITIES

*Andrea Prečuchová Štefanovičová*

**Abstract.** The article deals with the issue of communication between teachers and parents of integrated students. It describes the choice of communication strategies based on individual factors affecting the process itself and the effectiveness of communication. Part of the contribution is the presentation of partial results of the author's survey, focused on individual aspects of communication in the primary school environment in the context of inclusive education.

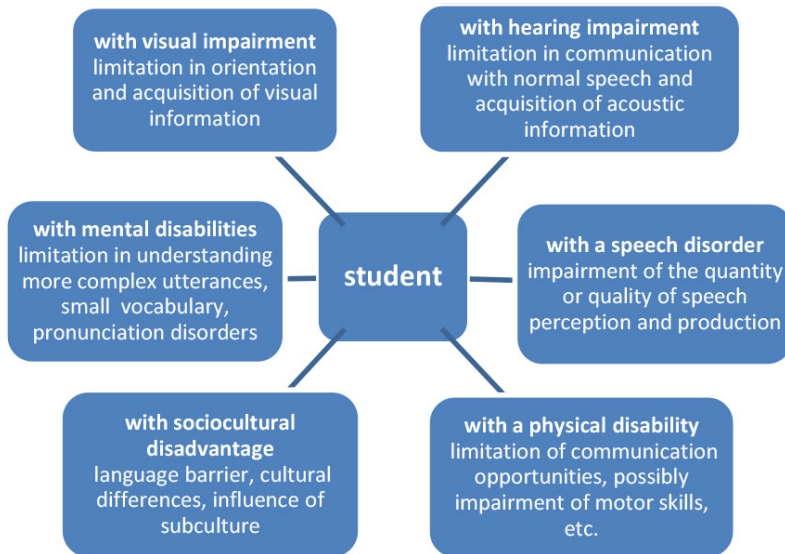
**Key words:** communication, student with a mental disability, parent.

## **Introduction**

Communication in inclusive education is extremely important for both students and parents. The inclusion process can only be successful if communication between the individual members of the inclusive team, including parents and the student, is effective and open.

## **Communication as a tool of inclusion**

At the outset, it is necessary to mention the communication specifics of individual groups of pupils [4]:



*Figure 1 Specifics of communication with integrated pupils [4]*

If we focus directly on the parents of integrated students, we must start from the above and take into account the factors that influence communication with them in practice:

- the type and degree of the child's disability,
- the level of coping with disability, or disturbing the child,
- how long have the parents known the difficulties, or child's diagnosis,
- the relationship of parents and other family members to the child,
- parenting style that parents prefer,
- the family environment from which the child comes - primarily whether the student is from a functional, dysfunctional or only partially functional family,
- the level of the social environment - especially in the case of children from a socially disadvantaged environment, or children of foreigners or other marginalized groups,
- overall comprehensiveness of the parent in the issue.

Parents' approaches to a disabled child are, together with the overall socio-cultural level of the family, the main factor in family education.

Prevendárová [2] lists nine types, or parenting styles of parents of disabled children according to Pilkiewicz (1980):

1. education through achievements - it is characterized by love and a high degree of acceptance of the child, high demands, demandingness, frequent control and use of rewards;
2. overly caring (hyperprotective) upbringing - characterized by strong love and acceptance, empathy, small demands, frequent control and rewards; liberálna výchova (zhovievavá) - charakterizuje ju láska a akceptácia, málo požiadaviek, zriedkavá kontrola a odmeňovanie;
3. democratic upbringing - characterized by adequate love and acceptance, average to high demands, rare control (trust is essential), rare punishments and occasional rewards; rigorózný autokratizmus - charakterizuje ho skryté nepriateľstvo alebo chýbanie akceptácie a empatie, vysoké požiadavky, častá kontrola, trestanie je hlavným spôsobom vplyvu na správanie vychovávaného;
4. punitive autocracy - characterized by a high degree of hostility or lack of acceptance, empathy, high demands, frequent control and punishment; príležitostný autokratizmus - charakterizuje ho nepriateľstvo, chýbanie akceptácie a empatie, vysoké požiadavky, zriedkavá kontrola a trestanie;

5. neglectful upbringing - characterized by a cold emotional attitude, lack of acceptance, low demands, rare control, lack of reinforcement (without rewards and punishments);
6. rejecting upbringing - it is characterized by hostility and lack of acceptance, low demands, rare control and severe punishments.

The most important thing in raising a mentally disabled child, and therefore also in the parents' approach to him, is to try to understand the child and accept him as he is. Placing reasonable and manageable demands on the child helps his further all-round development and progress. A healthy, loving and kind approach is no less important in raising a child. In an atmosphere full of love, affection and empathy, not only the child, but also the parents or siblings can handle the obstacles resulting from the disability more easily.

Ryckman and Henderson [3] describe several theses explaining why parents are so affected by the birth of a disabled child:

1. For parents, a child is a psychological and physical extension of themselves. They attribute the good and the bad of the child to themselves.
2. Children enable their parents to vicariously satisfy their dreams and wishes, which is often not possible for disabled children.
3. Through the child as the continuation of the family, parents can overcome their death. However, this does not apply to disabled children.
4. A child is understood in society as the personification of love. The parents of a disabled child therefore feel guilty for not being able to accept him unconditionally.
5. Children should be accommodated in their need for dependence. For the parents of a disabled child, this may mean the necessity of self-sacrifice.
6. The feeling of burden when raising a disabled child is several times higher than it is when raising a healthy child.

There are many classifications of types of parents, which are understood by experts from different points of view. Based on practical experience, we can talk about the following types of parents and the resulting communication with them in practice:

1. realistic parents - balanced parents, accepting the good and bad sides of the child, trying to work with the child in accordance with their potential, there is no underestimation or overestimation of the child - communication with this type of parents is the easiest

- from the point of view of the educator and is mutually beneficial for the development of potential of the child;
2. protective parents - parents who have a lifelong need to protect their child even at the cost of the child not being independent and dependent on the parent, such parents unintentionally underestimate their child's abilities - in such a case, it is necessary to patiently explain to the parent how to work with the child and support its independence in the future;
  3. liberal parents - parents whose philosophy is to give the child as much freedom and freedom as possible, there are no clearly defined rules, which can be counterproductive in relation to a disabled or disturbed child, but on the other hand, there is significant support for independence - open communication is very good at building on the parent's relationship with the child and naming things plainly, the parent is often willing to accept the teacher's suggestions;
  4. strict parents - parents who „go“ for the result and often prioritize work performance and not the feelings of the child, who may be depressed and demotivated in case of high demands - a realistic view of the child's abilities and potential is often disappointing for the parent and they need support in finding alternatives (e.g. the parent demands the child's higher education, insists on many clubs, despite the fact that they burden the child);
  5. unbalanced parents - parents who have not yet processed the fact that their child has a certain impairment or disability, which in practice can cause a lot of difficulties both in communication with the parent and in the subsequent cooperation in the education of pupils - parents need a sensitive approach, a realistic approach, which describes the child's difficulties, but on the other hand highlights his positives and potential, such parents need time and information to cope with the child's disability or impairment;
  6. negligent parents - often parents from a socially disadvantaged environment who do not have a significant interest in the child's education, although they provide basic material equipment, but leave the other attributes of education to the school - regular communication is necessary, only thanks to which we can achieve progress in the child, we must not have such parents condemn in advance, but try to communicate with them in such a way as to improve their approach to and responsibility for the child;

7. neglectful parents - parents without the need to pay attention to children, provide aids and material equipment, children have frequent absences and subsequently do not master the curriculum and repeat the grade - in the case of ineffective communication and long-term neglect of the child, it is necessary to notify the police and the office of social affairs, so that in the event hit;
8. uninformed parents – parents who do not have enough information about the child’s impairment or disability, or they are not able or have no motivation to get information - such parents often need patient communication that will provide them with enough information and help to improve orientation in the child’s problems, given that these are often parents with a lower education or intellectual level, communication is necessary adapt to the level of individual parents.

In April 2023, we conducted a short survey among the employees of a regular elementary school, which is attended by approx. 12% of integrated students, which places an increased emphasis on communication with their parents. We present several interrelated findings based on part of the research.

The selected survey questions were based on the goal of finding out to what extent primary school teachers think communication with parents is necessary and what type of parents they most often meet in their practice.

In the first questionnaire item, we asked respondents whether they consider communication with parents to be their job duty.

The overwhelming majority of respondents (95,5%) consider communication with the parents of integrated pupils to be one of their work duties.

Based on practice, we can confirm that inclusive tendencies increase the demands on the teacher’s communication skills and his personality assumptions. A quality teacher tries to communicate with the parent not only from the position of a teacher and educator, but in addition to the professional point of view, the elementary - human point of view is also extremely important.

The second item of the questionnaire is more interested in how respondents perceive the very process of communication with parents. Educators should choose one statement that is closest to them.

Despite the fact that we see a certain diversity in the answers, we must state that more than 85% of the respondents consider communi-

cation with parents as a way to improve the educational results of the student. Here, too, we can perceive communication as an extremely important part of the process of integrating students with special educational needs into the regular classroom environment. This usually cannot be done without a thorough communication strategy on the part of the educator as a member of the inclusive team.

In the last questionnaire item presented, we examined which type of parent (based on our above-mentioned breakdown) the teacher most often communicates with. It is obvious that the choice and method of communication strategy by the teacher also depends on the type of parent.

Based on their own experience, communication with a realistic type of parent prevails among teachers. We consider this fact to be very positive because, as we have already mentioned, communication with this type of parent is the easiest from the teacher's point of view and is mutually beneficial for the development of the child's potential.

However, according to educators, a frequent parental approach is also a protective approach, which, despite their efforts, reduces the effectiveness of the educational process and does not fulfill the child's potential to a sufficient extent. The parent unknowingly harms the child by his actions.

Other types of parents (except strict ones) occurred to a much lesser extent. It is clear, however, that parents' approaches to a child with a disability are extremely heterogeneous and therefore require the experience and adequate communication skills of the teacher.

It follows from the mentioned part of the survey that teachers consider communication with the parents of integrated pupils to be an important part of their work. They see its importance mainly in fulfilling the need to make the educational process more efficient within the framework of inclusive education. In their practice, educators work with a diverse group of parents who differ in their approach to their child. We can positively perceive the fact that educators work more with realistic parents and other types of parents are represented to a lesser extent.

### **Conclusion**

The article points to the issue of communication with the parents of integrated pupils. The paper also presents part of the results of the author's survey. The aforementioned part of the survey shows that teachers consider communication with the parents of integrated students to be an important part of their work. In their practice, teachers work with

a diverse group of parents who differ in their approach to their child. We can positively perceive the fact that educators work more with realistic parents and other types of parents are represented to a lesser extent.

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# FACILITATION OF SOCIAL INTERACTION AND ADAPTATION RESOURCES OF PRESCHOOLERS WITH ASD

*Elvira Sadretdinova, Veronica Vasina, Vlada Kugurakova*

**Abstract.** The purpose of the research is to study the facilitation (improvement) of social interaction and the dynamics of adaptive resources of preschoolers with ASD, depending on gender and age. The analysis of scientific literature has shown that timely diagnostic examination and correctional assistance to children with autism spectrum disorder can reduce or completely eliminate communication disorders, thereby ensuring further successful interaction with peers and adults. The survey was attended by 20 children with ASD 4-7 years old from the KFU kindergarten for preschoolers with ASD "We are together". In Kazan (Republic of Tatarstan, Russia), there were more boys in the sample - 18 (90%), only 2 girls (10%). The monitoring showed a regression (decrease) in the deficit of mental development according to the parameters: "social", "neuro-dynamic and regulatory", "cognitive", "motor" development.

It was found out that 15 people (75%) received a low result in all parameters, 4 preschoolers with ASD (20%) had an average level of development of adaptive resources, and 1 girl (5%) had high indicators. It turned out that the adaptive resources of children with ASD do not depend on age, but on the complexity of the defect. During the 8 months of correctional work, the average indicators by levels have not changed much, although there are some successes in individual children.

**Keywords:** facilitation of social interaction, adaptive resources, autism spectrum disorders, preschoolers.

## **Introduction**

Research activities in the field of childhood autism are becoming increasingly important in Russia, including due to the growing number of children with unformed communication skills. The term "autismus" was introduced into scientific use by the Swiss psychiatrist E. Bleuler in 1911, currently autism is most often defined as a separate syndrome with a stable course and lifelong character; since the mid-60s of the last century, its differences from schizophrenia, mental retardation, and other developmental disorders have been investigated. The question of the mental characteristics of children with autism spectrum disorders was considered by practical researchers K.S. Lebedinskaya, O.S. Nikol'skaya, I.I. Mamaichuk, E.R. Baenskaya, M.M. Liebling, a recent study by D.M. Dosshe is also of interest [21, 36].

The goals of communication are to serve the needs of survival, cooperation, maintaining relationships between people, receiving and com-

municating the necessary information to realize the world and one's place in it. [46]. Alternative forms of communication are used in communication with persons with impaired intelligence, with communication difficulties [25].

At the end of the last century, Baron-Cohen S., Leslie A.M., Frith U. [12] conducted research on the "theory of mind" in autism, the abilities of children with autism to understand other people's mental states, facilitating the process of socialization. Researchers have identified psychosocial correlates of dyslexia that act throughout life and inhibit the processes of adaptation in society. They conducted a longitudinal study to identify early indirect and direct signs of speech comprehension by children with ASD in the formation of their recognition of a fragment heard or read.

The authors of this article in their work relied on studies of working memory, verbal abilities and group skills in children with ASD conducted by Cain K., Oakhill J., Bryant P. [15], Catts H.W., Adlof S.M., Weismer S.E. [17], Carnahan C., Musti-Rao S., Bailey J. [16], however, speech behavior is not reflected in their works.

It is known that communication disorders in children with ASD usually manifest themselves very early and tend to persist until the end of life with some variations [10; 37]. A child with a similar diagnosis has all stages and forms of preverbal and verbal communication disrupted. Most of these children avoid direct eye contact, they have difficulties understanding the expression of someone else's face, emotions and gestures, an important feature of children with autistic disorders is a lack of social and emotional reciprocity. But not all children with ASD actively avoid eye contact in the process of trusting relationships, although they do not use it for successful social cooperation (Sviridenko, Ermakova, 2019). There are different forms of violations: when there is speech, but there is no communication, when there is no speech, but it is possible to use alternative communication.

Russian teachers and researchers I.A. Nigmatullina, A.I. Akhmetzyanova [8], N.V. Borisova, A.V. Khaustov, S.A. Rosenblum, L.V. Shargorodskaya [14], M.A. Iosifyan and others made a great contribution to understanding the pedagogical aspects of the problems of socialization of children with autism [25].

### **Purpose and objectives of the research**

In this study, we wanted to study the facilitation (improvement) of social interaction and the dynamics of adaptive resources of preschool

children with ASD, depending on gender and age, according to the parameters: “social”, “neuro-dynamic and regulatory”, “cognitive”, “motor” development.

### **Literature review**

Many researchers and scientists have focused attention on the issue of verbal behavior, social interaction. Behavioral analysts have focused on sources and variables that control the functioning of language as pure behavior (Catania, Mathews, & Shimoff, 1990; Greer & Ross, 2005; Michael, 1984; Skinner, 1957) B. F. Skinner (1957), M. L. Sundberg (2007) and others emphasized that the environment contains an infinite number of nonverbal stimuli and complex multiple relationships, and in the absence or insufficient formation of verbal actions, the use of conventional signs may be limited. Violation of interaction with others is clearly manifested in the violation of the communicative function of speech in children with autism spectrum disorder. Children with autistic disorders rarely ask questions to the interlocutor, most often do not give an answer to questions addressed to them, or can answer in monosyllables [23]. But at the same time, this category of children may have developed “autonomous speech”, a conversation with themselves.

Often these children may have delayed verbatim reproduction of previously heard in life. Such children have pathological speech forms: delayed and immediate speech echolalia, chanted pronunciation, unusual lingering intonation of neologisms. Conversational skills are the most preserved in Asperger’s syndrome in children with autism spectrum disorder.

Speech as behavior in applied behavior analysis has been studied for more than half a century. An outstanding American psychologist paid great attention to the importance of verbal behavior in the formation of behavior in general, especially in children at an early stage of speech and communication development. It included all verbal actions – speech, reading, writing. B.F. Skinner was sure that the child learns to speak due to the influence of various verbal stimuli and reinforcements on him.

