Educational psychology– individual treatment

Katalin Héjja-Nagy- Mária Dávid - Dolli Mester



MEDIA INFORMATION PUBLICATIONS

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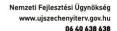


Líceum Kiadó Eger, 2015



Hungarian Online University – Ágazati informatikai együttműködés létrehozása az új típusú e-learning alapú képzések hazai és nemzetközi elterjesztésére

TÁMOP-4.1.1.C-12/KONYV-2012-0003







A projekt az Európai Unió támogatásával, az Európai Szociális Alap társfinanszírozásával valósul meg.

> Proofread by: Mihály Gáspár

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ISBN 978-615-5509-73-5

Publisher: dr. Lajos Kis-Tóth

Made: in the printing office of Eszterházy Károly Főiskola, in Eger

Manager: László Kérészy

Technical editor: Sándorné Nagy

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1 INTRODUCTION

In order to prepare students to be future teachers it is also necessary for them to acquire psychological knowledge which enables trainee teachers to find their ways in a particular learning-teaching environment. The course material titled "Educational psychology-individual treatment" comprises the fundamental topics which contain the psychological knowledge necessary for teachers to do their everyday school activities. By providing a theoretical course material and related practice exercises, we intend to prepare trainee teachers for a successful teacher career.

1.1 Objectives, competences, course requirements

1.1.1 Objective

The primary goal of the course material is to explore the psychological knowledge determining a teacher's activities by paying special attention to the processes characteristic of a school. We intend to provide them with basic knowledge related to self-regulated knowledge as well as to methods supporting learners to become self-regulated ones. Furthermore, we also aim at preparing teacher trainees to be able to recognise students that require special treatment, and to educate and teach them effectively.

1.1.2 Competences

By acquiring the course material students will have gained the following knowledge, skills and view system:

Knowledge:

- They will be able to identify the main topics of educational psychology with special attention to the socialization role of schools.
- They will be able to enumerate the phenomena that influence the development of learners' social relationships.
- They will have special knowledge about learning, and they will be able to enumerate some methodological tools of developing learning, and to incorporate the development of learning techniques into their lesson plans.
- They will be able to define the concept, the advantages and disadvantages of integrated and segregated education.

- They will be able to name and systemize the groups of learners with special educational needs, and to describe the characteristics and differentiation needs of these groups.
- They will be able to give examples for the tool system of learners requiring special treatment.

Skills:

- They will be able to find and process information by themselves in the topics of educational psychology.
- They will be able to think over, to plan and develop the teachinglearning process from the point of view of becoming a selfregulated learner.
- They will be able to plan exercises for developing learning techniques in their lesson plan.
- They will be able to take the characteristics of students requiring special treatment into consideration and plan their pedagogic activities accordingly.

Attitudes/views:

- They are committed to the fundamental democratic values and equal opportunities, free of prejudice, and accept the view of inclusion.
- They find the problem of teaching learning important, and are committed to the education of becoming self-regulated learners.
- They are sensitive and open to students' questions related to learning, and have a positive attitude to the problems of teaching learning.

1.1.3 Course requirements:

- Elaborating the literature continuously,
- doing all the exercises related to the lessons, and
- doing one test with questions related to the theoretical material of the term.

1.2 The contents 1.3 1.1 of the course Study tips, Objective, instructions (from lesson competences, 1 to 12) course 2.3 requirements Summary, questions Introduction Practice 2.2 tests Elaboration Course Lessons 1-12 material The title of 15. Mock exam Tests the subject Objective and competences 13. Final exam Summary 13.1 Contextual Appendices summary 13.2 Closing 14.3 142 Glossary, 13.3. Summary of Table of interpretation Others media contents of concepts elements

1.2 The contents of the course

Figure 1 The contents of the course

1. lesson: Introduction

I. MODULE: Educational psychology

- 2. lesson: The role of socialization in the development of learner's personality, the main characteristics of family and institute socialization, the socialization function of the school, socialization disorders.
- 3. lesson: Phenomena affecting the development of social relationships in schools: person perception, attitudes, prejudices.
- 4. lesson: The social world of a school, the characteristics of classroom communication, the features and development of interpersonal relationships in schools.

II. MODULE: Learning methodology

- 5. lesson: Learning as information processing in school, the role of complex learning in the development of knowledge, motivating learning, the role of meta-cognition in learning. The factors determining the appreciation of teaching learning: international monitoring examinations, life-long learning, information explosion, change in the learning environment.
- 6. lesson: The general questions of improving learning, the concept and most important tasks of the indirect and direct methodological improvement of learning taking the age-related characteristics of learners into consideration, the external, environmental factors influencing learning, the internal factors influencing learning, learning motivation.
- 7. lesson: The concept and types of learning style, the importance of recognising it through the process of teaching and learning, the questions of developing the simple and complex learning techniques.

III: MODULE: Learners requiring special treatment

- 8. lesson: The factors influencing school performance. Differences between learners. The symptoms indicating deviation from the average; the groups of learners requiring special treatment.
- 9. lesson: The different severity grades of learning problems, learning disorders, the characteristics of partial-skill disorders, the possibilities of offering pedagogical help, integration-inclusion: the features of segregated and integrated education.
- 10. lesson: the characteristics of disabled learners, sensory disabilities, physical disability, speech impairment as well as mental retardation.
 - lesson: Behaviour and socialization disorders and their treatment.
- 12. lesson: Recognising and developing gifted and talented learners in school.
 - 13. lesson: Summary
 - 14. Appendices
 - 15. Tests

1.3 Study tips, instructions

Dear Students,

Before you start to study the material of the course, we would like to give you some learning advice which can help you to prepare successfully for the test. The description contains the practical realization

of a learning strategy (the PQRST method), which is referred to as the strategy of effective learning in the literature.¹

During your preparation it is worth following the learning steps below:

The first step: Getting acquainted with the whole material, asking questions, tuning up:

- Before you start studying the material in details, devote a few minutes to getting acquainted with the whole material, its structure. In order to do so, read the table of contents in the introduction, then open some lessons from each three modules, read the titles and look at the figures. These few minutes will help you to get an overview of the material to be learnt.
- In the first step ask a few questions related to the electronic course material. What thoughts were evoked by the overview? What would you like to know, what would you be interested in as for the contents of the material? This step raises your interest, if you have asked good questions, you will try to find the answers to them while reading, and thus you will pay more attention to the material.
- Start studying the material lesson by lesson only after this overview and having asked questions.

The second step: Studying the course material –learning lesson by lesson:

- First it is advisable to prepare a learning plan, in which you divide up the material for each day. In order to make the division realistic, you are recommended to do a trial reading, and measure by a watch how long it takes you to read a sub-chapter-long material in such a way that the first reading is only silent reading, while during the second reading you also try to find and put down the key words of the lesson. Multiply this time by the number of the sub-chapters. Consider this added up time when you prepare your learning plan. It is also worth planning some time for watching the video films in the course material as well as for doing the 2 or 3 exercises for each lesson.
- Reading lesson by lesson elaborating: While you are studying the lesson, it is worth again reading through the whole lesson guickly because it helps you to organise the material,

Atkinson Rita L. – Atkinson Richard C. – Smith Edward E. – Bem Daryl J: Psychology. – Oziris – Századvég Bp. 1994

which increases the efficiency of recalling knowledge. It is also advisable to ask lesson by lesson questions related to the topic which you would like to get an answer to while studying the lesson.