In his research, B.F. Skinner (1957) paid great attention to working with children with ASD and made a great contribution to the development of the method of analyzing verbal behavior and applied behavior analysis in general. One of the most significant and serious results of his research is the classification of types of verbal behavior (The Behavioral Classification of Language). This classification describes nine types

of verbal behavior, according to which a child with ASD can effectively interact and communicate, provided that he learns to use words within each type.

The analysis of scientific literature has shown that timely diagnostic examination and correctional assistance to children with autism spectrum disorder can reduce or completely eliminate communication disorders, thereby ensuring further successful interaction with peers and adults [51]. The main task of specialists is to form the ability of children with ASD to master functional speech, teach them social ways of communication and develop their ability to use verbal and non-verbal means of communication and forecasting [37].

Depending on the availability, level and combination of resources, preschoolers with ASD try to build models of adaptive behavior. The aspect of adaptation combines two approaches – procedural and effective.

A.A. Rean [38] suggests analyzing this phenomenon procedurally, based on the allocation of time characteristics – the length and stages of adaptation itself. The productive aspect of adaptation is used as a core element in assessing the success of the formation of adaptive resources. Here, the object of review is a complex of those mental qualities that have been formed in the process of adaptation (knowledge, skills, skills, personal qualities, features of interpersonal interaction).

S.A. Larionova [27] believes that “the adaptive resources of a personality are a number of its socio-psychological and individual characteristics that determine the degree of adaptation of a personality in specific social conditions.”

Dominant adaptive mechanisms and personality traits develop in parallel and mutually dependent. If adaptation provides for “adaptation of an individual to environmental conditions, the formation of an equivalent system of relationships, role harmony of behavior and integration of personality into social groups,” then the adaptive resource of preschoolers with ASD is a source, reserve, fund, opportunities, additional funds.

T. Shibutani considers adaptation as “a community of adaptive reactions, which is based on the active development of the environment, its modification and the formation of irreplaceable conditions for successful activity [41]. According to I.A. Malashikhina and L.F. Artemenkova, the main aspect of social adaptation is the recognition of a person's social role, and the productivity of adaptation is directly related to how well he perceives himself and his interpersonal relationships [29]. For

preschoolers with ASD, adaptive resources are what a child has, what can be incremented, accumulated, developed for successful socialization.

The psychological support unit for children with ASD in order to successfully socialize relies on scientifically based teaching practices for behavioral disorders, effective methods for improving reading comprehension in children with autism spectrum disorders, which were studied by Cook B.G. [19], Accardo A.L. [1], which is reflected in the model of mental states of people with autism [11]. Studies of communication problems of people with ASD are presented in the works of Drew A., Baird G. [22], Thurm A., Lord C. [47], Shumway S., Wetherby A.M. [43], Warreyn P., der Paelt S., Roeyers H. [53], Vasina V. [50]. Non-contact and stereotypies are noted as the main signs of autism spectrum disorders. The crises of the first years of life often exacerbate the processes of maladaptation, especially in dysfunctional families. Communication abilities, value orientations, and attitudes towards social relations in children with ASD depend on the microsocial context of life and on the complexity of the disorder itself; organic disorders exacerbate social problems and make adaptation difficult [31].

The study of social interaction skills in preschoolers with ASD revealed the need to study the facilitation (improvement) of social interaction and the dynamics of adaptive resources [35]. Proponents of the procedural approach [30; 38] consider the adaptation of personality as a process and the basis for the formation of neoplasms, new mental qualities. The effective approach builds adaptation in four areas – affective, regulatory, cognitive and communicative [27]. The study of adaptive resources of the individual as reserves of the organism, which he can spend on the process of adaptation, has broad prospects in the modern education system (Adaptation of personality in the modern world, 2011). One of the resources of socialization, scientists note the predictive ability of preschoolers with an autosppectrum [9; 3]. According to I.A. Nigmatullina, A.A. Tvardovskaya, A.V. Vakhrusheva [34], difficulties of verbal and social behavior of preschoolers with ASD require correction of their skills in “social”, “neuro-dynamic and regulatory”, “cognitive”, “motor” development.

Facilitation of social interaction is a process of influencing social interaction in society in the presence of a facilitator (observer), it is a socio-psychological phenomenon, expressed in the fact that the presence of a facilitator affects the system of this interaction, it is the building of

the process of effective communication, including preschool children with ASD (Vasina, 2020).

### **Methodology**

This work is based on the social studies of T. Shibutani [41]. The data analysis is based on the theoretical aspects of assessing speech skills and social interaction in preschool children with ASD in the conditions of psychological and pedagogical support of kindergarten [35].

The study was conducted in the city of Kazan (Republic of Tatarstan, Russia).

Among the empirical research methods: Neuropsychological diagnostics of preschool children [37].

The methodology is a systematic presentation of the theoretical foundations and methods of neuropsychological diagnosis of normotypic preschool children from 2 to 6 years old, which makes it possible to diagnose older preschoolers with ASD. The theoretical issues of the specifics of neuropsychological diagnostics of children, the possibilities and advantages of the Luria approach for identifying symptoms of underdevelopment, deficiency and atypical development of children are analyzed. Age-differentiated methods are described and an album with stimulus material for neuropsychological diagnostics of preschoolers is given. The principles, criteria and scales for quantitative evaluation of the results of neuropsychological analysis and their dynamics in the course of correctional and developmental training are given. It is intended for psychologists, teachers, speech therapists, speech pathologists, doctors. The publication consists of three parts: Part 1. Theoretical and methodological foundations of neuropsychological diagnostics in preschool age Part 2. Diagnostic album for neuropsychological examination of preschoolers Part 3. Forms of protocols for neuropsychological examination of preschoolers and questionnaires for their parents.

Observations, qualitative analysis, Student's T-test were carried out.

The article presents a study of the academic year 2022-2023 for 20 preschoolers with autism spectrum disorder 4-7 years old from a special (correctional) kindergarten for children with autism spectrum disorders "WE ARE TOGETHER" of the Federal state Autonomous educational institution of Higher education "Kazan (Volga Region) Federal University" in Kazan. The names of the participants were replaced with initials.

### **Results**

Many preschool children with autism spectrum disorders have difficulties in communication due to impaired understanding of adult

and peer speech, due to difficulties in expressive and receptive speech. Therefore, special attention in children with ASD is paid to violations in communicative behavior, in the communicative function of speech. Since the need for the formation of communication skills is one of the leading directions in correctional work for autism spectrum disorders, there is a need to assess the level of their formation in a child in dynamics.

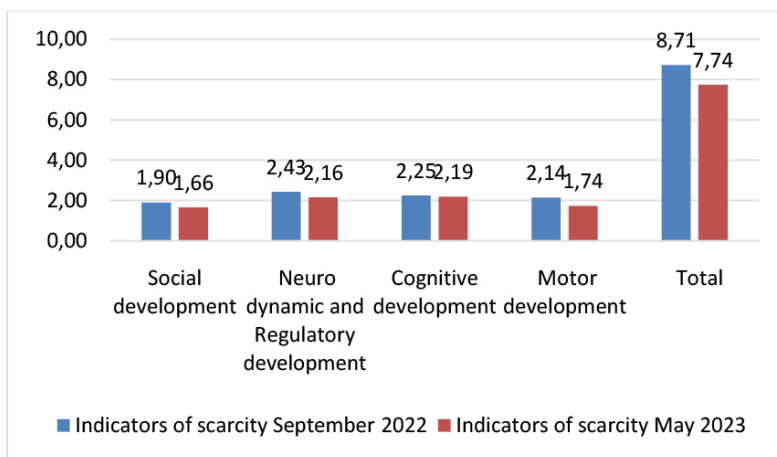
In the sample of children with ASD 4-7 years old, there were again more boys - 18 (90%), girls only 2 (10%). It cannot be said that the adaptive resources of girls with ASD are better developed, although one showed fairly high results on all tests, and one got into the values of statistical norms for a group of 20 people.

Manifestations of “social”, “neuro-dynamic and regulatory”, “cognitive”, and “motor” development were studied as adaptive resources of preschool children with ASD.

According to the severity of the delay in formation, the child could score a maximum of 3 points in the surveyed areas, i.e. 12 points in total for 4 indicators.

Here are the average activity indicators of preschoolers with ASD.

No one scored high points (from 2 to 3), although one girl (5%) showed the highest result in this sample. Only 4 children (20%) showed a level of development sufficient for the manifestation of the adaptation resource.



*Figure1 Reduction of the levels of deficit development of preschool children with ASD for 8 months of correctional work*

Currently, there is a tendency to increase the number of children with autism spectrum disorder. This category of children is characterized by a combination of qualitative disorders, where one of the main manifestations is difficulties in verbal behavior. Timely diagnostic examination and correctional assistance to children with autism spectrum disorder can reduce or completely eliminate communication disorders, thereby ensuring further successful interaction with peers and adults.

When processing the results, it was taken into account that the total amount of points for all indicators is calculated, a conclusion is given about the level of development. In total, preschoolers with ASD received 8.71 points out of 12 possible maximum points of developmental deficiency, i.e. they demonstrate an overall low level, which improved somewhat by the end of the school year to 7.74 points of deficiency.

No one scored high points, although one girl (5%) showed a sufficient level of communication abilities, in this sample this can be considered a high result. At the average level of communication development, 20% of preschoolers with ASD, although this is not visible in the average values of the test due to the total number of low and very low results (75%).

Here are the average indicators of social development of preschoolers with ASD, the indicators improved from 1.90 points to 1.66 points of developmental deficiency.

The communicative qualities of a person include empathy, benevolence, non-mediocrity, authenticity, sincerity, openness in communication, confrontation, initiative.

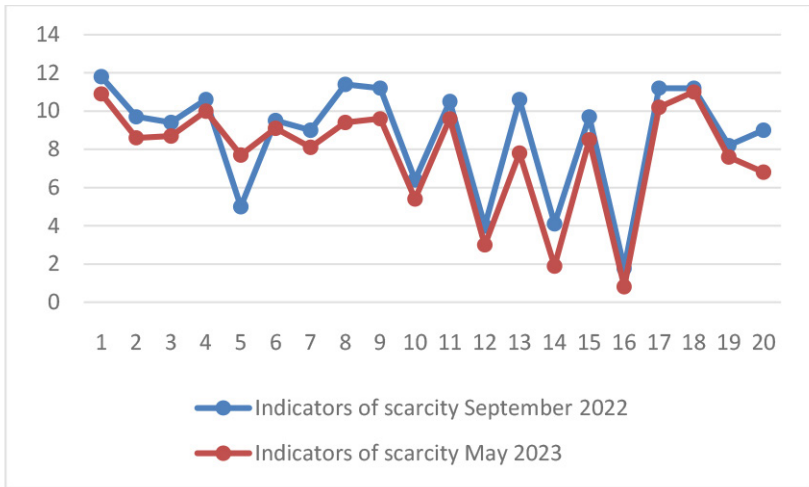
Neuro-psychological and regulatory development was studied in one block of organizational abilities and improved from 2.4 points to 2.16 points of deficiency in 8 months of correctional work.

Cognitive actions and skills include perceptual actions, operational skills in counting, memorizing, reading for older children, errors decreased from an average of 2.25 points to 2.19 points.

Motor development was supposed to be the most well developed in children with ASD, which was not justified due to great awkwardness, stiffness of movements, but improvements are also noticeable from 2.14 points to 1.74 points for the academic year.

Although the average values are not indicative in individual work with preschoolers of this category.

It was found out that almost all respondents do not have active speech (80%), so the diagnostician voiced the tasks, and the child with ASD showed a drawing or a photo.



*Figure 2 Dynamic changes in the decrease in the deficit development of adaptive resources of 20 preschool children with ASD over 8 months of correctional work*

In total, according to 4 parameters, preschoolers with ASD, even during the academic year of correctional work, demonstrate an overall low level, the average indicators for the levels have not changed much, although there are some successes for individual children.

Preschoolers with ASD demonstrated a fully developed understanding of adult speech, but there was a complete or partial absence of verbal communication (more often at the level of echolalia). These are children who possess nonverbal means of communication.

It is possible to expand the understanding of adaptive resources of preschoolers from ASD to affective, regulatory, cognitive and communicative spheres; in organized and free activities; in situations of interaction with peers, parents and other adults.

It was found out that 15 people (75%) received a low result in all parameters, 4 preschoolers with ASD (20%) had an average level of development of adaptive resources, and 1 girl (5%) had high indicators. It turned out that the adaptive resources of children with ASD do not depend on age, but on the complexity of the defect.

During the analysis of the Student's T-test (at the level of 0.01), it was found that the individual differences in the results of September 2022 and May 2023 are significant and reliable, although minimal.

Due to the uneven development of children with ASD, it is impossible to unambiguously divide them into age-related communicative groups: in one of the skills, a child may correspond to the age norm (or even be ahead of it), but lag far behind in others, and due to this, a simple calculation of the total number of points in testing is not indicative and cannot act as an objective assessment.

The dynamics of the development of skills of children with ASD during the year of longitudinal study is minimal, inconsistent and does not depend so much on age as on the complexity of the defect. A highly functional younger child may be better developed and socialized than an older preschooler.

With specially directed training, children with autism spectrum disorder master a small amount of gestures, much less than other people, but spontaneous use is almost inaccessible to them. In severe forms of this disorder, there is a total absence of eye contact, gestures and facial expressions. 70% of respondents at the control stage cannot interpret the facial expressions and views of other people, have difficulty expressing their own emotions. Thus, children with autism spectrum disorder have disorders of almost all mental processes, which is expressed in the features of the emotional-volitional sphere, verbal and nonverbal behavior, social relationships and affects their development, adaptation and life activity in general.

Severely restricted interests, preferences in food and clothing, frequently repeated actions, fear of unfamiliar spaces, inadequate reaction to light and sound characterize these children. It is noted that parents take an active part in the social adaptation of their children and often accompany them all their lives.

The dynamics of the development of verbal and social interaction skills in preschoolers with autism spectrum disorder can take place in a playful way in the system of additional education. The main and main task of additional education specialists is to form the ability of children with ASD to master functional speech, teach them social ways of communication and develop their ability to use verbal and non-verbal means of communication in the process of positive reinforcement. Speech development can occur at different times, but regardless of this, even after a year of correctional work, most children with ASD have violations of the formation of speech utterance and insufficient formation of the communicative function of speech.

## **Discussion**

A preliminary hypothesis was put forward that the study of facilitation (improvement) of social interaction and adaptive resources of preschoolers with ASD consists of studying the manifestations of “social”, “neuro-dynamic and regulatory”, “cognitive”, “motor” development depending on gender and age. The study showed that the list of possible elements of adaptation resources in the future, apparently, will have to be expanded. An integrated approach to the study consists not only in examining and accompanying these children by different specialists, but also in tracking mental processes, states and properties in four areas – affective, regulatory, cognitive and communicative.

As a recommendation for building a comprehensive model of support for preschoolers with ASD, it should be noted that the difficulties of verbal and social behavior of preschoolers with ASD require correction of their skills in the manifestation of activity, communicative abilities, in the recognition and manifestation of emotions, in elementary forecasting of future events.

The results of the study can be used in the practical activities of defectologists. The data obtained are a good basis for various kinds of assistance measures in building effective communications, for the development of programs for socio-psychological correction, socialization and adaptation of children with ASD.

During the analysis of the received data, it was determined:

1. All respondent children have insufficiency in all skill groups, as well as behavioral and other difficulties.
2. The least formed are the request skills.
3. Due to the uneven development of children with ASD, it is impossible to unambiguously divide them into age-related communicative groups: in one of the skills, a child may correspond to the age norm (or even be ahead of it), but lag far behind in others, and due to this, a simple calculation of the total number of points in testing is not indicative and cannot act as objective assessment.

Thus, the results showed that all young participants in the study need to repeatedly undergo an intensive correctional program, including the formation of understanding and acceptance of the communication situation (communication skills); teachers need to continue working on teaching children social and gaming skills, cooperation.

The prospects of the study should indicate the possibility of a quantitative increase in the sample with a separation by age and gender of respondents.

## Conclusion

The monitoring showed a regression (decrease) in the deficit of mental development according to the parameters: „social“, „neuro-dynamic and regulatory“, „cognitive“, „motor“ development.

It was found out that 15 people (75%) received a low result in all parameters, 4 preschoolers with ASD (20%) had an average level of development of adaptive resources, and 1 girl (5%) had high indicators. It turned out that the adaptive resources of children with ASD do not depend on age, but on the complexity of the defect.

This study examines the adaptive resources of preschoolers with ASD, depending on gender and age, and develops individual recommendations for facilitating social interaction. For further research, the understanding of the adaptive resources of preschoolers with ASD has been expanded into affective, regulatory, cognitive and communicative spheres; in organized and free activities; in situations of interaction with peers, parents and other adults.

In the sample of children with ASD 4-7 years old, there were naturally more boys than girls.

Due to the uneven development of children with ASD, it is impossible to unambiguously divide them into age-related communicative groups. A simple calculation of the total number of points in testing is not indicative and cannot act as an objective assessment. The adaptive resources of children with ASD do not depend on age, but depend on the complexity of the defect. In the correction, it is necessary to take into account that a highly functional child of a younger age may be better developed and socialized than an older preschooler.

For practical activity, it is important to substantiate, plan, and develop individual correctional and pedagogical programs for the development of communication skills in preschool children with ASD based on the data obtained, which will improve children's communication skills and transfer them to a higher and higher quality of life. The results of the study will serve in the future to select effective technologies of socialization and education and to build a comprehensive model of support for children with autism spectrum disorders. Kindergarten teachers need specific individual results of each child with ASD to develop and implement adapted basic educational programs of preschool education, and active parents should be involved in behavioral therapy programs to participate in the formation of speech behavior of their children with ASD.

The main task of specialists is to form the ability of children with ASD to master functional speech, teach them social ways of communication and develop their ability to use verbal and non-verbal means of social interaction.

### **Confession**

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## CHAPTER 2

Scientific research on psychology,  
pedagogy and digital transformation  
in formal and informal education

# EDUCATION FOR AN UNFORECAST FUTURE

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**Abstract.** The authors discuss the phenomenon of an unforecast future in the context of its impact on the higher education system. How education can change to try to prepare students to gain skills useful in an unforecast future.

**Keywords:** unforecast future, education, transversal skills, flexibility of education.

*“No problem can be solved from the same consciousness that created it.  
Albert Einstein”*

We have entered an era of an unforecast future, a time of great uncertainty. And if previously this was due to the increasingly rapid pace of technology development and the disappearance of a number of professions. Now this is due to the impossibility of forecast possible future developments, and a significant narrowing of the event horizon. We, like the desperate companions of Magellan, peer into the foggy future, trying to guess in the unclear outlines whether there is a safe passage ahead into the future, or whether we are destined to crash against as yet invisible barriers.

For generations we have worked and lived in times that we thought were certain. But the COVID-19 pandemic has already changed our collective hopes for sustainable development and forecast of the future.

The unforecast future affects all aspects of our lives, including education. The traditional system of transmitting knowledge from generation to generation has exhausted itself. The volume of information in the world increases by one and a half times every year. And digital media cannot do this. And although the human brain can accommodate 1000 Tbyte of information, a person may not have enough biological time to assimilate this volume.

And it would seem that initially the solution was found in narrow specialization. In the translation of a specific segment of knowledge from person to person within a narrow specialty. But with the development of technology, it quickly became clear that teams of narrow and highly qualified specialists should be led by people with a significant breadth and volume of knowledge. To be able to both set tasks for narrow specialists and evaluate the result of implementation, and its relationship with the results of other teams.

And the next step in education was an attempt to train such highly qualified intellectuals in selected elite educational institutions with preliminary careful selection of candidates (for example, The Ivy League universities).

But gradually, with the increase in the volume of knowledge, this concept has almost exhausted itself. Perhaps the time has come to bring up for discussion the issue of changing the very concept of knowledge translation in education.

In the past, the answer to the question of what you want to be when you grow up was simple: doctor, teacher, lawyer, designer. Schools and universities functioned to provide a specific type of training to ensure advancement in a chosen specialty. Today the situation has changed significantly. According to the World Economic Forum, 65% of the jobs that university graduates will be able to fill do not yet exist. [1] This creates an unpredictability of the educational path. Teachers do not know what knowledge students will need even in the near future.

The question arises: what is the ultimate goal of higher education today? Acquire and transfer knowledge? And what should education become in an era of an unforecast future?

One answer is educational flexibility. If in previous years education and teachers simply adapted to predictable changes, now educators must teach unknown skills and prepare for unpredictable changes. In order to properly respond to unforecast future changes, the educational system must become flexible and quickly adapt to new requirements.

Research results have revealed that it is preparedness for the unknown and unforecast future, and not the transfer of specific knowledge, that is the most important factor for students. Several major changes must occur in our education system to help students prepare for an unforecast future. Firstly, change the nature of what students are taught, not knowledge transfer, but teach life skills. Second, teachers must take on a mentoring role that allows students to take ownership of their own learning. Third, transform the educational environment into a safe, knowledge-supportive, inclusive and adaptable space. Fourth, provide your students with physical, psychological and emotional support.

One of the possible options is teaching not knowledge, not the classical translation of knowledge, but teaching transversal skills. You may also see the terms soft skills, cross-cutting skills, or transferable skills.

As a starting point for this terminology, we can consider the founder of cognitive psychology, Ulrich Neisser [2], who came to the conclusion

that human cognitive activity is better explained and related to the process of acquiring skills” (Nisser, 1976). In 1996, Bernard Ray [3] made the following clarification: “transversal (horizontal) competencies in which competence copes with a range of situations” (Ray, 1996).

The final point on this term was put by a working group of experts created by a group of member states of ESCO (European Skills, Competences, Qualifications and Occupations). ) is the European multilingual classification of Skills, Competences, Qualifications and Occupations) and the Advisory Group on the European Qualifications Framework to clarify and structure existing terminology on transversal skills. [4]

Most skills development programs focus on “hard”, functional or specialized skills acquired through classical vocational training, direct knowledge transfer. However, most employers require cross-cutting skills that help employees adapt to change throughout their careers. Regardless of the field of activity.

Transversal skills are skills that are generally considered not directly related to a specific job, task, academic discipline, or field of knowledge and which can be used in a wide variety of situations and work conditions. These skills can also be called “soft” or “transferable” skills because they are not sector or job specific. The term “transversal” refers to the way these skills “cross” different tasks and roles.

There are usually six types of transversal skills:

### **1. Critical and innovative thinking**

Critical thinking is the ability to analyze facts and form your own opinions. “Critical” in this sense does not have any negative meaning. A person with developed critical thinking conducts his own research, rather than trusting the opinions of others, is attentive to his thoughts and checks how logical and reasonable they are. Critical thinking involves the logical and systematic interpretation of information, that is, the use of critical thinking allows people to interact with other people’s ideas, consider different points of view, and come to logical, reasoned conclusions. Critical thinking includes several important elements.

First, it requires the ability to identify the problem and clearly understand the context. In addition, an important component is the active search and evaluation of information from various sources. Also, the reliability of information and the reliability of sources are assessed. It is about seeking to recognize biases and logical inconsistencies in arguments.

Second, critical thinking implies having logical reasoning skills, developing sound arguments, and identifying weaknesses in the reasoning of others. In addition, people who think critically are open-minded to new ideas. At the same time, they are cautious and refrain from making hasty judgments. Critical thinking is a weapon against information manipulation, it allows people to navigate the enormous amount of information immediately available and in a huge amount [5].

Researchers argue that the ability to compare different points of view and avoid categorical opinions is directly related to access to information, education and technology - resources that are a priority for democratic societies.

Critical thinking is one of the main concepts of higher education, and it is difficult to imagine a European university that does not recognize its importance. The true mission of education is usually described as developing critical thinking skills. This is especially important in higher education because it is through a university education that students prepare to enter the job market by acquiring and improving the skills with which they can meet the challenges of an unforecast future. This happens by using what they have learned over the years spent at university, as well as the competencies they have acquired and which are required in their work. In this sense, the role of the teacher is to guide and regulate students, encouraging them to actively participate in the development of critical thinking. Such a process includes the theoretical, practical and motivational components of critical thinking: acquaintance with implied concepts and understandings that enrich the knowledge base; mastering, improving and expanding the set of skills necessary for reflective thinking; increased inclination to apply knowledge and skills in practice. The generation of new knowledge occurs unstoppable and at tremendous speed, which makes the skill of distinguishing from a huge mass of information only relevant, reliable and suitable for further use one of the main skills that must be possessed.

As for innovative thinking, it is the ability to generate new and original ideas that do not fall into the realm of established thinking models. This is a complex process that involves searching for new perspectives and new understandings of problems. When it comes to education, innovation means not only staying ahead, but also staying relevant and sustainable in an unforecast world. Thus, it is not simply about disrupting traditional knowledge translation and learning methodologies, but about strategically shaping new methodologies to create new ideas, stimulate creativity, promote collaboration, inclusion and diversity.

## **2. Interpersonal skills**

Interpersonal skills are the face-to-face exchange of thoughts, ideas, feelings, and emotions between two or more people. This includes both verbal and nonverbal components of personal interaction.

Examples of interpersonal skills:

- Emotional intellect
- Motivation
- Active listening
- Mutual respect
- Conflict Management
- Leadership
- Positive attitude
- Team feeling
- Constructive response
- Friendliness
- Verbal communication
- Nonverbal communication
- Written communication

Interpersonal communication is a two-way process, feedback plays an important role in the communication process. The student must have interpersonal communication skills, otherwise the communication between him and the teacher will not be interpersonal. Interpersonal communication skills are necessary for students for the following reasons:

a) Helping students when in doubt. If a student has any doubts on any topic, they can only be dispelled by communicating with the teacher. Therefore, the student must know how to communicate between people. If a student hesitates to interact with a teacher due to fear or lack of self-confidence, then the unclear idea will not be clarified and this will hinder the student's progress in his studies.

b) Fostering friendliness towards others. The student must be friendly with other students. Interpersonal communication with other people helps in forming new friendships with people who have similar views and goals. Being around people with the same mindset and attitude creates a feeling of cooperation and this helps in achieving goals.

c) Progress in your career. Effective communication, confidence and knowledge are essential for job interviews. A student who does not have strong interpersonal skills will often fail the interview and have no

impact on their knowledge. Apart from this, strong interpersonal skills help students find better jobs for themselves, which helps in the growth of their careers.

d) Foster teamwork and cooperation. Interpersonal communication abilities enhance the quality of teamwork among students. A general positive attitude, gratitude to other team members, and working together to solve problems help students develop teamwork skills. It also helps them develop leadership qualities that will help them interact with colleagues and partners in the future. Therefore, it is necessary to improve your interpersonal communication skills every day while you are studying at school and university, so that the inability to communicate does not become an obstacle in your future career.

e) Ethics of interpersonal communication and interaction in social networks. It is very important to remember that whenever you connect to a social network, you are joining a community. Every society has certain rules for discussing topics. You must treat people in your community with respect and kindness. It is very important to respect the boundaries of others. Treat others the way you would want them to treat you. When communicating in a group discussion, the student must understand when to speak and what to say, and give others the opportunity to speak. It is necessary to have a sense of cooperation and tolerance towards others, which helps them become better people.

f) Improving cognitive functions. In the process of communicating, listening and understanding the topic of lectures, students' concentration and composure improves. Focus on the subject of study is a must for a student to succeed in life. Improving cognitive functions also improves their communication skills, memory, concentration and thought processes.

### **3. Intrapersonal skills.**

Intrapersonal skills are self-awareness of one's own strengths and weaknesses. Intrapersonal skills are a form of self-communication, as they are related to what is happening inside a person. Intrapersonal skills, including emotional intelligence, enable a person to manage emotions and use effective thought processes to solve problems in personal and professional relationships. Intrapersonal skills include:

- Introspection
- Self-confidence
- Perseverance

- Openness to change and new ideas
- Strategic Thinking
- Ability to overcome distractions
- Time management
- Sustainability
- Self-discipline

Knowing your personality strengths and working on your weaknesses can help you achieve success in your work and personal life.

#### **4. Global citizenship.**

It is a term that summarizes the social, political, environmental and economic actions of globally minded people and communities on a global scale. This term is based on the assertion that individuals are members of numerous, diverse local and international organizations, rather than isolated entities from isolated communities, that each person is a citizen of the world. [6]

The concept of global citizenship is embedded in the Sustainable Development Goals through SDG 4: Ensure inclusive and quality education for all and promote lifelong learning, which includes global citizenship as one of its goals. By 2030, the international community has set a goal for all students to acquire the knowledge and skills needed to promote sustainable development, including global citizenship. Universities have a responsibility to promote global citizenship by teaching their students that they are members of a larger global community and can use their skills and education to contribute to that community. [7]

This means that a person places his membership in the “world community” above his membership as a citizen of a particular nation, and that the duties or rights of such a person relate to the broader concept of “humanity.”

In the education system, the concept of global citizenship education is beginning to prevail over concepts such as multicultural education, education for sustainable development and international education, etc.

#### **5. Media and information literacy.**

Media and information literacy is essential to ensuring quality and universal access to education and lifelong learning. Media and information literacy is a comprehensive concept proposed by UNESCO in 2007 and covers all competencies related to information and media literacy,

including also digital or technological literacy. In the context of this literacy, the most important are the various interrelated competencies necessary to improve people's interaction with information and media, including for educational purposes. [8]

Media and information literacy consists of a set of skills that are important for understanding when and what information is needed, where and how to obtain this information, critically evaluate and analyze it. The concept of media and information literacy extends beyond the boundaries of communication and information technology and encompasses learning, critical thinking, and interpretive skills outside the scope of professional and educational knowledge. The reason is that we live in a “post-truth” Internet era, filled with content that can be misleading, and it is becoming increasingly clear that something other than simply combating disinformation online is required. Media and information literacy aims to enable people to think critically about the media.

For young people, media and information literacy classes need to be integrated into formal education curricula to help them participate in the increasingly complex digital landscape. It is important to understand that this is not just about protecting young people from unwanted information. It is not enough to simply turn off the TV screen or computer. The digital information environment does not just influence our culture, it is our culture. In addition, such programs should also include other groups of people, such as older people, which could help enable their communication and participation in public life, such as access to a variety of services that are increasingly digitized.

## **6. Cross-disciplinary education.**

Cross-disciplinary learning refers to educational activities related to a subject across disciplinary boundaries and without any integration with other disciplines. Cross-disciplinarity means that topics are studied using methodologies from unrelated disciplines.

In education, cross-disciplinary collaboration refers to the collaboration of teachers from different fields to simultaneously teach students the same topic from different perspectives, thereby teaching students to understand several points of view.

Cross-disciplinarity is the ability to apply knowledge from outside your field to your work. When you are completely immersed in your field of activity, you can get stuck in a narrow way of reasoning. But if you are willing to embrace new ideas and concepts from outside your

field, this can be a way to gain fresh ideas that you can apply to your work.

To summarize, transversal skills are the larger set of competencies, skills, and attitudes that students need to succeed in an unforecast future. They prepare students for this future: critical and innovative thinking, creativity, interpersonal communication and collaboration, team problem solving, and media and information literacy. These skills can be applied to all types of activities. Such skills are a means of ensuring awareness and effectiveness of actions in the rapidly changing conditions of an unpredictable future. The successful integration of transversal skills and cross-disciplinary education is our key factor for the safety and success of future generations.

Within the framework of the new concept of education to prepare for an unpredictable future, the role of the teacher is rethought, the role of the teacher changes, he becomes a facilitator or mentor for students on their own path in education (individual educational trajectory). Much of the knowledge once delivered directly by the teacher is now available online, making the use of digital technology a critical factor in the transformation. This opens up new opportunities for teachers and universities, allowing students to be the creators of their own learning journey. Teachers' interactions with content and curricula are also changing. This allows teachers to focus on developing transversal skills in students, within joint and creative educational spaces.

One of the possibilities for such a space is the agile classroom, a next-generation learning environment where your students are motivated to work with full dedication and feel engaged in teamwork. Agile classes emphasize collaboration, communication, emotional intelligence, teamwork and self-organization, all skills that will benefit students in all areas of their future lives in an unforecast future.