- As the next step read the material of the lesson carefully.
 Move on with small steps, by subchapters while studying.
 During the first reading do not try to find the main points, and do not look for key words because it is not possible to find the main ideas without knowing the whole text.
- If you find it necessary, while reading the text the second time, try to find the key words in the text and put them down, but it should not be longer than 10-15% of the text.
- If you find it necessary, start taking notes or making a rough outline of the lesson after that. It is useful to make a study aid supplemented by coloured figures, a so called "mind-map", which also helps you to memorise the material, and recall it better by providing information in pictures and structuring the material.

Following the reading, finding the main ideas and taking notes recall what you have learnt, and try to test your knowledge by answering the questions for self-assessment.

If there is a practice exercise related to the lesson, do it and compare your experience with what you have read in the theoretical part, and try to link them.

Test your knowledge by answering the questions at the end of each lesson, and doing the practice test.

Move on studying in detail lesson by lesson, but insert a comprehensive test at the end, which covers the whole course material.

The authors wish you success in learning, and that you immerse yourselves successfully in knowledge.

Please read the contents of the course in the introduction, and write at least 5 questions related to the topics mentioned that you would like to get an answer to while reading the material.

2 THE ROLE OF SOCIALIZATION IN THE LEARNER'S PERSONALITY-DEVELOPMENT

2.1 Objectives and competences

The goal of the lesson is to give an overview about how the individual adapts themselves into the social world, which factors influence their becoming a social being, and what role the family and school play in this process.

After studying the material, teacher trainees will be able to satisfy the following criteria:

- they will be able to recall the concept of socialization,
- they will be able to name the up-to-date questions of the research related to socialization.
- they will know and understand the main ideas of the theories of socialization.
- they will be able to identify the different settings of socialization,
- they will be able to enumerate the socialization function of the family and understand its main points,
- they will be able to name the socialization functions of schools and the characteristics of school socialization,
- they will be able to enumerate and interpret the different forms of social learning, and
- they will recognise the role of cognition in the process of socialization.

Studying the lesson will provide the basis for the following teacher competences:

- Having the relevant knowledge they will be able to understand the socialization differences between learners, and perhaps their adaptation disorders,
- they will recognise the importance of social learning with regards to the learner's personality development, and
- they will understand the importance of their serving as a model for their students.
- They will find it important to make a pattern for their students, which is required with regards to social adaptation, and is adaptive.

concept and questions o The models ocialization The role of arner's personalit Direct The Reciprocal development ecological The process ocialization Shaping cultural behaviou model socialization The role of social of individual with learning cognitions observation Socialization Socialization Socialization in an institutio

2.2 Course material

Figure 2 A mind map about the structure of the lesson

2.2.1 The concept and questions of socialization

The individual is a social being, and therefore it is fundamentally important how successfully they can adapt themselves to their environment: the concept of socialization indicates this process. Furthermore, socialization also plays an important role in the continuous survival of societies as it forces individuals to set up such patterns of behaviour which are expected from them by the members of the community, and which actually make a given society function.²

From the psychological point of view "socialization is a process in which the individual acquires all the knowledge, skills and attitudes which enable them to become a more or less effective member of society." (Brim – Wheeler, 1966). "We learn the necessary and proper social behaviour, and gain experience in social interactions." (Zigler – Child, 1969).³

² VAJDA Zsuzsanna, KÓSA Éva: *Educational psychology*. Osiris, Budapest, 2005

³ VAJDA Zsuzsanna, KÓSA Éva: *Educational psychology*. Osiris, Budapest, 2005. 49.o.

Socialization is a multifold process, it involves upbringing in the family, the individual's adaptation to many social roles during their life, the acquisition of culture and their integration into particular groups, etc.

In the last few years the theoretical approaches to socialization have emphasized that socialization is determined by environmental and cultural factors, i.e. the process can be examined and interpreted only in this context. Another significant recognition is that the individual is an active participant in their own socialization: their motivation and cognitive skills are highly important in the process.

In fact, socialization used to be believed to be a one-way process in which the individual will be formed somewhat passively due to the effects of the society that shapes them. For example, this was thought by the followers of behaviourism (such as Watson and Skinner), according to whom the behaviour of children can be changed with the help of operant conditioning from the very beginning. The same one-way process is emphasised by Freud with regards to the fact that the individual becomes from a being acting on instinct, not bothering about their companions to a citizen behaving according to conventions influenced by society.⁴

However, in the last few decades (from the beginning of the 20th century), researchers and scholars dealing with socialization have turned their attention more and more to the reciprocal nature of socialization and the environmental and cultural factors influencing the process. In contrast with the earlier views, it seemed to be that the individual having social skills takes part in social situations from infancy, and in continuous interactions with their environment they mutually influence each other.

2.2.2 The theories of socialization

In the following we will introduce the main theoretical approaches determining the views about socialization. We will focus on approaches which contributed significantly to the definition of socialization. Although these theories approach it from different perspectives, they emphasise the determination of socialization by the social context and its interactive nature.

The ecological model

The ecological model illustrates the relationship system between the individual and the environment. Its most significant representative is Urie

DURKIN, Kevin: The social nature of social development. In Hewstone, M., Stroebe, W., Codol, J-P., Stephenson, G. M. (szerk.): Szociálpszichológia. Közgazdasági és Jogi Könyvkiadó, Budapest, 1995, 58-77. o.

Bronfenbrenner⁵. Starting from the foundations of system theory, he considers "the environment to be a system of hierarchic, interrelated structures in which each system is involved in the next one." The different levels are layered around the individual like an onion (see Figure 3). According to this model, the behaviour of an individual can be interpreted only in this system knowing its environment.

- Microsystem: the immediate environment surrounding the child includes the physical objects, their structure and the interpersonal structure.
- Mesosystem: it involves the groups, societies together that become bigger and bigger during the development of the individual.
- 3. Exosystem: the wider social structure which has an impact on the life of the individual (town, work, school and media, etc.)
- Macrosystem: the economic, social and political institute system embracing a given culture, and the value and norm system of a given culture.

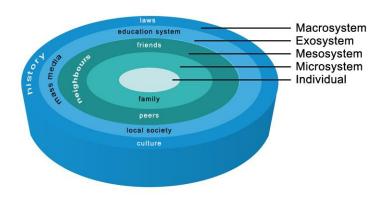


Figure 3 Bronfenbrenner's model (1979)

The cultural model

The relatively new branch of psychology, the cultural psychology examines how the cultural environment, traditions and the social environment influence the psychic processes of the individual. The so

⁵ VAJDA Zsuzsanna, KÓSA Éva: *Educational psychology*. Osiris, Budapest, 2005.