Agile classes can function in different ways, such as individual projects, problem-based learning, inquiry-based learning, etc. At the same time, the flexible classroom easily adapts to the goals of the curriculum. In an Agile classroom, teachers and students collaborate. Instead of standing at a lectern in front of an audience and giving a lecture while students listen and take notes, the teacher communicates with the students with constant feedback. This is a bit unusual for 20th century classical education, but students can ask questions and engage in reasoned discussions to identify and fill gaps in their knowledge. [9]

Flexible education did not appear by chance; it is the result of targeted work, the result of research into the changing educational needs of society. The educational space of a new transversal type is becoming a primary factor for students to obtain useful skills in an unforecast future, provides equal educational opportunities for every student, and takes into account the needs of everyone. There is no doubt that developing skills to cope with uncertainty and unforecastable change will be critical to the success of today's students in the future. This concept of education in conditions of an unforecast future has significantly influenced modern pedagogy, requiring openness to unforecastability, uncertainty and readiness for the unknown.

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# METHODS AND APPROACHES OF FOREIGN LANGUAGE TEACHING IN DIGITAL DIDACTICS

*Kathrin Köpke*

**Abstract.** Digital education is a new culture of learning and teaching based on digital technologies in the information and knowledge society. The term “digital education” has now largely replaced the term “e-learning”, which is only used when it comes to specific technology-based learning instruments. In contrast, the term “digital education” encompasses the entire digital learning process, such as knowledge of how to use digital media, the specific methods for learning with digital media and content that should be tailored to life in a digitalized world, as well as a changing relationship between learners and teachers. This definition implies that the use of digital learning media does not automatically go hand in hand with new learning methods. Although most digital learning media are sold with the claim of being suitable for self-learning.

Compared to traditional forms of learning, digital learning scenarios offer many possibilities, especially regarding the fulfilment of demands on modern foreign language teaching, such as individualization of the learning process, self-control of one’s own learning process, cooperative learning, and the efficient use of the learners’ foreign perspective in the sense of intercultural foreign language didactics. In the first part of this article, these advantages are presented in detail and criteria are mentioned that should help to ensure the success of learning in digital learning environments.

Cultural-historical precursors of digital learning scenarios are traditional distance learning, learning programs on CD-ROM (Computer Based Training/CTB), learning programs on audio cassettes and educational television. In digital learning scenarios, the various aspects of these forms of learning are synergistically linked. The blended learning model comes closest to the digital learning scenarios. In blended learning, attempts are made to develop teaching models that largely integrate electronic media into face-to-face teaching and are extensively based on the use of electronic media in the self-learning phases.

The new possibilities created by digital media require a far-reaching reorganization of learning and teaching and thus also of the traditional role of teachers, learners, and teaching materials. Possible learning approaches in digital didactics and the prominent importance of acquiring learning strategies as a basis for learning within digital learning environments are presented and described in the second part of the article.

**Key words:** digital learning media, digital teaching methods, digital learning scenarios, blended learning, learning strategies.

The demand for a targeted, situation-appropriate application and integration of digital media content in foreign language teaching is not

a recent development. In an increasingly digitalised society, learners' viewing, reading, writing, listening and communication habits automatically change, and so do the learning processes themselves. The question of how digital media and tools can be used in the classroom in a way that is appropriate and beneficial to learning is closely linked to the advantages they offer over traditional teaching methods.

Digital media not only enable flexible organisation of the learning process in terms of learning location, learning times and learning duration, but also in terms of the learning path and learning content. This is because through various digital teaching offers, teachers can better respond to learners' individual interests and inclinations. It provides learners the opportunity to work intensively and independently. In addition, with the help of attractive multimedia presentations as well as playful learning scenarios, learning motivation can be increased and complicated learning subjects can be presented in a more comprehensible way through visualisations, animations and simulations.

Grass, for example, describes the effectiveness of grammar animations in e-learning programmes using the example of alternating prepositions in German in her study by saying that these relieve the learners cognitively through the form of visualisation and support the construction of mental models [2].

According to Piaget, mental models are cognitive constructions by means of which a person organises his or her experience or thinking in such a way that he or she achieves a systematic representation of his or her knowledge to generate subjective plausibility or to simulate specific processes of objects or events in his or her imagination [11, p. 37].

Kozma focuses primarily on the multimedia nature of new media [4], which should thus be used that information is represented in a manner that promotes the cognitive activities necessary to process the information. Kozma's hypothesis is also supported by other scholars such as Paivio in the context of his theory of double coding [9] and Mayer using the cognitive theory of multimedia learning [6]. Both describe how the systematic use of digital media and the resulting multicodality and multimodality support cognitive processes and induce a greater depth of processing. The theory of cognitive flexibility by Spiro and Jehng [14] also reinforces Kozma's approach that, in particular, new media promote learning processes, especially those of complex structures.

Another advantage of new media is that they can also help to better meet the demand for communication-oriented teaching with authentic

material. Interactive exercise environments as well as extensive knowledge resources, such as glossaries, lexicons, libraries, link lists, literature lists, for the respective learning topic can be made available to learners on a learning platform, for example.

Interactivity not only within a group but also between participants from different countries is increased by the use of digital media. Teachers can utilise an interactive whiteboard with audio and video channels to moderate even heterogeneous virtual class groups without much technical effort [13, pp. 250-252].

A digital learning environment is a virtual place, accessible via an internet browser, where learning content (files, videos, pictures, tasks, links, etc.) can be provided by teachers and edited by learners. A learning management system additionally combines numerous tools useful for teaching and learning in one place.

Furthermore, digital learning environments offer many advantages for the teacher or organiser:

1. the fast, geographically unlimited distribution of learning opportunities;
2. the fast and inexpensive updating of learning content;
3. the efficient production of new learning content;
4. the re-use and further utilisation of individual learning contents.

In many respects, digital media can also relieve the organisational burden of face-to-face teaching: through automatic archiving of learner performance, additional diagnostic tools, automated correction feedback and electronic correction options [16, p. 3].

Some authors point out that certain criteria must be considered in order to exploit the potential that new media hold [13, 16]. Roche, among others, demands that each learner should learn with digital media according to his or her own requirements, i.e. determine the amount of learning, learning speed, skills and topics himself or herself. In addition, depending on the language level and learning goals, learners should be offered different learning paths or learning methods. These are selected together with the tutor or by the learners themselves depending on their learning experience and learning needs. Roche also recommends that learners' individual interests and needs, strengths and weaknesses should be identified at the beginning of the course.

How this demand can be implemented in school or university settings, where a strict curriculum dictates the topics, the amount of learn-

ing and the pace of learning, remains unclear in the respective research literature. Open, action-based forms of teaching that take the learners' perspective and experiences as a starting point and actively use them, could help to support as well as to promote the individualisation of the learning process with the help of digital media. However, the intersection between digital didactics and open teaching methods is a research desideratum.

Nevertheless, it must be emphasised that digital media allow for greater differentiation of given topics through new task formats, such as forum tasks [15], and new genres, such as hypertext or hyperfiction. This possibility should be used to implement the general demand in didactics for the individualisation of the learning process.

Exclusively all authors point out that supervision by a tutor and qualified feedback are decisive prerequisites for learning success in digital learning environments. The communication channels of online programmes, such as chat and forum, should also be well supervised by a tutor. Communication channels should be used regularly, and fixed appointments should be made for this purpose [13, p. 253; 16, p. 10].

Despite the many advantages of new media in virtual learning, the disadvantages cannot be overlooked. The biggest challenge lies in the transfer of real communication to virtual communication. The physical absence of a teacher and a learner means that communication through verbal and non-verbal signals does not take place. On the one hand, the teacher loses important tools to assess and influence the learners' behaviour. On the other hand, the learner lacks important opportunities to receive motivating and comprehension-promoting attention and confirmation signals from the teacher and fellow learners.

There are considerable communicative limitations for all of them:

- to express what one means in a differentiated way;
- to understand in a differentiated way what others mean and how they mean it;
- to assess the communication situation;
- coordinating the flow of dialogue.

Conducting simultaneous (synchronous) group communications is cognitively very demanding for the participants because the entire organisation of the communication process needs to be controlled by explicit, newly defined codes. The new media cannot always completely replace the complexity of direct (face-to-face) communication, but they can provide sufficient alternatives in many cases.

In virtual teaching, it is not possible to make immediate adjustments, on which successful communication always depends. On the other hand, certain corrections can be made more easily from a distance, for example because they are written down or the distance allows more freedom in formulation and correction.

Another disadvantage is that electronic media are not culturally sophisticated. They are characterised by certain communication concepts, namely the way knowledge is conveyed and the use of specific linguistic and visual symbols (icons, smileys).

For example, learning cultures in which non-public communication between teacher and student play an important role are not taken into consideration. Research has revealed that culturally different concepts of media and their use are often unconsciously responsible for the failure of communication [13, p. 256].

The new possibilities created by digital media require a far-reaching reorganisation of learning and teaching, thus also of the traditional role of teachers, learners as well as teaching materials. Digital learning environments enable learners to increasingly organise their learning themselves. The control of the learning process shifts from teacher to learner. In this context, learners as well as teachers must acquire new competences, particularly *e-learning competence*.

For the learner to be able to work independently in a digital environment, he/she will need

- computer and internet literacy;
- self-learning competence: the knowledge of learning strategies;
- competence to cooperate and communicate in networks.

The competences of teachers include:

- familiarity with digital learning environments;
- the creation of (at least simple) digital learning formats;
- organising digital learning scenarios;
- tutoring of online courses [16, p.10].

The learning process with new media is highly self-organised as it resembles the pedagogical approach of blended learning. It combines phases of face-to-face learning in the classroom with numerous online learning phases. In traditional classes, students are used to the teacher determining learning material, learning time and learning pace. In case of online learning, learners are expected to organise and control the learning process themselves. For many learners, using a computer for learning is a new experience and very few have the ability to organise themselves.

Learning autonomy is a skill that needs to be developed in the classroom for independent learning to be successful in general and specifically in an online format. There are different definitions of learning autonomy. Researchers Bimmel and Rampillon define it as the independent reproduction of knowledge outside the classroom, where learners plan, supervise and control their own learning. Furthermore, it implies the independent choice of place and time of learning as well as of the individual educational path and goal setting [1, p. 5].

Mastery of learning strategies is an important prerequisite for learning autonomy. In 1990, Rebecca Oxford developed a detailed classification of learning strategies for foreign language teaching. She distinguishes between direct and indirect learning strategies. Unlike other authors, Oxford does not have a scheme in the form of a syllabus (grammar and vocabulary learning), but the main goals of foreign language teaching are communicative competence and learning autonomy. The direct strategies Oxford refers to are foreign language learning strategies, which include memorisation as well as cognitive learning techniques and compensatory strategies. Indirect strategies include metacognitive learning strategies that help to guide one's learning process, affective learning strategies (anxiety reduction and reassurance) and social strategies that enhance learning through interaction with others [8, p.5].

For students to have a quality learning experience with digital media, it is necessary to understand the influence of the teacher (mentor) on learning autonomy. Through knowledge of the learning strategies described by Rebecca Oxford and targeted teaching, autonomy skills and learning autonomy are improved. The strategies are taught either face-to-face or online. The students then consolidate these skills in independent work phases with digital media.

The great advantage of digital media is that they open up new possibilities through multimedia, multicodality, multimodality, hypermediality and interactivity. Furthermore, they enable behavioural, cognitive and constructive approaches to learning. However, digital learning media alone do not promote learning. It is the teacher (tutor) who must decide which learning approaches to use, when and with which learning group. The relationship between learning approach and autonomy plays an important role.

In foreign language teaching, the teacher can use behaviourist exercises to practise and automate certain grammatical, lexical and phonetic structures. In digital didactics, they are more suitable for self-learn-

ing phases or for groups with little learning autonomy. Closed curricula with defined learning paths help learners, who are not used to working independently, to adapt to the programme. In such programmes, learners can choose where and when they want to learn, yet the learning path and explanations are predetermined. The development of learning autonomy does not take place in such programmes. It should be noted that purely behaviourist learning formats and curricula do not correspond to the current state of foreign language learning research. Nevertheless, all computer programmes are designed according to this approach.

The cognitive approach focuses on the processes of information intake during learning. In contrast to behaviourism, which is based on stimulus-response patterns, the cognitive approach emphasises independent exploration and problem solving. Consequently, learning not only motivates students but also promotes metacognitive reflection. This refers to conscious learning and mastery of learning strategies. It can be concluded that the learning process in foreign language teaching should take place via different learning approaches. The different approaches are generally associated with authentic communication and the use of authentic material. The cognitive approach is well suited for teaching strategies in digital didactics [5, p.28]. Language learning programmes that, as a source of authentic material, use the Internet – containing information for learners, explicit grammatical explanations and offers the possibility of working on the material independently – meet the requirements of the cognitive approach.

The constructivist approach does not assume that knowledge is directly transmitted and that information is simply perceived. The acquisition of knowledge takes place independently and through constant change of the cognitive structure. The process of learning consists of creating new cognitive structures and constantly changing old ones [13, p.20]. The learning process does not happen in isolation, but in interaction with other learners on whom the assumptions about language are tested. The learning process becomes a social process embedded in a specific context and is controlled by the learners themselves. Emotions have a great influence on the learning process. Positive emotions improve it, negative ones slow it down [5, p. 32].

Foreign language teaching based on the constructivist approach should be interactive and communicative. The learner unconsciously creates the language learnt by actively using it, moreover, by testing as

well as recreating the clichés and communication strategies suggested to him/her. The constructivist approach is best suited for learning a foreign language abroad, as the learner can constantly test his assumptions in the respective language environment. However, ordinary teaching cannot emulate this. Therefore, teaching models that simulate such an environment must be used. These include language courses abroad, student exchanges, and open-ended, practice-oriented forms of teaching such as learning scenarios [3].

The advantage of digital media is the recreation of an authentic speaking situation on the internet or the possibility of a simulation game. By using media, learning is tied to specific topics and at the same time the interests of the learners are taken into account because the tasks are accomplished from different perspectives [13, p.21].

Hypermedia is a learning format best suited to the constructivist approach. When working with hypertext, the learner receives information through a combination of hyperlinks. Hypertext is a system of cross-referenced text, images and data in which the user can navigate according to his or her interests. Its structure is dynamic, unlike printed material. Hypertext is not always linear. So the learning goal is achieved individually, the learner works more intensively on topics that interest him/her and skips those that do not. Working with open digital formats requires a high degree of learning autonomy.

The application of these three approaches in digital foreign language teaching is evolved through the development of learning autonomy and knowledge of learning strategies. The teacher's (tutor's) role is to match digital learning media to a particular approach and to select appropriate learning materials. In each of these approaches, teacher and learner have different roles. In the context of behaviourist as well as cognitive approaches, it is the teacher who plans and controls learning processes himself. Nevertheless, both approaches are very different from each other. The constructivist approach is based on the teacher not controlling the learning process, but merely facilitating it [5, p. 34].

### **Conclusion**

The use of media in the classroom depends on the didactic concept behind it, and they only unfold their potential if learners recognise and improve their skills. Digital media alone do not offer solutions to educational problems; there is no developmental determinism in technology. Therefore, the assumption that new media or their new use are a panacea is not correct.

For learners to take advantage of the learning potential of digital media, they need to have relevant skills and competencies, such as computer literacy and mastery of learning strategies. Based on their level of learning autonomy, teachers can use behaviourist, cognitive and constructivist approaches applied in foreign language teaching. Thus, learners are guided and encouraged to act as well as to support effective, successful and superior interaction with digital media.

Digital media can be a source of inspiration for new or modified didactic ideas. They can even put already known didactic methods in a new light. Due to the rapid development of new media, there should be a constant comparison of didactic goals with the learning potential of new media, but also their limits.

Teaching and learning with media in school and university can be realised in a blended learning format. In applications and programmes, the language to be learned is practised through various repetition tasks that are suitable for self-study at home. In face-to-face lessons, only productive speech acts can be practised.

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# DIGITAL STORYTELLING AS A WORKING TOOL IN THE CONTEXT OF A NETWORKED PEDAGOGICAL WORKSHOP

*Ekaterina Plotnikova, Maria Pirogova*

## **Abstract**

**Introduction.** Currently, experimental platforms and pedagogical workshops have become a popular and effective form of interaction between a university and a school, an educational community and a younger generation. One of such networked pedagogical workshops is “Project Activities of Junior School Students in Information and Communication Technologies (ICT) in the Implementation of the Content of the Perspektiva Educational and Methodological Complex (EMC) (the Head – Professor T.A. Zolotova). As part of the workshop activities, students of the schools participating in the workshop create their own projects based on materials of traditional (folklore) culture using a wide range of digital tools. This article aims to reproduce the mastering and the improvement of the “digital storytelling” technology by junior school students.

**Materials and Methods.** The study follows the main stages of elementary school students’ work in creating their own digital projects based on traditional (folklore) culture, including photos, video and audio recordings, music, text and voice accompaniment. Each of the three projects described in the article illustrates the skills children acquire in working with information and communication technologies, the improvement of such skills and the gradual expansion of the projects they create.

**Results.** Digital storytelling as a modern tool of information presentation with the help of computer technology and web design allows on the one hand to talk about complex things in a meaningful and entertaining way, and on the other hand – which is more important for the authors of the article – to arouse the interest of the younger generation in the studied material (traditional (folklore) culture), possibilities of its interpretation and reproduction with the help of ICT.

**Discussion and Conclusion.** Thus, this article presents digital storytelling as a tool that allows not only to deepen students’ understanding of traditional (folklore) culture, but also to effectively apply their knowledge, skills and abilities in ICT in educational and extracurricular activities.

**Keywords:** digital storytelling, networked pedagogical workshop, traditional (folklore) culture, junior school students, ICT, project activities.

## **Introduction**

The networked pedagogical workshop “Project Activities of Junior School Students in ICT in the Implementation of the Content of the Perspektiva EMC” (the Head – Professor T. A. Zolotova) was created [1]

in 2018 on the basis of Prosveshchenie Publishing House Joint-Stock Company (JSC) (Moscow) as a continuation and development of experimental platforms of the Federal Institute for Educational Development (FIED) in the Mari El Republic (MER). Currently, the participants of the workshop and their trainees meet in online forums on the platform of Prosveshchenie Publishing House, where the former have an opportunity to present the school students' projects in their entirety, and the latter have an opportunity to discuss them and listen to the opinions of experts in a particular area.

The know-how of the platforms and, accordingly, of the workshop is primarily focused on the classical and modern folklore collected and systematized by students and teachers of Mari State University (MarSU) in the MER according to "the unity in diversity" [2; 3]. The workshop participants are focused on individual and collective projects created by junior school students based on the traditional (folklore) culture of the peoples of the MER with the help of information and communication technologies. The main interest of the participants of the networked pedagogical workshop is surely the high level of the children's creativity, as clearly expressed in the symbolism, attributes and mythology of the worlds created by the children. At the same time, these components are redesigned in their works and are connected, first of all, with the category of visibility. The visual world the modern children live in undoubtedly influences their perception and understanding of artistic works. The **relevance and scientific novelty** of this article is ensured by the following: 1) the reproduction of the mastering and the improvement of information and communication technologies by elementary school students, in particular, the use of "digital storytelling" technology in school projects; 2) the implementation of "the unity in diversity" in the study (mastering) of the traditional (folklore) culture of the multinational republic.

### **Literature Review**

Among the interactive digital methods that have been actively integrated into the educational process in recent years, digital storytelling deserves special attention. The practice of storytelling is not novel. It has been widely used since the 1990s in various fields, from advertising and marketing to human resource management and journalism. Traditionally, storytelling is considered by researchers as an effective com-

munication technique in advertising [4, 5], management [6] and human resource management [7].

At present, the traditional narrative in penetrating the constantly changing digital environment finds a new life: modern multimedia technologies transform narrative practice into an entirely new format of content organization. The authors of the introductory article “Educational Use of Digital Storytelling” [8] on the University of Houston’s portal define digital storytelling as the art of telling compelling stories using a variety of digital multimedia such as graphics, audio, video and web design. Digital storytelling has been explored in network media [9-10] and is actively penetrating education, becoming the subject of research by many authors [11-14]. Strong interest in digital storytelling in educational environment is common not only for Russian, but also for foreign researchers [15-18], who focus more on the use of virtual and augmented reality technologies, robotics and artificial intelligence, game design and immersive technologies in the context of storytelling.

In scientific publications, storytelling is considered as “a way to convey information and knowledge, as well as to stimulate desired actions through instructive stories” [7]. According to O.A. Fadeyeva, storytelling is a story that appeals to a myth or uses mythological images and scenarios to solve a socially significant problem [5]. A number of researchers believe that stories are the most expressive, fascinating, easily associated with personal experience and easier to remember in comparison with other forms of information transfer [6]. As a result, stories have a strong influence on the formation of human beliefs and behavior [4].

In foreign practice [19-22], the classification of storytelling is supplemented by such types as virtual storytelling (using virtual and augmented reality tools), mobile storytelling (an even more compressed, capacious format of storytelling implemented using a mobile phone or tablet), location-based storytelling (user location data serve as a background (context) for digital storytelling), immersive storytelling (creating the effect of complete immersion in a story, as well as the effect of human influence on the course of further events). Thus, as technology advances, digital storytelling acquires new “technical means of expression”. Moreover, with online services and design tools that can be used to create multimedia stories without special skills or costs, digital story-

telling goes beyond digital journalism and penetrates other fields (web design, advertising and marketing, tourism, museums, education, etc.).

To date, there is no consensus on the role of digital storytelling in the educational process: whether it is a full-fledged pedagogical technology, an independent or auxiliary method, a practical or project activity, or perhaps just a way of transferring and popularizing knowledge. The authors of this article share the point of view of V.Yu. Grushevskaya [11], who believes that the method of storytelling can be used to solve pedagogical problems: conveying information, increasing students' motivation and developing communication and ICT competencies. L.A. Gorokhova [12] extends this list and identifies four groups of competencies that are facilitated by the pedagogical technology of digital storytelling: informative, cognitive, communicative, and research. The first group includes skills of working with ICT tools and information of different types: audio, video, graphic. The second group of competencies (cognitive) includes the ability to think creatively, think critically, set and solve learning tasks, and analyze information. Communicative competencies include the ability to work in a team, to evaluate oneself and others, and to use various forms of communication. The group of research competencies includes the ability to work with data, to collect, systematize and process sets of information, to correctly cite sources, to make references, and to conduct project work. E.A. Ogurtsova and I.D. Zhuravlev [13] emphasize the motivational aspect: storytelling as a means of increasing interest in the school subject.

### **Materials and Methods**

The team of the pedagogical workshop, which was active in the national republic, was, of course, entrusted with the development of general methodological principles and approaches to spiritual and moral education of the younger generation. One of the main principles was the principle of "unity in diversity", which was justified and developed by outstanding national philosophers K. Leontyev, N. Danilevsky and L. Gumilev [2]. In the modern period it was actively used by art scholars under the supervision of K. Sokolov in work with subcultural communities [23]. For our team it provides an opportunity to review the traditional culture and folklore of each of the participants of the educational team.

Over the years, school student projects have been based on children's urban mythology, calendar rituals and texts of the peoples of the MER, epic works of the peoples of the MER, minor genres of the peoples of the MER, children's play folklore of the peoples of the MER, and urban professional (theater) folklore of Yoshkar-Ola. Webinars and online forums of the pedagogical workshop, where the above-mentioned projects were demonstrated, gained some popularity (up to a thousand views on YouTube). However, the greatest interest was aroused by the online forums on modern fairy tale worlds (from 4,000 to 11,000 views on Uchitel. Club), which were based on digital storytelling technology. According to the participants of the pedagogical workshop, the use of this technology in students' team projects contributes to the development of the key 21<sup>st</sup> century competencies, such as teamwork (collaboration), critical thinking, creativity, and is, of course, fundamental to the development of digital, information, technological and media literacy competencies [24]. Three projects, which will be discussed further, were prepared by the team of Lyceum No 26 in close cooperation with the teachers of MarSU. Let us review them.

### **Results**

As mentioned above, projects that focus on classical folklore in a modern multimedia environment were the main goal of the team of the pedagogical workshop. Such projects, in our opinion, can promote children's and youth's exposure to cultural heritage and enrich their social experience. For example, E.S. Romanicheva writes about a "text of a new kind" or "polycode text" [25, p. 10]. [25, p. 10], which shows the peculiarities of students' perception of folklore and literature. Of great interest in this context is the fairy tale, which has a strong aesthetic and moral potential, and also corresponds to the age characteristics of the children who created the projects [26]. Thus, the *first* Digital Storytelling-based *project* of the students (hereinafter we added italics – E.P., M.P.) was developed in accordance with the requirements of the Literature-Based Reading course, the students were asked to invent their own fairy tales by analogy with the works they had read and, if possible, to stage them independently using multimedia. As a result, the gymnasium students created their own digital stories, most of which contained illustrations and computer graphics, which were presented in Power Point using Adobe Scan and Photoshop (Fig. 1). While working with the digital story

even in this project, we could see that the use of narrative techniques increased the children's involvement in individual and team activities and allowed for a more vivid and deeper presentation of the result.



Figure 1

In order to create the **second project**, the story tale “Kolobok 2.1”, which was more complicated both technically and in terms of content, the students studied A.N. Afanasyev and V.I. Dahl, the first collectors and compilers of classical editions of Russian folk tales, discussed the specifics of the genre (tale) in detail with the teacher in class, recalled once again the types of tales (animal tale, household tale, fairy tale) and the structure of a fairy tale [26]. The students worked on this project and at the same time studied the section “The World of Folk Tales”. Kolobok 2.1 is an original interpretation of the fairy tale plot of a well-known Russian folk tale in the context of today’s popular topic of pandemic. For this digital story, the second-graders, under the guidance of older school students, used a wide range of Adobe products, from Photoshop to Premier Elements, to create 15 static images illustrating the main plot

points (Fig. 2). At the same time, the events of the digital story were accompanied by a poetic narrative that they voiced and edited themselves [27].



Figure 2

The **third project**, implemented by Lyceum No 26 in active cooperation with MarSU teachers, was the most ambitious both in terms of scope and technical framework. The interest of the students sparked by the two projects described above and their rather successful implementation based on digital storytelling became the motivation to create their own quest game based on the material of the tales of the peoples of the MER [28]. The teachers set two main goals for themselves and the students. The first was to broaden and deepen the awareness of the younger generation about the heroes of the fairy tales of the Russian, Mari and Tatar peoples, their peculiarities and interrelations, as well as about the origins, essence and interrelations of the national cultures coexisting in harmony in the republic. The second goal was to master new digital tools - transition from static to dynamic. As a result, both goals were achieved.

So, the goal of the player in this quest is to open a magic box. The quest tasks are arranged in three levels – blocks of questions about Russian, Mari and Tatar folk tales, mostly fairy tales, focused on the recognition and differentiation of key characters (protagonist, antagonist, female character (heroine) and a magic object) of a specific folklore genre. The questions in the virtual space are posed by three elders; each question begins with an address to the player, followed by a descriptive characteristic of the sought-for character or magic object. The player first engaged in a dialogue with a Russian, then with a Mari, and finally with a Tatar elder (Fig. 3).

It should be noted that this project is educational. Therefore, after answering a question, the player (quest participant) is not only informed of the correct answer, but also receives a detailed comment and a hint, if their choice was wrong. As a result, almost every question and comment have links to the texts of the tales (Afanasyev's collection, collections of Mari and Tatar tales) and interesting materials on fairy tales and cultural topics available online. Besides, each correct answer in this game is illustrated with computer graphics – 2D vector animation specially created for this project.

In the near future, everyone will be able to complete this quest by visiting the specialized website of the networked pedagogical workshop (the website is currently under development and is planned to be launched at the beginning of 2024).



Figure 3

## **Discussion and Conclusion**

Thus, the participants of the pedagogical workshop carried out extensive work, including research, to study classical and modern folklore of the MER. On this basis, under the guidance of MarSU teachers, interesting awareness-raising projects were and are being created by students. It should be emphasized that the works of classical folklore, in particular the texts of folk tales, organically fit into the space of modern culture – their content is updated, the trend of the so-called “private appropriation” develops. At the same time, the work on mastering classics in the space of modern culture contributes to the strengthening of a number of skills necessary for students to work with folklore texts (reflective reading, cultural narration, analysis in the context of new genres and technologies).

While working on the projects described in this article, the students actively and productively mastered the “digital storytelling” technology, gradually expanding and enriching the range of their technical skills (the students not only selected images and pieces of music, added their own comments, but also, together with and sometimes ahead of a teacher, mastered new tools such as Adobe Scan, Photoshop, Premier Elements, After Effects, etc.). The students’ horizons have certainly broadened. Their ICT skills have increased. When implementing these projects, the children show interest in the knowledge the new projects provide, awareness of their strengths and abilities. The students’ motivation is supported by their self-esteem – “I can do it! I did it myself! Now I know how to do it and I can master something new!”

The authors of the article conclude that projects aimed at the socio-cultural adaptation of the younger generation are extremely important, among other things, for the harmonization of interpersonal and intercultural interactions in modern society.

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# PROFESSIONAL AND PERSONAL DEVELOPMENT OF THE COMPETITIVENESS OF A FUTURE SPECIALIST

*Sergei Lavrentiev*

**Abstract.** From the standpoint of global trends in increased competition, the article reveals **the actual problems** of global crisis phenomena in the political, legal, cultural, educational, economic space, analyzes the requirements for the quality of training students. The social order of the state, the society of employers for a professionally trained, competent, creatively thinking, professionally mobile worker, initiates the search for new ways to increase the competitiveness of a graduate of a modern university, college. **The purpose** of the scientific research is to identify the reasons for the insufficiently high formation of students' competitiveness in the conditions of a modern university and the empirical substantiation of methods, means of improving the quality of education in accordance with the willingness to build a strategy for the development of professional competencies and personal qualities of students. Theoretical identification and psychological and pedagogical analysis, interpretation of the results of the process of forming the competitiveness of students, included and non-included observation and subsequent content analysis of the creative activity of bachelors and masters, their interactive interaction in the educational process of the university served as **the materials and methods** of the study. The study revealed a number of reasons for the low level of personal and professional development of competitiveness, which include: psychological, material, every day, social, educational, etc. On the basis of theoretical analysis and empirical substantiation of the research results, the definition of the professional competitiveness of students is formulated, which consists in readiness for a competently built work activity, purposeful achievement of the planned results based on the effective implementation of the creative, intellectual and personal potential of the student. In **conclusion**, directions for further research are indicated to improve the efficiency of professional training of modern and in-demand specialists in a university setting.

**Keywords:** competitiveness, personal and professional development, quality of education, effectiveness of training.

## **Introduction**

Russian and global trends in the development of society are characterized by overcoming the consequences of global crises and are conditioned by the need to solve a number of problems in the economy, culture, and education. The need to overcome the negative consequences as soon as possible, the growing competition imposes special require-

ments on the quality of higher education. Representatives of government agencies, the business community see a graduate of a modern university as a socially mature person who improves professional skills, as well as a competent employee with special knowledge, skills in the field of innovative technologies, creative thinking and professional mobility of a competitive employee.

The solution of the identified problem of the formation of the competitiveness of university students will become more effective when competitiveness is determined by the ability to actively mobilize personal qualities and the willingness to build a strategy for professional activity in accordance with the system targets of the university educational process.

Theoretical and methodological analysis of the current state of competitiveness in the works of Russian and foreign authors containing the provisions of theories and functions of the current state of the process of formation of competitiveness; included and non-included observation; content analysis of students' creative works; diagnostic methods, including the generalization of independent characteristics, mutual and self-assessment data, made it possible to identify three leading areas, namely:

1. Theoretical study of research literature, identification and experimental justification of the qualities of a professional and personal plan that contribute to the construction of a model of an ideal university graduate.

2. Determination of the reasons for the limited development of competencies (i.e. skills) that is professionally important within a particular field of activity and the search for the most effective ways to overcome them at various stages of professional training.

3. Identification of key principles, patterns, organizational and pedagogical conditions and the search for optimal ways of professional and personal development of a graduate.