⁶ VAJDA Zsuzsanna, KÓSA Éva: *Educcatonal psychology*. Osiris, Budapest, 2005. 60.o.

called "culture-inclusive" research paradigm (Valsiner, 1989)⁷ takes what role the culture present for the individual plays in their development and socialization into consideration. The cultural model of socialization interprets people in the system of their cultural environment, on the basis of which the given culture provides a frame for the individual's socialization, accounts for the events of the environment, organises knowledge and interprets experience.

The Reciprocal model

The latest research of development-social psychology (from the 1970s) casts light on the fact that children are not born as "blank slates" or tabula rasa but they have reflexes, skills and predispositions. They use these not only for responding to their environment but they also initiate and explore – help other people to find out what is worth paying attention to in their environment. At the same time the interest and the skills of children influence the range of activities in which they can be involved from the beginning. According to the reciprocal model of socialization (Schaffer, 1984)⁸ children stand in a reciprocal relationship with their environment, and thus they are the active participants of their own social development. Accordingly, the key of the success of socialization is the tuned interaction between the competences. characteristics of children and the responsiveness of the social environment.

2.2.3 The scenes of socialization

As was mentioned in the introduction, socialization takes place at several different places during our life. Of these, now we will deal with only the two most relevant ones with regards to a teacher's career: socialization in the family and in school.

Socialization in the family

The first and most important place of socialization is the family. The reason for this is perhaps that the life of a child begins in the family, and consequently it has an impact on the individual from the earliest time, and therefore it has a significant impact in the long run. Besides, family bonds are mostly important for the individual, they are intensive, intimate,

⁷ VAJDA Zsuzsanna, KÓSA Éva: Educational psychology. Osiris, Budapest, 2005.

⁸ DURKIN, Kevin: The social nature of social development. In Hewstone, M., Stroebe, W., Codol, J-P., Stephenson, G. M. (szerk.): Szociálpszichológia. Közgazdasági és Jogi Könyvkiadó, Budapest, 1995, 58-77. o.

lasting and thus their impact is significant. In the earliest time, in the first few months the child's fundamental experience is feeling a sense of security. By the end of the 6th month a bond with the mother (or with the first caretaker whether it is the father or adoptive parent) will have developed, and its quality (of the secure, avoiding, ambivalent or disorganised linking type) has an impact on how we will be able to establish and maintain relationship with other people until the end of our life. Namely, on the basis of parents' responsiveness an internal model will be developed in the baby which forms the foundation of all social relationships later. The importance of early mother-child relationship has been justified with plenty research evidence by several studies since the 1960s. For example, in their examination considered to be pioneering in the topic, Harlow et al. (1965) found the rhesus monkeys spending the first six months of their life without their mother and other companions were later completely unable to adapt themselves to their companions and it has not improved over time, either. 10

Unfortunately there are examples in the case of human children as well that the consequences of the lack of the early personal relationship and nursing were examined by natural observation. The results of examination of Rumanian and Lebanese children living in orphanages in neglected circumstances have also indicated that long term-isolation makes the individual completely unsuitable for integrating themselves into society. Adoption and nursing in early infancy can considerably improve the state of children but it takes a very long time, the improvement will not be complete, and it affects rather the cognitive skills than the skills of social adaptation and social behaviour.

We will present the socialization functions of the family based on Kozma's classification (1988). 11 Bearing all these in mind, it is easy to see that the social position, norms and possible dysfunctions or the deficiencies of the family system of the family can determine the success of the individual in the process of integrating themselves into society in the long run.

 Securing the emotional foundations of personality development, establishing a sense of security. A safe, stable and harmonious family provides the basis for a healthy personality development. The health of the personality; the

⁹ TÓTH László: *Psychology in teaching*. Pedellus Tankönyvkiadó, Debrecen, 2000.

CSÓKA Szilvia: Life quality and equal opportunity in the light of early attachment. In: Kopp Mária (szerk.): Magyar Lelkiállapot - Esélyerősítés és Életminőség a mai Magyar Társadalomban. Semmelweis kiadó, 2008. 179-192.

¹¹ TÓTH László: *Psychology is teaching*. Pedellus Tankönyvkiadó, Debrecen, 2000.

individual's fundamental sense of security considerably determine how successfully they will be able to adapt themselves to the social environment, and integrate themselves into society.

- Teaching speech. Speech is vitally important in the process of social integration. We acquire our mother tongue in the family; the quality of the spoken language also plays a role in the success of socialization.
- Providing the first space of interaction. Family bonds provide the first place for experiencing interpersonal relationships. Here you can practise how you are expected/required to behave, and how you are not allowed to behave.
- Offering a model. Learning by observation is an important means of socialization (see later, in the chapter titled "The process of socialization"). During the life of an individual the first models to be followed are provided by the parents, brothers and sisters and other members of the family, the child will copy first (and for quite a long time) their behaviour.
- Transmitting general values and norms. Social values, norms and rules will get to the individual mostly through the values and norms of the family. Therefore, from the point of view of the success of socialization it makes a difference how much the value system of the family and that of the society match.
- Developing self-awareness and identity. The individual's self-awareness and self-identity will be primarily developed through feedbacks from family relationships; it is the family in which they try to find an answer to the questions of who they are, where they are going, who they belong to, where their place is, and what their role is in the world.

Socialization in the family is fundamentally important in the process of integration into society. In the family children gain such experience which is later very difficult or impossible to make up for. The irreparable disadvantages of the social skills are testified by the stories of children who were brought up alone, without a family for some reason and were found later. The film below shows the case of a boy brought up in the wilderness.

Observe in the film below in what fields the disadvantages coming from the lack of education in a family are manifested.

http://www.port.hu/a_vad_gyerek_l_enfant_sauvage/pls/w/films.film_page?
i_film_id=51268

The attention is focussed on the long-term consequences of the deficiencies of family socialization in such cases as well when although the child is brought up in a family, the family does not have the desirable role in establishing the emotional security of the child and in its upbringing. An example for it is the case of the American "Genie", who was "brought up" by her parents in miserable circumstances, in total isolation from the world, assaulted and tied to the bed for years.

http://www.youtube.com/watch?v=hmdycJQi4QA

Socialization in an institution

The individual spends a significant part of their life in an institution beginning from their time in the nursery school (crèche) to retirement. These educational–teaching institutions, workplaces, etc. greatly differ from the close, intimate relationships, and frame systems of a family and provide new opportunities for the individual to establish inter-personal relationships, carry new rules, a value system and norms which they have to adapt themselves to: i.e. is they form further settings for socialization. Bearing the goals of the course material in mind, we will have a closer look at only socialization in school here.

Socialization in school

The functions of socialization in school. Schools have a role of unquestionable importance in the process of social integration. However, according to several authors the importance of the role of the school and teachers can be questioned due to the development of the information society, and the mass access to information poured out by the internet and the media. 12,13. At the same time, guidance, schools and the frame system provided by competent teachers are necessary to find our way in information and to interpret it properly. Besides the unambiguous teaching role (transferring information and teaching learning) schools also have other functions in the fields of social-emotional development, value transmission and cultural education, etc.

The socialization functions of the school can be summarised as follows. Based on the classification by Németh (1997)¹⁴, schools have

¹² VAJDA Zsuzsanna, KÓSA Éva: *Educational psychology*. Osiris, Budapest, 2005.