### **Literature Review**

It should be noted that in theoretical terms, such a direction of pedagogy as the theory of competitive behavior is, on the whole, far from complete. There is a small number of works in which this topic is cautiously raised. In particular, in the literature, only in the last few years, one can find different interpretations of the very concepts of competition, competitive advantage, competitiveness, competitive environment

in relation to a person and his activities, and even more so to a student of higher education [1].

The term “competitiveness” is used, as a rule, to characterize economic objects: goods, organizations, technologies, management, marketing and others [2, 3]. Exploring the essence of the concept of “competitiveness of the individual”, many authors focus on the definitions of the subject of economic life [4, 5].

In the training course for creative self-development by V. I. Andreev “Competitionology”, the concept of “competitive personality” interpreted as “a person who is characterized by the desire and the ability to high quality and efficiency of their activities, as well as to leadership in the conditions of competitiveness, rivalry and intense struggle with their competitors”[6].

From the point of view of L.M. Mitina, “the development of a competitive personality is the development of a reflective personality, able to organize its activities and behavior in dynamic situations, possessing a new style of thinking, non-traditional approaches to problem solving, adequate response in non-standard situations. The trajectory of the successful professional development of a competitive personality is understood as “a person’s awareness of his potential, the prospects for personal and professional growth encourages him to constant experimentation, understood as search, creativity, choice. The decisive element of this situation of a person’s professional development is the opportunity and necessity to make a choice, which means to feel one’s freedom, on the one hand, and one’s responsibility for everything that happens and will happen, on the other [7].

Scientist N.N. Shoen in his research “Innovative educational technologies in the system of higher education” gives the following definition of a competitive personality: “as far as an industry specialist, as an independent tolerant person, is able to combine professional competence with the acquisition of life experience and personal qualities of a creator and creator, can create his own model of self-development and on this basis will be able to formulate an encyclopedia of professional growth, an encyclopedia of mistakes made and instructive examples, can engage in regular self-assessment, self-criticism and self-improvement” [8].

E.R. Khairullina, considering the competitiveness of a person as a dynamic open system developing on the basis of a personal program of self-determination and self-development, defines it as “the ability to

quickly and effectively adapt in a social (in particular, professional) environment” [9].

F.R. Tuktarov interprets the competitiveness of the individual as a holistic multi-level (social, biological, psychological, cultural) potential of rivalry and focuses on the philosophical aspect of the competitiveness of the individual, i.e., the mutual influence of the individual and society, the conditions for the development of the competitiveness of the individual and their specificity in the context of the transforming Russian society under the influence of globalization. In his opinion, “the competitiveness of an individual is formed in certain socio-cultural conditions generated by social and cultural traditions, the mentality and mentality of the people, its manifestations depend on the type of society (Eastern or Western, which corresponds to the institutional X-matrix or Y-matrix), is fixed in stereotypes of behavior and social attitudes” [10].

In this vein, the definition of the researcher F.S. Ismagilova is very interesting, which describes the essence of the competitiveness of a graduate as “the degree of his professional demand in the labor market, in an enterprise and in a company due to his advantages over other candidates” [11].

Investigating the competitiveness of a student, N.N. Shoev defines it as follows, “to what extent the applicant for higher education has mastered in total the program objectives of education at the university, and whether the level of his competence and professional mobility justifies the funds invested to achieve the project goals of profессиograms and an effective model of a specialist according to the qualification assigned to him” [12].

The scientist O. V. Perevozova defines the competitiveness of students as “an indicator of the level of knowledge, skills and abilities of students, which is developed in a continuous pedagogical process, accompanied by permanent practical training” [13].

Arguing about the process of professional and creative self-development of the student’s competitiveness, E. R. Khairullina defines it as “a development process directed by the self-consciousness of the subject to improve personal and professional qualities that characterize the student’s competitiveness” [14].

L. M. Mitina identifies four stages of optimizing the personality and behavior of the student: preparation, awareness, reassessment, action; the main processes of personality development: motivational (stage 1),

cognitive (stage 2), affective (stage 3), behavioral (stage 4); complex of methods of influence [15].

Exploring the processes of development of a professional, V. N. Mezinov proposes a definition of the competitiveness of a teacher as a systemic, multi-level personal education, which, having projections on almost all spheres of a person's life, can act as a factor in activating his life (primarily professional activity) and become an important target-functional landmark of educational process and provide an advantage in the pedagogical field in the conditions of social competition [16].

### **Materials and Methods**

Theoretical identification and psychological and pedagogical analysis, interpretation of process results of forming students competitiveness, included and non-included observation and subsequent content analysis of the creative activity of undergraduate and graduate students, their interactive interaction in the educational process of the university.

### **Results**

An analysis of studies on the problem of forming the competitiveness of a university student indicates that the authors point to the professional and educational-professional process of personality development. In this perspective, they tend to consider professional development as a very long period of personality development, from the stage of formation of professional intentions to the full realization of oneself in professional activity. Professional self-realization plays a fundamental role in this process.

According to L.M. Mitina, professional development cannot be separated from personal development, because their essence lies in the principle of self-development, which determines the ability of practical transformation, and is directed to the highest form of a person's life activity - creative self-realization [17].

Exploring the trajectories of mutual influence of personal and professional development and career perception, A.A. Mudarisov and Y.V. Sinyagin write that a career, for various reasons, can be an independent goal, or it can act as a means of professional self-realization, a condition for the implementation of personally significant ideas and decisions that are relevant in social, scientific, industrial, cultural plans [18].

If the motive of career achievements becomes a goal, not a means, if a successful career, achieved by any means, becomes an object of need

(an independent motive), then we can state the phenomenon of “shift of the motive to the goal” [19].

In this case, the goal of life becomes only career success. Career is perceived as a source of happiness and becomes an independent object of aspirations. According to V. Frankl, if the focus of a person’s attention falls on happiness (and hence competitiveness as a subjectively perceived synonym), then it is natural that the causes and ways that provide it go to the periphery of a person’s attention as a subject of activity. Thus, a person loses sight of the reasons for happiness, does not concentrate on these reasons [20].

For a person and his development, it is more useful when the need for a social position (in professional competitiveness), the desire for power, according to V. Frankl, are only derivatives of the goal, the content of which is filled with ideas about a certain product and about the process of obtaining this product. Indeed, if power, professional competitiveness are not an end in itself, then they are only a means of achieving something that can be presented and accepted. According to V. Frankl, the reason for happiness is created by the process of productive activity in order to achieve the goal. V. Frankl focuses on this, he shows that the reasons, ways, processes of movement to a high social position, to power are important to a person: “... a person is not interested in pleasure and happiness as such, but in the reasons that give rise to them”, although a person does not realize it. It is wiser to search for and implement these causes. Thus, happiness, social position, according to V. Frankl, is a “side effect” of productive activity. The reason here is productive activity aimed at creating a result that is recognizable by other people, interesting for others, necessary and useful to them. When pleasure, happiness becomes an independent task, in which there is no place for personal development, happiness eludes a person, writes V. Frankl, because the pleasure has already been experienced and the desire has already been satisfied [20].

Therefore, we can conclude that people who are oriented towards satisfaction with professional competitiveness, a high social position, power, as the only and ultimate values that exclude any meaningful, productive, activity-based content of the process of moving towards the expected result, are doomed to disappointment.

The high significance of a career can act as a catalyst for personal and professional development, if a career is perceived by a person as

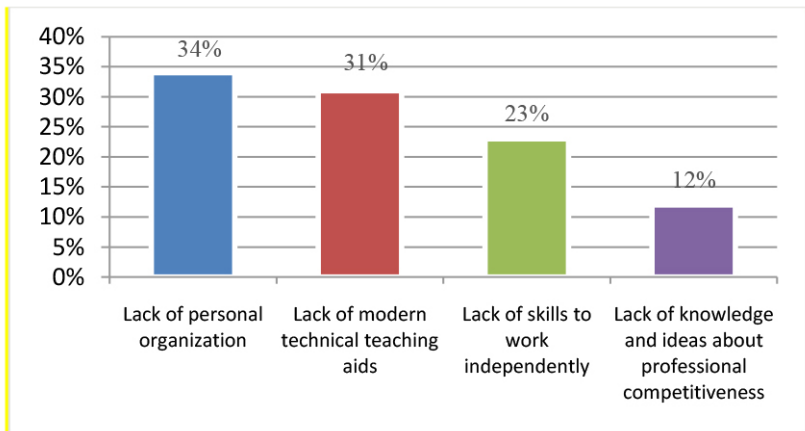
a way to carry out productive activities, a means of achieving a socially and professionally significant goal, and not as an independent goal in life.

The study of modern research on the theory and practice of forming the competitiveness of a graduate of a modern university, and the content analysis of the survey and structured surveys, participant observation, made it possible to identify several reasons for the insufficiently high level of professional and personal development of students. We included among them:

- individual psychological (low performance of students, insufficient diligence, low level of interest in the profession, discrepancy between the personal qualities of students of the chosen specialty, etc.);
- organizational (inconsistency in the organization of the educational process, irrational construction of the curriculum, etc.);
- educational (deficiencies in methodological methods of teaching modern requirements, insufficient provision of the educational process, etc.);
- material and technical (insufficient technical and material base for the educational process, etc.);
- social (unhealthy, uncreative atmosphere in the academic group, limited intellectual communication, etc.);
- material and domestic (material difficulties of the student, insufficient provision of living conditions, etc.) [21].

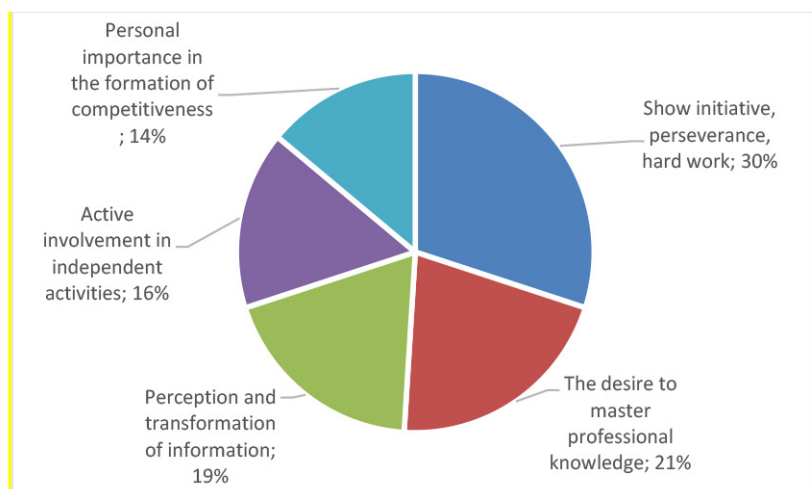
In order to study the effectiveness of the quality of the educational process, in 2019-2022 in “Mari State University” a study was conducted of the opinion of students from the first to the fifth year, regarding the increase in the level of formation of professional competitiveness. The survey involved 78 students of both full-time and part-time forms of study studying in the direction of training “Vocational training (by industry)” and Pedagogical education.

When answering the question of the questionnaire: “What difficulties do you experience in the development of professional competitiveness?”, 34% of students noted shortcomings in self-organization; 31% of students, according to the survey, indicated a lack of information and communication teaching aids; 23% identified an insufficient level of skills to work independently; and 12% have a student's lack of knowledge and ideas about professional competitiveness (Graph 1).



*Graph 1 Difficulties in the development of professional competitiveness of university students (based on a questionnaire survey of students)*

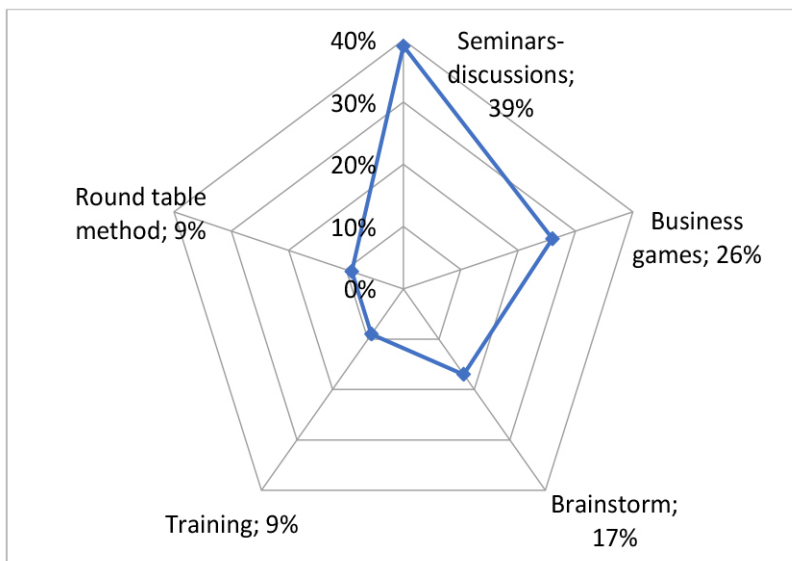
To another survey question: “What qualities does a university student need to have in order to effectively develop competitiveness?”, the students answered as follows: 30% of respondents consider initiative, perseverance, and efficiency to be significant qualities; the desire to master professional knowledge was identified by 21% of students; 19% of students noted the perception and transformation of information; 16% of future graduates consider active involvement in independent activity important for themselves, and 14% consider personal significance in the need to form competitiveness as decisive for them (Graph 2).



*Graph 2 Qualities necessary for the effective formation of competitiveness (based on a questionnaire survey of university students)*

The conducted studies have shown that in traditional education, the systemic nature of the formation of competitive professional and personal qualities is observed in a small number of students. This fact is explained by insufficient preparedness for the effective organization of independent activities. The study and subsequent analysis of the results of surveys, pedagogical observation, questioning and practical teaching convincingly indicate that when organizing the process of forming the competitiveness of university students, it is necessary to use interactive teaching methods [22].

At the same time, seminars-discussions (39% of students) and business games (26%) enjoy the greatest success among the students of the university. In the classes on the formation of professional competitiveness, the respondents also noted the effectiveness of using the brainstorming method - 17% of students, training and the round table method, 9% each (Graph 3).



*Graph 3 The most preferred methods of interactive learning by university students*

Interactive teaching methods, focused on stimulating the competitiveness of future professionals, allow you to focus on previously ignored aspects of the educational process. The introduction of these methods into pedagogical practice requires a qualitatively different approach to the organization of competition, the system of relations between the teacher and the student. The teacher, having gone beyond the scope of the subject, who owns extensive theoretical knowledge, various methods, takes the role of a qualified consultant of the future specialist [23].

So, the problem of forming the professional competitiveness of students remains one of the most important problems of pedagogical science, since the multifaceted nature of the contradictions that exist in education comes to the fore, which reflects the logic of educational knowledge and is the driving force behind personality development. Scientists see the source of professional competitiveness of an individual in the social conditions of life, in the active essence of a person. The development of professional competitiveness cannot be considered separately from personality development, since professional development

is conditioned by the individual's need for effective, purposeful activity, and personality development is aimed at realizing creative, intellectual potential.

Professional competitiveness arises on the basis of persistent actions of the individual to solve problems, tasks, creative tasks, mobilize attention and other psychological processes in search of new knowledge. Of great importance for the educational process is the interest in cognition, which arises on the basis of conscious motivation. To develop the professional competitiveness of students means to develop theoretical thinking, to form the skills of independent search for new knowledge, methods of their processing and application, the ability to perform targeted actions aimed at achieving the planned results [25].

Professional competitiveness is manifested in relation to the content and process of learning; in the pursuit of effective mastery of knowledge and methods of labor activity to achieve the goals; in the mobilization of moral and volitional efforts; in the ability to transform the surrounding reality and the person himself; in the intensity, tension of the actions performed; in performance. Intensification and improvement of the effectiveness of the formation of the professional competitiveness of a future specialist requires mutual and purposeful intensification of cooperation between the teacher and the student, innovative changes in the organization of the educational process and the relationship between classroom and research and project work at the university [26].

Only on the basis of a holistic approach to the formation and development of professional and personal competitiveness of students, it is possible to train bachelors and masters with high creative potential, in-depth knowledge and an active life position, therefore, it is necessary to direct our efforts to stimulate students' interest in the profession, to promote the development a positive active attitude to learning, the development of skills and abilities of independent cognitive activity, taking into account the pedagogical conditions that affect the formation of students' competitiveness.

The analysis of literary sources, a series of empirical studies allows us to formulate our own definition of professional competitiveness - this is readiness for a competently built work activity, purposeful achievement of planned results based on the effective implementation of creative, intellectual and personal potential.

The student's attitude to the formation of professional and personal competitiveness can be considered as a state of his readiness for inde-

pendent activity, which involves the mastery of basic knowledge, methods of cognition, methods of self-development of competitiveness, skills of independent cognitive actions, etc. The study of works that reveal the essence of competitiveness, the theory and practice of forming the competitiveness of bachelors and masters, allows us to highlight a number of conclusions that are fundamentally important for our study:

- the principle of competition in the educational process is considered as an independent didactic principle, which is an indispensable condition and indicator of the implementation of any principle of learning;
- competitiveness is considered as a personal and professional quality of a student, which is formed when certain pedagogical conditions are created;
- internal source of competitiveness are ideas, needs, motives, attitudes, interests of a university student, which in the learning process can be subject to qualitative change and modernization;
- an external source of formation of competitiveness is the system of created pedagogical conditions. However, only those pedagogical conditions that, being not only objectively significant, but also subjectively accepted by students, have a real positive influence that encourages students to effective professional activity, turning into an internal source of activity.

### **Conclusion**

Thus, the search for new approaches to design, theoretical and empirical verification of goals and objectives are aimed at solving various internal and external factors in the formation of professional and personal competitiveness of university students and clearly demonstrate the need to search for the specifics of training students. The study of the main directions of the problem under consideration reveals the psychological and pedagogical basis for the development, subsequent successful implementation of programs for the formation of key qualities, experimental testing, selective selection of the most effective methods and pedagogical technologies for the professional and personal formation of the competitiveness of students of a modern university.

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# THE ROLE OF MANAGEMENT IN FACILITATING INFORMAL LEARNING AMONG STUDENTS IN ONLINE ENVIRONMENTS

*Aiman Azmukhanova, Arnur Narekesh*

**Abstract.** The focus of this research is on creating a system to manage non-formal online learning activities of students as it was previously overlooked. The research method is interviews conducted with university students which revealed that motivated students use the Internet to enhance their knowledge and skills. It considers students' activities, who consume educational content online, as a management process. This management process is carried out through 5 main functions as planning, organization, management, coordination, and control.

The results of the study are as follows: managing non-formal online educational activities is a complex and multifaceted process that requires 5 main management functions. The internet plays a significant role in the educational environment, providing students with a diverse and flexible range of options for learning.

**Key words:** non-formal education, online learning, Fayol's model, Weiner's attribute theory, student's motivation.

**Introduction.** Education is expected to play a significant role in shaping the "knowledge society". Investments in human capital are considered the most valuable resource. Individuals are increasingly acquiring knowledge and education from diverse sources, which leads to the formation of a well-rounded person with a sense of personal freedom, social responsibility, and a rational attitude towards life.

Non-formal education is gaining recognition and is seen as a powerful tool for self-development. Online learning is becoming more respected, and the quality of online education is improving [1]. There is preliminary evidence that online learning can result in higher quality education than traditional methods. In fact, a study conducted by the US Department of Education in 2010 showed that students who took online courses performed slightly better than those who exclusively engaged in traditional education. Approximately 68% of education employees confirmed the success of online learning [2].

Managing online educational activity is an attractive subject of study because it is versatile in its practical implementation. Students are able to participate independently in the creation of new knowledge, further highlighting the significance of the internet in the educational environment.

There is a growing trend towards “student-oriented” education in an open learning environment, where students are at the center of knowledge generation. It can be observed in both formal and non-formal education.

The focus of study is to explore how non-formal educational activity is managed online from the perspective of various subjects involved in online education. The aim is to identify the specifics of managing non-formal online educational activity of students.

The object is students who are enrolled in Kazakhstani universities.

The subject is the management of non-formal online education of students.

Tasks: 1) to identify the specific motivations and behaviors of students as subjects of online education; 2) to study the advantages and common problems of online education; 3) to define the key management components relating to online educational activity.

**Literature review.** The study of the Internet’s influence on the educational process are indeed broad and interdisciplinary. There are many researchers who have contributed to understanding of this phenomenon. For example, the work of Sousan Arafeh [3], Jo Coldwell-Neilson [4], Evgeny Henner [5], and Martin Dougiamas [6] are among the scholars who have contributed this topic. They have explored various aspects of it, including the use of online platforms for teaching and learning, the impact of digital technologies on pedagogy, and the emergence of new forms of online education.

The structural-functional approach to management, as exemplified by Henri Fayol’s model [7], provides a useful framework for understanding how to manage non-formal online educational activity. It highlights the importance of various management functions in achieving organizational goals, including planning, organizing, managing, coordinating, and controlling. By applying this model to non-formal education, it is possible to develop effective management strategies that support student learning and success.

The attribute theory of motivation by Bernard Weiner [8] is also useful for understanding student motivation in online learning. It emphasizes the role of internal and external factors in shaping individual motivation, and provides an understanding how to support and enhance motivation in online learning. By identifying the factors that influence student motivation, it is possible to create a more engaging and effective online learning environment.

**Materials and methods.** The research method used in this study is interviews conducted with university students. The interview guide was tailored to the different perspectives of learners.

**Results.** Students are the primary subjects of managing non-formal online educational activity. It was observed that the manifestation of online learning is more prevalent among students who have specific goals in developing their professional competencies. The degree of involvement in such practices increases with higher levels of motivation.

During the study, the researchers were able to identify the unique characteristics of student behavior and motives that contribute to their engagement in non-formal online education, and created a classification based on their findings. The study also revealed a significant correlation between the management of online learning and students' academic achievements.

**Discussion.** To comprehend why students are participating in non-formal online education and develop a management process for it, it is crucial to identify their primary motivations, as well as examine their behavior. Bernard Weiner's attribute theory of motivation is utilized for further analysis [9]. According to it, people with high resultant motivation perceive achievement and success based on their ability and effort. Weiner identifies three dimensions of achievement:

Locus: whether the performance is influenced by the actor (internal motivation) or by external factors.

Stability: whether the causes of the performance are internal or external and whether they are stable or unstable.

Controllability: to what extent is the performer able to control the solution to the upcoming task.

*Tab. 1 - Locus*

Internal (motivation)	External (situation)
Interest	Demand for the environment
Desire to learn a new profession	Lack of knowledge provided by formal organization
Rest	Relevance in the world
Desire to change the quality of life	

We can observe that the locus is classified into 4 internal motivations and 3 external situations. The primary driver for students' actions is their own interests, which is seen as the main incentive for engaging in non-formal education. Students enroll in courses, attend master classes,

and various training sessions because they are interested in acquiring particular knowledge or skills.

Another internal factor is the desire to learn a new profession, which occurs among those who are transitioning to a new professional field. Rest is internal motivation, as students can view and study materials and apply knowledge in practice to relieve stress. The last one is the desire to enhance their quality of life. By participating in online study, students have the opportunity to select a particular course that can assist in making money (e.g. courses on business sales) or acquiring necessary knowledge and skills for professional advancement.

External factors that contribute to the management of non-formal education for students are those related to situations. The first is the demand of the environment, especially the labor market, which is currently overcrowded in many fields leading to fierce competition. As a result, students strive to acquire a diverse range of skills and knowledge in order to increase their chances of finding employment. The second is the lack of knowledge provided by formal educational organizations, which leads students to seek out additional education on various online platforms or from specialists. It may be influenced by the specific educational institution, program, or the teachers involved. The final is the relevance of a particular phenomenon in the world. Some view it as unwise not to take advantage of the opportunities provided by the internet, while others follow trends or pursue knowledge for its perceived prestige.

To discuss stability as a dimension, we can look at the efforts students make towards achieving their educational goals. This includes their participation in the educational process, accessing knowledge sources, completing practical tasks, and ultimately obtaining results. However, these efforts may not always be stable due to the student's internal motivation. Strong motivation can maintain stability, but a lack of it can lead to instability and the risk of not achieving the desired result.

Another aspect of stability is the difficulty of the task, which is relatively stable and built into the system of non-formal education. When students encounter difficult tasks, they must rely on their motivation and abilities to overcome them and move closer to their goals. Students often invest in paid courses to strengthen their desire to achieve their goals, which can serve as a valuable incentive to stay on track.

The last dimension is controllability. Control in managing non-formal education for students can be democratic or solely in the learner's

hands. Its purpose is to determine the value of the desired result, which is acquiring valuable knowledge or skills. The responsibility for achieving it primarily lies with the students themselves, as it depends on their level of interest in gaining knowledge. When it comes to internal and external conditions affecting control, the individual's motivation and personal characteristics can be seen as internal factors, while external ones can include the quality of educational materials provided by online platforms.

The motivation model can be summarized as follows [10]:

*Locus (reason)+stability (ability, effort, task difficulty)+controllability (responsibility for the result)=Achievement (desired result)*

The reason why students turn to non-formal education and manage the process is referred to as the locus. Efforts and task difficulty are determined by the level of student motivation, while controllability refers to the responsibility for the final result, which is the acquisition of knowledge or skill.

Managing in non-formal education can help students develop practical competencies and increase their human capital. They have the freedom to choose courses based on own interests, whether or not they relate to their professional activities.

Student achievements in educational pursuits can be formal or informal. Formal achievements include receiving a diploma with honors, winning international competitions, receiving scholarships, placing in scientific conferences, taking a language proficiency certificate, and completing additional education programs. Informal achievements include completing educational courses on online platforms, internships in commercial or non-profit organizations, and participating in project activities [11].

To assess the significance, advantages, and disadvantages of students' activities on various websites, it was important to determine how much time they spend online, and how much of that time is devoted to educational purposes. Students who engage in non-formal online education tend to spend a significant amount of time on web resources.

While the COVID-19 pandemic has led to many formal education courses being moved online, students generally try to use their time productively, consuming educational content from various fields. These resources are freely available to all. Students who do not actively engage in non-formal education tend to only use the internet for purposes within the context of their formal education programs. Some students argue

that the internet may not have a significant positive effect on education, but it also does not have a negative impact. However, students do recognize that they can be easily distracted by aimless online activities and entertainment content. But they will only have a negative impact if they spend a long time on them.

The internet plays a crucial role in education as it offers numerous channels to access knowledge and makes education more flexible and customizable, allowing students to pursue own interests. It also contributes to the development of cognitive abilities, which is beneficial for the progress of society.

Students generally perceive the internet as a useful tool for learning while enjoying the process. However, negative feedback is also present, mainly concerning the shift to online learning due to the pandemic, which is seen as affecting the quality of education provided. Distance learning is viewed as a complementary approach, not a replacement for traditional education.

Success in online education is influenced by individual characteristics, such as self-discipline, motivation, and educational goals. The effectiveness of online platforms depends on how students engage with them and apply their acquired knowledge and skills in practice. Experts in the field of education argue that the lack of a hierarchical structure, where the teacher holds more power than the student, creates a different learning environment that allows students to explore their abilities and knowledge application in new ways [12, 13]. To fully evaluate the online education, its benefits and limitations need to be considered.

*Tab. 2 – Benefits and limitations of online education*

+	-
The option to select your preferred instructor Affordable pricing Accessible at any time and location worldwide High availability Convenience Flexibility in scheduling The ability to select relevant and interesting materials A diverse range of information and courses available	Decreased sense of accountability Lack of motivation Challenge of verifying author's competence Absence of interaction with peers Expensive fees for some courses Lack of face-to-face interaction Difficulty in sustaining focus Challenging to inspire and sustain audience's engagement

We aim to analyze how students manage their online educational activities, specifically focusing on the five functions of management.

*Planning online learning activities* as per Henri Fayol's model, involves formulating a plan for future activities with a goal and expected result. The study found that students have limited involvement in planning activities related to their university programs. This trend was observed across all educational institutions we communicated with. This is because students are not the subjects of management in formal educational institutions. Students' main responsibility is to complete tasks assigned by teaching staff [14].

Managing non-formal educational activities is different compared to formal education. To understand how students manage their non-formal education, it was necessary to identify the methods they use to achieve results. It was found that students prefer to engage in online courses on different platforms. They have the freedom to choose the appropriate learning content, each with its own structure, goals, duration, and modules. The planning process involves selecting a course, enrolling, and paying if required. It is structured according to a predetermined plan. Students can also pick a convenient time for learning, making the study process more flexible.

*Organization of online learning activities* involves providing the necessary resources to achieve a goal. In formal education, teaching staff are responsible for organizing the process, and students are not considered subjects of management [15].

In contrast, the organization of non-formal online learning activity involves dividing responsibilities between educational organizations and students. Students must organize their own workspace and have access to a good internet connection, and their personal motivation and goals play a significant role in the learning effectiveness. They must consider factors such as their preferred work conditions, time management, and use of supplementary resources. Students' understanding of the organization of online learning activity is dependent on their own needs and personal characteristics.

In terms of *managing online learning activities*, the administration function plays a vital role. Its goal is to get the most effective results by stimulating participants in the learning process. In the formal education, teachers are responsible for transmitting tasks to students. The system of rewards and punishments in formal education is easily understandable and clear. This is due to the fact that educational institu-

tions require students to fulfill specific obligations in accordance with a predetermined set of requirements. Any breach of them may result in negative consequences as a lower grade or even expulsion. Therefore, the system of incentives and consequences is transparent and straightforward in formal education.

Looking at management in the online education reveals some differences. Generally, students are responsible for managing their own time and actions. Educational materials and tasks are provided for them to assess their knowledge, but how thoroughly they study, how honestly they complete tasks, and how actively they engage with the course are influenced by their personal motivation and circumstances. While formal organizations or other educational sources may oversee or provide guidance for online learning activity, it is up to the students to carry out the tasks and perceive their own progress, driven by external factors such as rewards or punishments or their own internal motivations.

*The coordination of online learning activities* involves different structures, departments, or individuals working together to ensure a smooth process. In both formal and non-formal education, teachers in a particular field provide all the necessary learning materials as video lectures, texts, and assignments on online platforms. Students also have direct communication with the teaching staff to address any issues that may arise during the online learning [16].

This interaction involves resolving both substantive and technical issues. Technical assistance is provided by individuals or structures aside from the teaching staff. Depending on the institution or online platform, students may have access to additional support persons, such as tutors, and chat associations can be created to allow for prompt feedback between participants and teachers. It is particularly helpful for beginners or those unfamiliar with the online environment, and it can also make the job of the course creator or instructors easier, especially for courses with a large number of participants. Involving third parties in this coordination process may come at an additional cost, as it may require extra expenses from the course creators.

The coordination function plays a crucial role in making the learning process more organized and comprehensible for the participants. The coordination system is usually well-developed, ensuring that students do not face prolonged or unresolved issues during the online learning.

The 5<sup>th</sup> function of management is *control*, which ensures that the activity is in line with the organization's goals and plans. In formal ed-

ucation, control of students' educational activities is primarily the responsibility of the teaching staff or higher authorities. The process of education online is monitored through checkpoints or assignments to ensure that the students comply with the organization's requirements. However, in non-formal education, the control function may not be as strict, and it depends on the platform or the course creator's specific rules and requirements. Some platforms, like Coursera, offer evaluation through cross-validation, where students evaluate each other's work [17].

Students acknowledge that while there may be some form of control system in place, the responsibility for completing the course and meeting control points ultimately rests with them. The presence or absence of control in such practices may depend on various factors. Firstly, control may be implemented by course developers to engage with capable and talented learners. Secondly, educators may need to effectively communicate their experiences to students in a way that ensures the value of their material and work. Thirdly, certain online educational platforms are beginning to establish themselves as full-fledged online universities, where certificates for completing courses hold value in specific employment organizations. In such cases, knowledge control becomes necessary to confirm competence in a particular field and sort out individuals who do not align with the goals of the educational platform. As a result, the control function is essential for applying knowledge in practice and confirming competence.

The combination of these factors leads to visual models that demonstrate how students' online learning activity is managed.