SZABÓ László Tamás, BUDA Mariann, BUDA András, PAPP János, PETŐ Ildikó, VENTER György: The "hidden curriculum": varieties of school life worlds. OTKA Kutatási Jelentések, 2006. URL: http://real.mtak.hu/1097/1/43492_ZJ1.pdf

¹⁴ VAJDA Zsuzsanna, KÓSA Éva: *Educational psychology*. Osiris, Budapest, 2005.

pedagogical and social functions. Vaida-Kósa both adds its anthropological function to these as well.

- The pedagogical functions of schools: they mean the goals of individual development including the transfer of knowledge, personality development, and developing the skills necessary for adult life and the successful integration into society.
- The social functions of schools: They include higher social goals, such as the transfer of values, norms and knowledge represented by a given society and culture. According to Mészáros (1999)¹⁵ school intends to fulfil its social functions in several ways. One is that education at school can mean an alternative besides the parental treatment and culture, and it can control parental education as well. Learning in peer groups and active participation can create the prerequisites of the ability of adaptation and cooperation, and at the same time they also offer an opportunity to learn how to solve conflicts in a constructive wav.
- The anthropological function of schools: it means that the enrolment of pupils int schools, their education commonly accepted in society can both modify the whole childhood, the conditions of an individual's upbringing and shape the way of thinking and views of the whole society 16, and therefore they exert a long-term influence on society. The school system - so to say sanctifies the peculiarity of childhood, and its difference from adulthood, as well as culture and the spread of general education made it possible among others for civil democracies to be created (Mészáros, 1999)¹⁷.

The characteristics of socialization in school. It must be borne in mind that children getting to school have different levels of socialization under the influence of family experience, the scale of values and norm system of the family can agree with the values and norms at school in different degree or can contradict them. In the examination of successful or unsuccessful school career some research focussed on examining the differences of the family background, according to which the attitude of

¹⁷ VAJDA Zsuzsanna, KÓSA Éva: *Educational psychology*. Osiris, Budapest, 2005.

¹⁵ VAJDA Zsuzsanna, KÓSA Éva: *Educational psychology*. Osiris, Budapest, 2005.

¹⁶ VAJDA Zsuzsanna, KÓSA Éva: Educational psychology. Osiris, Budapest, 2005.

the family to school performance and the values represented by the school has a great impact on an individual's school career. 18

Other research analysing school success is related to the recognition that together with the declared goals of the institution and open socialization procedures, there exists a hidden, deeper lying effect system more difficult to recognise, which also strongly determines what the individual's school career will be like, depending on whether they will recognise and adapt themselves to these hidden requirements¹⁹. Now let us have a closer look at the socialization procedures of the school: on the basis of all these they can be manifested (open) or hidden. The manifested procedures involve such obvious means as for example observing/having the rules of the house observed, rewarding or condemnation or giving marks. The hidden socialization procedures (in other words hidden curriculum) encompass such unintended effects which children meet in the classroom day by day, but they do not belong to the school's official, declared goals. Parts of the hidden curriculum are, for example, the teacher's own personal attitudes, values, which he/she will unwillingly transmit to the students through his/her behaviour, modelling or by often giving well-disciplined students better marks than to their less conform peers.²⁰

2.2.4 The process of socialization

The forms of social learning

As was mentioned above, during socialization the individual also acquires norms, skills, knowledge, particular rules, and complex opinion structures. How all these happen can be explored best by means of the interpretation frame of the cognitive-social approach of learning theory (Ladd – Mize, 1983)²¹. This approach points out three components in the background of social learning:

- direct instructions (such as instructions, encouragement, warning)
- shaping behaviour (by means of rewarding and punishment)
- modelling or learning with observation

¹⁸ SZABÓ László Tamás, BUDA Mariann, BUDA András, PAPP János, PETŐ Ildikó, VENTER György: The "hidden curriculum": varieties of school life worlds. OTKA Kutatási Jelentések, 2006. URL: http://real.mtak.hu/1097/1/43492_ZJ1.pdf

SZABÓ László Tamás, BUDA Mariann, BUDA András, PAPP János, PETŐ Ildikó, VENTER György: The "hidden curriculum": varieties of school life worlds. OTKA Kutatási Jelentések, 2006. URL: http://real.mtak.hu/1097/1/43492_ZJ1.pdf

²⁰ TÓTH László: *Psychology in teaching*. Pedellus Tankönyvkiadó, Debrecen, 2000.

²¹ VAJDA Zsuzsanna, KÓSA Éva: *Educational psychology*. Osiris, Budapest, 2005.

According to the representatives of this theory these three components are often intertwined with each other, as well as all three exert their influence by filtering through the social cognition (that is via the understanding and interpreting of the environment).

Direct instructions

Direct instructions try to establish the desirable behaviour, norms in such a way that they transfer general information or formulate quite concrete messages in connection with what, when and how must, is allowed or mustn't be done, said or thought. Besides, they give incitement to the person to intend to carry out the instruction. Such instructions are rarely applied by themselves, they mostly occur together with other effects and processes.²²

- For example, a common general direct instruction is "Behave yourself normally" or "Behave yourself as a child in the fifth class is supposed to". An example for the concrete instruction is that" you must stop at the edge of the pavement".
- It must be noted that these intructions can often be misunderstood, they are ambiguous. Their understanding and the intention of carrying them out are influenced by cognitive and social processes and other factors, respectively.

Shaping behaviour: rewarding and punishment

This method involves actually applying the classical and operant conditioning in socialization: reinforcing behaviour according to the expectation and extinguishing the undesirable behaviours by means of rewarding or punishment. This category encompasses not only the conscious education procedures as in fact, every given response of the environment to the individual's behaviour either reinforces or extinguishes the given behaviour. Obviously the ultimate goal of socialization is that behaviour should be guided by an inner regulating system which does not depend on either external rewarding or punishment. However, on the way to it building reinforcement and inhibitions plays an important role in the process of giving over norms.²³

It is	worth b	rushing	ı up tl	he concepts r	elated to	lea	rning	theory of
the	course	titled	"The	psychologica	al bases	of	the	teacher's

²² VAJDA Zsuzsanna, KÓSA Éva: *Educational psychology*. Osiris, Budapest, 2005.

- activity", such as positive reinforcement, negative reinforcement, positive and negative punishment.
- ? What do you think about punishment as a method of socialization? In what cases and how can it be applied?

Learning with observation

According to the approach of learning theory a form of social learning of central importance is observing other people's behaviour by which the individual can create new forms of behaviour or can apply the elements of their present behaviour in a new form, in other situations as well as they can draw conclusions from the consequences of the behaviour of others for themselves. Research has also highlighted that direct observation is not needed, in order to shape their behaviour it is enough for the individual to hear or read about other people's activities.²⁴ The forms of learning with observation are as follows:

- Copying. This is the simplest form, it means copying the behaviour of the model as a whole. Babies of several months old are already able to repeat things which they have already done before. Intentional copying starts at 7-8 months old; and by the end of the first year having the knowledge about their own body and themselves as an independent being babies are able to repeat series of more complex activities. For the ability of the delayed imitation (namely having got further away from the observation of behaviour) the internal representation of other people's behaviour is necessary, and thus it can be observed at the age of one and a half two years.
- In the examination by Meltzoff and Moore²⁵ the ability of copying manifests itself really early, in new born babies but it cannot be regarded as real, intentional copying. You can observe this in the film below.

http://www.youtube.com/watch?v=k2YdkQ1G5QI

At later ages we rarely apply such imitation (only in justified cases). It will be more important who the model is: while small children imitate others almost indiscriminately or they copy mostly people important for

²⁴ VAJDA Zsuzsanna, KÓSA Éva: *Educational psychology*. Osiris, Budapest, 2005.

²⁵ COLE, Michael, COLE, Sheila R.: Development psychology. Osiris Kiadó, Budapest, 2003.

them (their parents), in the case of following models later the model has positive social characteristics such as having social power, being able to reward or punish, successful, caring, etc.²⁶,²⁷

- ? In what cases can you imagine direct copying as an element of socialization in adulthood?
- **Identification.** Identification is the higher level of learning with observation. The concept was introduced by Freud and psychoanalysis, it referred to the process in which the individual takes over the opinion, thoughts, value judgement, tastes and roles, etc. of another person who is important and significant for him/her. The individual does not simply copy behaviour: they themselves would like to become like the model. The basis of choosing a model is mostly love (for example identification with the parents at the time when children go to nursery school), or adolescents are guided by the desire of identification with an envied, admired person, in adulthood it can also happen e.g. on the basis of political ideology.²⁸
- Interiorization (or internalization). The highest level of socialization is when behaviour becomes totally independent of the external control, the model. It supposes the presence of an internal control which is developed by the processes of rewarding-punishment, modelling learning and identification in which the learnt elements will be built into the personality, the value system of the person.²⁹ The moral values, norms and rules become internal, a personal conviction, and this internal control is sufficient to regulate social behaviour.
 - Try to find examples for direct instructions, rewarding and punishment as well as for the various forms of learning with observation from the field of family and school education (even from your own life).

²⁶ VAJDA Zsuzsanna, KÓSA Éva: *Educational psychology*. Osiris, Budapest, 2005.

²⁷ HATVANI A., ESTEFÁNNÉ V. M., TASKÓ T.: Personality- and social psychology. EKF Médiainformatika Intézet, Eger, 2001.

²⁸ VAJDA Zsuzsanna, KÓSA Éva: *Educational psychology*. Osiris, Budapest, 2005.

²⁹ VAJDA Zsuzsanna, KÓSA Éva: *Educational psychology*. Osiris, Budapest, 2005.

The role of individual cognitions in socialization

The process of socialization; learning with socialization are influenced by the cognitive processes of the participants: that is how they interpret their experience as well as the expectations and the possibilities of the environment. This refers to both the cognition of adults and children.

The justification of the reciprocal model of socialization is proved by such examinations according to which infants and even new-born babies have the abilities and predispositions necessary for social interactions.³⁰ The socialization effects exert their influence through the cognitive filter of children: every socialization procedure has an effect only by the meaning interpreted by the child. For example, punishment is not effective by itself, only through its interpretation, mainly if the child understands the reason of prohibition.³¹

At the same time participation in the social interactions also exerts an influence on the development of cognitive skills: a series of research justify the role of interpersonal interactions in the development of intellectual and language skills.³² (In development psychology the cognitive approach of social constructivism – represented mainly by Vigotszkij and Bruner– deals with how the cognitive skills develop in an interaction with a competent companion.) It seems to be that social cognition (the knowledge referring to the function and rules of the social world) is the result of a development process: a child understands the rules of social interactions, the moral values and expectations, etc. gradually through experience.

The new theory of natural pedagogy³³ based on the observation of infants and small children offers one explanation for the cognitive-social development. The so called natural pedagogy is the special social learning system with the help of which a huge amount of cognitively boundless cultural information for a child can be acquired quickly and easily. This system also comprises what an infant-small child looks for actively, and recalls the relevant knowledge from the competent persons in their environment and also that these people having this relevant

³⁰ DURKIN, Kevin: The social nature of social development. In Hewstone, M., Stroebe, W., Codol, J-P., Stephenson, G. M. (szerk.): Szociálpszichológia. Közgazdasági és Jogi Könyvkiadó, Budapest, 1995, 58-77. o.

VAJDA Zsuzsanna, KÓSA Éva: Educational psychology. Osiris, Budapest, 2005.
 DURKIN, Kevin: The social nature of social development. In Hewstone, M., Stroebe, W., Codol, J-P., Stephenson, G. M. (szerk.): Social psychology. Közgazdasági és Jogi Könyvkiadó, Budapest, 1995, 58-77. o.

³³ GERGELY György, EGYED Katalin, KIRÁLY Ildikó: On natural pedagogy. Magyar Pszichológiai Szemle, 2007, 62 (1). 107-125.

knowledge are willing to transfer their knowledge in a suitable, receptible way fitting the abilities of the "learner".

Another important aspect of the social-cognitive development is that the infant, small child should learn to draw conclusions about the mental state of others (i.e. what they have in their mind and how they feel). According to the theory of natural pedagogy in this respect the major task of early social-cognitive development is to understand that not everybody knows everything, knowledge contents are not universal: other people are independent of each other and have a mind having different contents.

It is also important to mention what role the parents' cognition plays in the socialization of children. One projection of it is the parents' intellectual, verbal and conceptual level, which primarily determines what interpretation a child gets about environmental experience from them. Another aspect of it is grasping the expectations of the environment which will be transmitted to the child in the opinions they have on education procedures, more precisely the methods applied in education.³⁴

2.3 Summary, questions

2.3.1 Summary

Socialization means the process of integration into society, the acquisition of the forms of behaviour, attitudes and norms regarded to be desirable by society. In the latest views of socialization the cultural and environmental factors are important to determine socialization, and the individual actively cooperate in their own social development. These are comprised by the ecological model, the cultural model and the reciprocal model.

The first and most important scene of socialization is the family. Providing the emotional basis for personality development, teaching speech, the first interpersonal interactions, offering a model to social behaviour for the first time, transmitting general values and norms, as well as shaping self-awareness and identity happen in the family.

2.3.2 Questions for self-assessment

Recall the definition of socialization.

In what fields did the modern approach to socialization bring something new?

Enumerate the main theoretical models of socialization.

³⁴ VAJDA Zsuzsanna, KÓSA Éva: *Educational psychology*. Osiris, Budapest, 2005.

What are the socialization functions of the family? What are the socialization functions of the school? What are the forms of social learning?

2.3.3 Practice tests

Which of the following does not belong to the socialization functions of the family?

- A) Teaching speech
- B) Acquiring the role of occupation
- C) Creating a sense of security
- D) Forming identity

Which model of socialization emphasises the active participation of the individual it his/her own socialization?

- A) The ecological model
- B) The cultural model
- C) The reciprocal model

Which form of social learning has the basis of the intension of identification with the loved person?