*Tab. 3 - Management of learning activity in formal and non-formal education [18, 19]*

	Formal education	Non-formal education
Plase of education	Educational institutions; distance education certified by them	Educational space or educational online space that is not a state or municipal
Education content	Standardized, rigidly structured, input requirements determined by the organization	Individualized, flexible, student-determined entry requirements
Management nature	Subject-Object	Subject-Subject
Management subject	Representatives of educational organizations (teachers, departments, etc.)	Students

Planning	Compliance with a plan certified by the organization	Formulation of a personal goal, choice of schedule, formation of an image of the final learning result
Organization	Providing an educational plan, requirements for completing assignments, posting materials and information on educational platforms to build the learning process	Organization of the workplace, choice of the educational platform and course content, alignment of the educational process in accordance with the proposed plan, immersion in the educational process
Managing	Providing information on attendance and assignment requirements	Time management, determining the intensity of learning based on own goals and wishes
Coordination	Communication with students (+possible interaction with 3 <sup>rd</sup> parties)	Communication with teachers (possibility of interaction with 3 <sup>rd</sup> parties)
Control	Providing requirements for the assessment system, setting deadlines. The organization can impose sanctions for violation of the requirements. Control is external/hierarchical in nature	Following the requirements of the educational site, which are not so formal in content or self-control. Control is internal/democratic or based on the principle of self-government

Students utilize social networks primarily by joining educational communities and subscribing to them. The content posted by these communities appears in the students' feed where they can come across helpful information or find something they need. Social networks are used as a communication channel, allowing students to discuss homework, share opinions and necessary information, and help each other in the learning process [20].

**Conclusions.** Therefore, managing online learning activity is a complex and diverse process. Within formal education, it is controlled by state and licensed organizations and is hierarchical, structured, and follows standardized requirements. Managing learning activity within non-formal education is considerably different. The students and those who provide educational content on various websites are the subjects of

such management, as evidenced by their involvement in management and its functions. Non-formal education provides flexibility, variability, and lacks strict standards, giving the subjects of management much more freedom. Online course developers focus on organizational issues, while students manage their own learning process. This makes students the key subjects of online education. Responsibility for managing educational activity in such circumstances lies primarily with the students and is also determined by their motivation.

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# INTERIOR DESIGN AS AN INSTRUMENT OF COMBATING EMOTIONAL BURNOUT

*Irina Nikolaeva*

**Abstract.** In this article, I would like to show how an interior designer can help people leave the area of emotional burnout. The emotional burnout syndrome is a popular topic for a reason today: it is highly typical of the contemporary person. Our times are characterized by ceaseless haste, a diversity of opportunities, and a strife for achievements. But they are also characterized by lack of relationships and non-commitment. These are pragmatic times filled with the spirit of consumption and a strife for increased productivity. If the designer knows human psychology and understands human emotional states, he/ she can create a psychologically sound interior that will help the person keep his/ her emotions balanced.

**Key words:** design, emotional burnout, psychology, emotions, balance, person.

We live in a historically significant time. Previously, we could learn about the events that happened only from the books. We are surrounded by things that we know little about. We see them every day, we turn them on, we use them, we collect them, we even admire them, but we do all these things habitually, without recognizing it. Fernand Braudel writes in *The Structures of Everyday Life* that intellectually, people living in the previous centuries are almost our contemporaries: “their spirit and their passions are similar to ours, which allows us not feel as if we were in an alien world”. However, if magic could send us to Voltaire’s house, for example, to the XVIII century, “we would be astonished by all the details of everyday life there, by how the person looked after himself. There would be... a chasm between him and us: the lighting of the house in the evenings, the heating, the means of transportation, the food, the illnesses, the treatment methods...” [6].

In the modern world, we cannot speak of design without taking human psychology into account. Without doubt, the principles that designers used to adhere to before and the methods that they relied on are outdated today. The designer’s range of knowledge has to be much wider. It cannot be limited to the basics of space organization and the knowledge of colors, styles, and so on. Things that attract us remain enigmatic even in terms of the reasons for their attractiveness. Clearly, our interest for things arises not only due to their practical applications. Jacques Lacan

writes the following: “There is something about our relationships with things, relationships that are formed with the help of our vision and customized figures of representation that eludes our reason, transfers from one level to another, and escapes our understanding in this or that way” [2]. In other words, what attracts us and what makes us want things is their least objective, functional, or substantive qualities.

If the designer knows human psychology and understands human emotional states, he/ she can create a psychologically sound interior that will help the person keep his/ her emotions balanced. In this article, I would like to show how an interior designer can help people leave the area of emotional burnout.

The term ‘emotional burnout’ refers to a specific syndrome that appears due to the person’s professional activities. It is manifested by emotional and physical exhaustion, alienation from people that the person interacts with, lack of professional plans and dashed hopes [3]. Notwithstanding the fact that the phenomenon is well covered in both foreign and domestic literature and the causes as well as negative consequences of emotional burnout are well studied, there is still space for research. It is believed that the term ‘burnout’ was introduced by the American psychiatrist H. Freudenberger (1974). However, the psychological phenomenon was pointed out in connection with the studies of assistant professions in the works of Bradley (1969) [1].

According to Langle, burnout occurs due to lack of true existential sense of the things that the person does [7]. Existential sense means the feeling of existential fulfillment. This feeling may arise against the background of tiredness (probably, the person may feel ‘tired but happy’). Contrary to a meaningful and full life, a life that pursues a false goal (such as building a career or seeking social recognition) leads the person to emptiness as far as emotions are concerned. This sort of life takes power away from the person and contributes to stress. Instead of feeling joyous about creating something, the person may feel only pride for the achievement. But pride does not burn out. Even rest and relaxation cannot compensate for the emptiness that the person feels inside [4].

The emotional burnout syndrome does not only mean temporary physical or nervous exhaustion: the person suffers from “chronic stress of the nervous system” [9].

Everything a person does, brings him/ her certain emotions. The person wakes up, goes to sleep, cooks meals, goes to work, watches a movie, communicates with other people, does housework, goes shop-

ping, etc. – everything brings some emotions. Every action that we make has an energy component to it. It can fill us and help us live a bright life or in other cases, it can turn our life into a ‘groundhog day’ and take our time and power away. Against the latter background, any stressful situation may eventually lead to emotional burnout. The person has no desires whatsoever: the only thing that he/ she wants to do is hide away somewhere where nobody could find him/ her. And as you have rightly assumed, the person’s home is going to serve as his/ her hideaway. If the interior design of the person’s home has been made with account for human psychology, the person will come to a normal state of mind without realizing the reasons for it. I do not mean to suggest that emotional burnout can be overcome with the help of interior design alone. In some cases, psychologists’ assistance is required. However, thanks to interior design, we can lessen the degree of emotional burnout. We can show the person that he/ she is safe in this place, that everything there makes him/ her feel happy. I always recommend using something that is dear to the person in the interior design details. Ask your clients if they have any things that they treasure and try to use them in the interior design. Most often, this will be an inexpensive but emotionally precious thing. Clients often say that they want all things to be new but I always try to get to the bottom of things and find something that will fill the interior with positive emotions. If I am successful at that, the client will feel good psychologically even when returning home on a hard day. Many people underappreciate the role of interior design in the psychological state of the person. The interior is an inalienable part of the architectural solution that the building has, it is the organization of the inner space. Even the first humans designed the interiors of their caves! At home and at work, in shops and movie theaters, in resort complexes and hotels, and even in the subway – we find interior design elements everywhere. The main function that the interior has is to support the emotional balance of the person inside the building and give him/ her positive feelings.

When a person feels comfortable inside, it is essential to his/ her psychological health. Research shows that even the relationships between people who co-exist in a room depends on how well thought out the design of the room is. The wrong placement of the furniture, aggressive colors, and poor lighting may negatively affect the psychological state of the people and even harm their physical health. The design of the personal space in the house, of the place that reflects the traits of the

person's character is one of the most important factors that affect the overall emotional state of that person.

From the psychological point of view, interior design can be passive or active. The passive design does not affect the psychological state very much and it uses neutral colors. The active interior design, on the contrary, has to affect the psychological state of the people inside the room and motivate them to do certain things. For example, the design can inspire creativity in the person. In this case, brighter colors can be used.

When you design the interior of a private house, you have to start from the preference and psychological dispositions of the people who live there. When you design the interior of a public place, however, you have to think with the masses and use the psychological elements that will arouse positive emotions in the majority of visitors. The task becomes even more global if you want to not only give positive emotions to the visitors but also help them overcome emotional burnout.

When a person visits a public place, he/ she subconsciously wants to be significant there; he/ she wants his/ her individuality to be recognized. For me, designing the interior of a public place is always a personal challenge. Such projects are emotionally hard. You have to look into every detail and visualize the interior of the place before it is refurbished. You feel as if you were a film director: you know what the final result should be but something always goes wrong in the process and you have to adapt in a clever way to be able to come to a happy end.

I would like to use the example of the design project that I have implemented for a beauty clinic in the city of Kazan. The clinic is called "HIDE" and I am going to tell you what principles we adhered to and what devices we used in the process. I worked together with my colleague, a professional designer Dinara Khakimova on the project. The design project for "HIDE" beauty clinic was drawn up in 2022. We have managed to combine a beautiful interior, up-to-date engineering solutions, high quality finishing materials, and sanitation equipment. "HIDE" beauty clinic is one of the most advanced such clinics in Kazan. It uses modern ventilation, air conditioning, alarm, video surveillance, and fire extinguishing technologies. The floorplan conforms to the requirements that such institutions have to meet. The finishing materials as well as the furniture also conform to the industry's standards. Complex structural patterns are used for the interior. The edges of different surfaces fit together perfectly well.

We have created a friendly atmosphere in the clinic with the help of natural light. Lack of sunlight always causes negative emotions. The windows are the eyes of the building; they are symbols of our perception of the world and ideas of the self. For this reason, we have used blinds that let in the light [Picture 1].



*Picture 1*

We have tried to avoid using too many details as the so-called visual noise pulls vital energy from the person. If the space is overloaded with many small things and if these things are of many different shapes and textures, the person in the room is likely to start feeling upset. You should combine naturalness and technology. Clear lines, regular shapes, and lack of large massive details will create a sense of orderly space.

We have paid special attention to soundproofing, as too much noise from outside will cause irritation and stress. We also have taken good care of the ventilation system, as air is life and if you cannot breathe effortlessly in the room, you begin feeling unsafe.

Long narrow corridors are uncomfortable to walk through from the psychological point of view. The clinic does have long narrow corridors and the solution that we have come up with is as follows: we have used a large number of lights in the corridors and covered the walls with nat-

ural materials. We have put ‘light lines’ on the walls that give neutral white light and visually widen the corridors. We have used warm lights to illuminate the door plates on the office doors. We have used wooden panels of the natural color of wood to cover the walls. These decorations allow feeling comfortable inside while walking along the corridors [Picture 2].



*Picture 2*

The first thing that the visitor sees when he/ she enters the clinic is the reception counter. Our task was to make the reception area impressive and laconic at the same time. We wanted the clients visiting the clinic to feel aesthetic pleasure and comfort at every stage of interacting with the personnel beginning with the receptionist and ending with the doctor. The feeling of comfort will affect the opinion of the client about the clinic as well as his/ her psychological well being. With our interior design, the clients feel as if they were in nature’s lap as soon as they cross the threshold. We have put trees on the ceiling and covered the walls with wooden panels and mirrors of unusual shapes. These elements make visitors feel as if they were in a fairytale [Picture 3].



*Picture 3*

Then the visitor takes two steps forward and finds the world of beauty and aesthetics. The combination of natural materials makes the person feel well balanced and harmonized. Thanks to the custom-made lamp above the reception counter (that sparkles with many small lights and resembles a Christmas firecracker), the visitor feels at home and comes in a holiday mood. All these devices taken together affect the visitors' subconscious emotionally and they feel pleased without realizing what makes them feel so pleased [Picture 4].



*Picture 4*

After that, we have to affect the conscious emotions of the visitor and so we pass on to the waiting area. This is one of my favorite spaces in the clinic. Unification with nature becomes even deeper there and even though the clinic is located in the center of a big city, the visitors feel as if they were in the forest. They find a huge green wall that is attractive and admirable indeed. It is made of leaves that invite you to touch them. To balance the interior, we have added a blue sofa of an unusual form that stands out against the green background. When putting some bright spots in the right places, you supply additional 'vitamins' to the person in the room and offer him/ her an impulse for action. I would like to note that hues of beige and all light hues of any color are 'diluted' colors and they do not give any positive energy to the person [Picture 5].



*Picture 5*

To help the visitors fully immerse in the emotionally pleasant environment, we have added some nice fragrances and music. The information about the fragrances that we smell is processed close to the centers of emotions and memory in the brain. Without any cognitive effort, the person begins to associate the place with the fragrance that it gives. Consequently, he/ she is going to have a better opinion of the place if the fragrance is nice. In general, the fragrances we smell affect our mood, our vision of the world, and our social communication to a great extent. A good smell can affect your self-esteem and overall psychological state. Besides, people remember fragrances very well. As for the music, it also contributes to arousing positive emotions in the visitors.

Music can be an important element of interior design, as a matter of fact. Both music and interior design are based on rhythm, proportions, and harmony and both of them reflect emotions, impressions, and moods. Musical rhythm can be consonant with visual rhythm. Rhythm is repetition, rhythm is constant motion. Beat is the rhythm in music. The rhythm in design is repetition of the design elements that helps set the space in motion. It highlights the design elements while repeating

them in an organized manner. The idea is to pick one element of the design and make it move. Music contributes to personality formation by transferring the cultural values, norms, and ideals to the person. Music makes the person more creative and more constructive. Boris Teplov believes that emotional responsiveness to music is the indicator of the person's musicality. [10] When a person is emotionally burnt out, he/she will respond to rhythmical compositions in a more positive way, which contributes to the restoration of the person's mental state. Music expresses our emotions in a much more powerful manner than words do.

One may believe that our emotional state depends on our mood, on our environment, on real-life problems, and on inner psychological processes. However, the lighting is highly important for our emotions too. Light can increase or decrease the depth of feelings. According to psychologists, everything that surrounds us reflects on our psyche. We have taken a very serious approach to the lighting in the clinic. The light intensity, the flashing frequency, and the color of the light can manipulate people if you set the lights right. You may find yourself in a room with a beautiful and expensive interior but it does not feel comfortable inside. Your eyes are closing and you do not understand what is wrong. The problem is the lighting in the room: it is too dark or too bright. If you use artificial light sources, you should choose the lamps that give steady light. Over the last few decades, psychophysiological perception of light has become an increasingly important research topic. Scholars investigate how to manipulate the light parameters in order to stimulate positive reactions in people: to make them feel happier, healthier, and more joyful. The lighting in the room affects people's emotions. Emotions are a complicated phenomenon as they involve mental, motor and chemical processes in the body. [8] We have designed a comprehensive lighting system for the clinic. It is based on a tracking device that allows quickly changing the directions of the lights. In addition to that, we have used spot lighting to have balance and stability in lighting. To affect the emotional state of the visitors even more, we have used decorative lights: customized chandeliers of uncommon shapes and wall illumination. We have also created a floating ceiling effect, and illuminated the mirrors and the furniture shelves [Picture 6].



*Picture 6*

We have also paid great attention to the interior design of the doctors' offices. Connection with nature is the central principle that we have based on. The patients are filled with positive emotions anywhere they go.

Medical institutions want to have nice interior designs these days as much as they want to have modern medical equipment. They want to have comfortable and technologically sound rooms with the intention to make the patient feel happy. When the patient likes the clinic that he/she attends, he/she will want to come back. Besides, the patient will tell his/her friends about the clinic. This will guarantee a constant inflow of clients and their loyalty. We have put the patient's happiness in the center of our work making it our top priority in the interior design of the medical institution. A well-thought-out interior design can help the patient to overcome emotional burnout.

A designer is an artist and he/she creates works of art that are important for certain groups of people over a certain period [5]. The knowledge and understanding of people's behavior and interactional patterns as well as the methods of emotional influence allow the designer to cre-

ate efficient and cool products that can help the person to balance his/her mental state.

The emotional burnout syndrome is a popular topic for a reason today: it is highly typical of the contemporary person. Our times are characterized by ceaseless haste, a diversity of opportunities, and a strife for achievements. But they are also characterized by lack of relationships and non-commitment. These are pragmatic times filled with the spirit of consumption and a strife for increased productivity.

The person does not only cognize the world through his/her senses. The person lives in the world and seeks to satisfy his/her material and spiritual needs by acting in certain ways. The designer's task is to create a world of harmony and fill the person with positive emotions.

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