- A) Identification
- B) Interiorization
- C) Model following
- D) Behaviour shaping

The correct answers are: B, C, A

3 THE FACTORS INFLUENCING THE SHAPING OF SOCIAL RELATIONSHIPS IN SCHOOLS: PERSON PERCEPTION, ATTITUDES, PREJUDICES

3.1 Objectives and competences

The aim of the lesson is to give an overview of the social-psychological phenomena which influence the shaping of social relationships in school.

Having studied the lesson, teacher trainees will have to satisfy the following requirements:

- They will be able to recall the concepts of person perception, attitude, stereotype and prejudice,
- they will know and understand the theories of person perception,
- they wil recognise the various distortions of person perception.
- They will be able to enumerate the various components of attitudes,
- they will understand and will be able to name the role and functions of attitudes,
- they will know the theories determining the main attitude dynamics and will be able to talk about their main ideas.
- They will be able to enumerate the advantages and disadvantages of stereotyping.
- They will be able to name the reasons responsible for developing prejudices,
- they will be able to enumerate the methods and procedures moderating prejudice.

Acquring the material of the lesson can provide a basis for the following teacher competences:

- They will recognise their own person perception distortions and their significance from the point of view of judging students, as well as they will be able strive after objectivity in evaluation bearing these in mind.
- They will recognise the appearance of undesirable attitudes in the learners' group from the social point of view. Furthermore, they will have the suitable methods to change attitudes.

- They will recognise and influence the stereotypes that can be experienced in learners' group as well as the phenomenon of disadvantageous differentiation and exclusion based on stereotypes and prejudices by using the appropriate methods.
- They will understand the importance of serving as a model for their students as a teacher in transmitting the desirable social attitudes and the prejudice-free social norm.

3.2 Course material

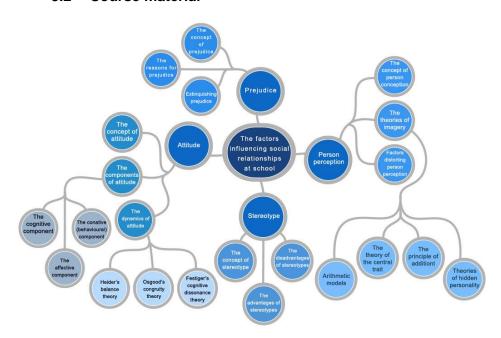


Figure 4 A mind map about the structure of the lesson

3.2.1 Person perception

The concept and phenomenon of person perception

Person perception means the perception of other people. It is the first stage of any interpersonal interaction in which we can also draw conclusions about the inner characteristics that cannot be observed directly.³⁵

³⁵ Forgách József: *The psychology of socal contact*. Gondolat, Budapest, 1993.

Person perception differs considerably from object perception as in person perception in contrast to object perception among other

- we must judge inner, hidden characteristics: we often conclude things that canot be observed directly, such as how clever the other person is,
- there is value content it it: the perceived characteristics (such as the degree of cleverness) mean something good or bad, favourable or unfavourable for us,
- are involved, we are biased: it is often in our own interest –
 although unconsciously , to perceive other people wrongly,
- there are a lot of subjective factors: it makes a difference what mood we are in when we perceive the other person.
- objective comparison is missing: there is no measure on which we can check the accuracy of our perception, and thus we often make mistakes.³⁶

Nevertheless, it is often very important what image we make, what impressions we have about another person. With the help of the following exercise you can try how reliable, for example, testimonies are.

Ask a companion for help to do the exercise. As you are walking in the street, one of you should ask somebody, for example, what time it is, where the nearest post office is, etc. When he/she gets out of sight, the other person should ask to describe the person who asked the question before, what impression he/she had. Furthermore ask the examined person to characterise him/her on the basis of certain inner characteristics (e.g. how nice, quiet, aggressive, etc. he/she was). How accurate are the descriptions? Are they willing to characterise somebody who they saw only for a short time along the inner characteristics? What do they base their judgements on?

The theories of imagery

On the basis of the perceived impressions, outer characteristics, supposed inner characteristics and features we make a homogenous image about the other person during person perception. There have been created several theories about how we form a homogeneous image. Next we will look at these.

³⁶ Forgách József: *The psychology of social contact*. Gondolat, Budapest, 1993.

Arithmetic models

- a) According to the summation model (Fischbein and Hunter, 1964)³⁷ we simply add up all the information that we got about a person in the forms of positive and negative signs. The value of characteristics is culturally and individually determined. Consequently, the in our view good characteristics get a positive sign, and the more important some characteristic is for us, the higher number we assign with it. However, it is possible that the same characteristics would get completely different values for another person.
 - For example, Let us suppose that we give scores on a scale from +10 to −10 in ourselves. One student in our class, Pisti is very clever (+10), nice to his classmates (+10), loves cars (+3), but picks at his nose (--3), and keeps chewing his pencil (-2) → If we add them up, the total judgement of Pisti is +18, that is we foem a positive image of him. If we get to know about him that he can whistle well (+1), the image will be even more positive: +19.

According to the theory, the more good characteristics we know about somebody, the better their judgement will be. Even the smallest positive characteristics increase the favourable judgement.

- ? What criticism could you formulate in connection with the theory on the basis of your own experience?
- b) According to *the averaging model* (Anderson, 1965)³⁸ we not only add up the information but also average it. Accordingly, the less positive characteristics for us, for example, decrease the good judgement of the overall picture.
 - Let us look at the theory through the example of Pisti mentioned above: if we average the total 18 points by calculation 5 characteristics, the result is: 3,6. If we learn later that he can whistle well, we get 19/6=3,17, and consequently, the picture became less positive in the whole due to this piece of information.
 - ? What criticism could you find in connection with the theory on the basis of your own experience?

According to the criticism generally formulated in connection with the arithmetic models, person perception cannot work like this because the value of the characteristics is not constant for particular individuals,

³⁷ Forgách József: *The psychology of social contact*. Gondolat, Budapest, 1993.

³⁸ Forgách József: *The psychology of social contact*. Gondolat, Budapest, 1993.

either. Furthermore, person perception mostly functions as an automatic process, which precludes a rational, conscious calculation.

The theory of the central trait (Asch, 1946)³⁹

In Asch's view the value of traits is context dependent. The outstanding representative of Gestalt psychology started from the fact that the whole is greater than the sum of its parts is true in the case of the impressions we form about persons. In his view, certain traits play a greater role in forming the overall picture than other traits; these are the called peripheral vs. central traits. He proved his theory experimentally: He gave the two groups of the experimental persons one trait from the two lists of traits, and then he asked them to characterise the described person along independent characteristics. The original list of the two groups was different only in one trait: intelligent, skilful, hardworking, warm-hearted, determined, practical, cautious - and the same list with the trait cold instead of warm-hearted, respectively. According to the results the two groups characterised the person completely differently on the independent list. However, if they changed another trait, it modified the impressions only slightly. Consequently, on this list the central trait was cold and warm-hearted respectively. 40,41

What makes a trait of central importance? On the basis of the examinations the following factors can have a role in one trait becoming a central one:

- The goal of person perception: in imagery the goal of judgement can change, which modifies the central trait: for example, the particular traits of students are of different importance, if we look for a student who could have the role of the class secretary or somebody who organises the carnival party.⁴²
- Preference effect: the first impression is mostly very important; we evaluate all the information obtained later in the light of the first one (in accordance with the principle of addition). However, the preference effect can be eliminated easily if we call the attention of the perceivers that they should pay equal attention to every single piece of information.⁴³

 $^{^{39}}$ Forgách József: *The psychology of social contact.* Gondolat, Budapest, 1993.

⁴⁰ Forgách József: *The psychology of social contact.* Gondolat, Budapest, 1993.

⁴¹ Hatvani Andrea, Estefánné Varga Magdolna, Taskó Tünde: *Personality- and social psychology*. EKF, Médiainformatikai Intézet, Eger, 2001.

⁴² Hatvani Andrea, Estefánné Varga Magdolna, Taskó Tünde: Personality- and social psychology. EKF, Médiainformatikai Intézet, Eger, 2001.

⁴³ Forgách József: *The psychology of social contact.* Gondolat, Budapest, 1993.

- It is important, for example, that we teachers should not let the first piece of information we obtained about a student, our first impression about them (such as an unfortunate sentence, or that he ran up at us in the corridor) determine all our later experience.
- The novelty effect: this phenomenon is related to the fact that we remember the last few pieces of information simply better.
- Distortion into the negative direction: research has shown that negative information has a disproportionately greater role in determining the image about other people than positive or neutral information, and it is difficult to change the image we have formed in such a way.⁴⁴

The principle of addition

This theory tries to resolve the contradiction that it is difficult for people to change their opinion they formed about somebody, at the same time it is difficult for them to bear that a newly learnt trait contradicts this created image. Due to all these we try to form, add the new piece of information to the image present so that it should not change it fundamentally (Tagiuri, Brunner, Shapiro, 1954).⁴⁵,⁴⁶

Theories of hidden personality

This theory tries to account for how we are able to characterise other people on the basis of little experience along relatively many characteristics. Our earlier own experience sometimes seems to be more important in person perception than the real characteristics of the perceived person. Kelly $(1955)^{47}$ supposed that we organise our experience in so called constructs, we perceive the world along these, and thus our social relationships as well. The term theory of hidden personality refers to the fact that there exist some – unconscious – expectations and suppositions in our mind about how certain characteristics go with other characteristics. Actually these connections do not characterise the other person but our own individual, hidden personality theory. For example, teachers often suppose at school that

⁴⁴ Forgách József: *The psychology of social contact*. Gondolat, Budapest, 1993.

Forgách József: *The psychology of social contact*. Gondolat, Budapest, 1993.
 Hatvani Andrea, Estefánné Varga Magdolna, Taskó Tünde: *Personality- and social psychology*. EKF, Médiainformatikai Intézet, Eger, 2001.

⁴⁷ Forgách József: *The psychology of social contact*. Gondolat, Budapest, 1993.

ability, diligence, good behaviour go with other favourable personality traits. $^{48}\,$

Factors distorting person perception

We have already mentioned that person perception is not accurate; there are several possibilities to make mistakes, to make a wrong judgement. Next we will outline which ones distort characteristically the accuracy, the objectivity of person perception.

- Think it over and answer the following question honestly: What kind of students do you think Dzsenifer, Renátó, Dóri and Béci are? You have some tips, don't you? Surely, distortions of person perception work with everybody. But what can be in the background of the two?
- Stereotyping: the next chapter will investigate the phenomenon when we identify somebody as a member of a group, and we suppose that he/she has all the characteristics that we attribute to the group.
- The halo-effect: the term refers to the fact that we tend to draw conclusions about a person's other characteristics on the basis of a favourable or unfavourable characteristic. For example, we tend to attribute good inner characteristics as well to nice looking persons (Dion et al. 1972), in the case of contravention we tend to impose less severe penalties than for somebody with a less attractive appearance. In an experiment teachers evaluated the same test paper of the same students by different marks if a common or a very extraordinary name was written on it (Harari and McDavid, 1973).⁴⁹
- Try out how these distortions work in practice. Look at the following two pictures (Figure 5), and evaluate the students from 1 to 5 on the following list of traits on the basis of how typical they are of the student (1: not typical, 5: very typical)

intelligent nice warm-hearted popular

⁴⁹ Forgách József: *The psychology of social contact*. Gondolat, Budapest, 1993

⁴⁸ Forgách József: *The psychology of social contact.* Gondolat, Budapest, 1993

polite hard-working

- Distortions according to expectations: we can select or evaluate the information obtained about a person in a different way in the light of our previous expectations related to him/her (for example, we evaluate the test paper with no mistakes of a student we consider to be clever or stupid in a different way).
- Lenient distortions: If people have no particular reasons to suppose something bad about somebody, they fundamentally tend to think something good about other people, they suppose that they have positive characteristics.⁵⁰, ⁵¹
- Distortion in the direction of causality: We also tend to suppose intention behind behaviours: we attribute fewer roles to chance.
- Projection: we can project our negative thoughts and emotions on other people so we suppose to discover them in them. This functions mostly unconsciously, and therefore it is difficult to eliminate.⁵². For example, if we don't like a student for some reason, it is difficult for us to acknowledge it. However, we can feel even more that he is not fond of us.
- Unconscious sympathy and antipathy: old experiences can modify our perception without our being aware of them. The characteristics regarded to be sympathetic or antipathic; and judging students having these can perhaps develop along a childhood memory that we weren't made aware of.⁵³ It is important to recognise them in order to maintain impartiality.
- and finally among the mechanisms distorting person perception we can also mention the processes referred to above the theory of central trait (preference effect, the novelty effect, distortion into the negative direction).

It is important both to accept the presence of these processes and to bear them in mind, and make us aware of them as the teacher's unrecognised distortion of person perception can influence the

⁵⁰ Forgách József: *The psychology of social contact*. Gondolat, Budapest, 1993.

⁵¹ Hatvani Andrea, Estefánné Varga Magdolna, Taskó Tünde: Personality- and social psychology. EKF, Médiainformatikai Intézet, Eger, 2001.

⁵² Tóth László: *Psychology in teaching*. Pedellus Tankönyvkiadó, Debrecen, 2000.

⁵³ Tóth László: *Psychology in teaching*. Pedellus Tankönyvkiadó, Debrecen, 2000.

judgement of particular students in the classroom, and thus often the marks they got and their proficiency at school as well.

Attribution

Attribution is one special aspect of person perception: it means causal judgement, i.e. making inferences about the causes of other people's behaviour. There can be several causal explanations for people's behaviour. Some theories made an attempt to discover some kind of a system in these explanations, and these are the so called attribution theories.

"Attribution theory is a set of conceptions, rules and suppositions which refer to how people make inferences about the causes of their own and other people's behaviour."

Think it over what could have been the cause of a student's behaviour in the following situation. What other pieces of information would you need to decide it with certainty? When describing particular theories, look at the example again and think about it within the frame of that given theory. You ask Pisti to answer your questions at the beginning of the lesson. Pisti refuses to do so and asks you to give him a one. Otherwise, Pisti is a good student, this is the first time that it has happened to him.

Heider's attribution theory

According to Heider⁵⁵ we always suppose some causes behind certain behaviours, and we try to find this cause either in the person of the doer or in his/her environment. He thought that we suppose internal, personal causes only if we cannot discover any obvious external cause or if the doer acts against the circumstances. If this is the situation, and we attribute the behaviour to internal causes, the other question to decide is whether the given behaviour was intentional or unintentional.

Jones and Davis' attribution theory

Jones and Davis' (1965)⁵⁶ so called correspondent inference theory tries to account for how we can state if a given behaviour was intentional.

⁵⁴ Forgách József: *The psychology of social contact.* Gondolat, Budapest, 1993. 91.

⁵⁵ Forgách József: *The psychology of social contact.* Gondolat, Budapest, 1993.

⁵⁶ Forgách József: *The psychology of social contact.* Gondolat, Budapest, 1993.

In order to decide whether it was intentional or not, we consider if the person was aware of the possible consequences of his/her deeds. We suppose intention especially when the consequences of the behaviour are not desirable, if there are only few consequences or only one, if the doer had been informed about the consequences before, if the consequence is severe, or if the behaviour is against the norms or unusual. It is thought it we have already managed to make some kind of inference about intention, we won't try to find any other explanations for the causes of the behaviour. However, according to the authors at the next level of causal judgement we examine how much the intention and the action matches or corresponds with the doer's personality.

Kelley's multi-dimensional attribution model

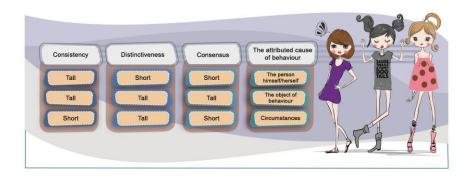
Kelley's model⁵⁷ is more elaborated and complex than the previous ones as he identifies three dimensions in connection with the inferences about the causes of acts: the context, the object or goal of the act, and the doer himself/herself can be the cause of a certain kind of behaviour. In his view, we examine the changes of these three components at various times and in different situations asking the following questions:

- Is the observed behaviour constant in time? (Does the person behave in the same way in a similar situation at another time?) – Consistency dimension
- How distinctive is the behaviour? (Does the person behave in other situations with other people in a similar way, too?) – Distinctiveness dimension
- Do other people behave in the same way in a similar situation? –
 Consensus dimension

The various combinations of these three dimensions lead to different attribution inferences, and accordingly, we can attribute the causes either to external factors or to the person or to the object of the act.

⁵⁷ Forgách József: *The psychology of social contact*. Gondolat, Budapest, 1993.

Table 1 The causes attributed in the background of behaviour according to Kelley's Model



In the school situation mentioned above e.g. If Pisti does not usually evade answering questions, and nobody else wanted to do so in that lesson, and then in the next lesson he gets a five in another subject, we can suppose that the children didn't understand the material (we attribute the cause to the object of the action).

Attribution distortions

In many cases we make wrong inferences about the causes of other people's actions. The most common attribution distortions are as follows:

- self-centeredness (people usually start from themselves when they make judgements about others)
- the role of internal causes is often overemphasised, especially when judging other people
- belief in a just world (everybody gets what they deserve).⁵⁸

3.2.2 Attitude

The concept and functions of attitude

Attitude means that we think something and we have a kind of attitude to all the phenomena of the world. It is an important concept in psychology: mainly because it determines, influences our behaviour. Knowing the attitude, we can make inferences about behaviour. Furthermore, by modifying the attitude we can change behaviour as

⁵⁸ Forgách József: *The psychology of social contact.* Gondolat, Budapest, 1993.

well.⁵⁹ Thus, it makes a difference what attitudes a teacher has in connection with different children's groups (for example, with socially disadvantaged children or children belonging to minorities), or what attitudes children have towards school, mathematics, or to learning in general.

The concept of attitude: "an evaluative reaction towards a person, an object, a phenomenon, a situation or a group of people which serves as a reference point, on the basis of which people form opinion, behave or have a special response to them. (Szabó, 1994, p. 23). 60

Thus, attitudes determine our knowledge, views, emotional relations and behaviour related to the object of attitude. But what are attitudes good for? Attitudes are supposed to have four major functions⁶¹:

- Ego-defensive function: one role of attitudes is to protect the self or the group of the individual from negative feelings. This function can be explained by the psychoanalytic defence mechanism: We project our own unacceptable negative feelings on a group of people (projection) or explain the bad social (perhaps personal) treatment of a minority group with the help of attitude (rationalisation).
- Value expressive function: it means that people need to express their views, value system, beliefs, or their attitudes reflecting the central components of their ego. It plays an important role in reinforcing their self-image.
- Instrumental or adaptation function: Attitudes help us to obtain reward and to avoid punishment. For example, the acceptance and expression of attitudes similar to the attitudes of the members of our own group help us to adapt ourselves to the group.
- Knowledge function: attitudes also help us to find our way in the world by means of filtering and categorising information. They influence information processing through the following processes: We are busy looking for relevant pieces of information by our

Stahlberg, Dagmar, Frey, Dieter: Attitűdök I. Strucure, measurement and fuctions. In Hewstone, M., Stroebe, W., Codol, J-P., Stephenson, G. M. (szerk.): Szociálpszichológia. Közgazdasági és Jogi Könyvkiadó, Budapest, 1995.

Hatvani Andrea, Estefánné Varga Magdolna, Taskó Tünde: Personality- and social psychology. EKF, Médiainformatikai Intézet, Eger, 2001.

Stahlberg, Dagmar, Frey, Dieter: Attitűdök I. Strucure, measurement and fuctions. In Hewstone, M., Stroebe, W., Codol, J-P., Stephenson, G. M. (szerk.): Szociálpszichológia. Közgazdasági és Jogi Könyvkiadó, Budapest, 1995.

attitudes and avoid the ones which contradict them, similarly to this both the perception of information and its recalling from the memory are also selective.

The components of attitudes

The most commonly accepted views about the components of attitudes are represented by Rosenberg and Hovland's (1960)⁶² three-component model, according to which attitudes have three components: the affective (emotional), cognitive (knowledge) and conative (behavioural) components. Let us have a closer look at them with regards to what they mean exactly, and how the various levels can be measured.

The affective component

It expresses the emotional response to the object of the attitude, which can be positive (likes), negative (dislikes) or rarely neutral or ambivalent. It can be measured mainly with physiological indicators (vegetative responses, such as heart beat, skin resistance, etc. for example, with a polygraph.

The cognitive component

It refers to all knowledge, views and beliefs that we know or suppose to know about the object of attitude. It can mainly be measured by self report, for example with various scales. For example, on the Likert-scale we have to score statements from 1 to 7 according to how much the person agrees with us. On the Osgood-scale it must be indicated on antonymous adjective pairs related to an attitude object to which and how much the person's opinion is close to.

The conative component

It means the behavioural level, the behaviour can be actual (that can be observed) or even intentional (it can be only asked). It can be measured with observation, life-situation experiments or, for example, with Bogardus' social distance scale. This scale is usually used for the attitude examination of various ethnic groups, on which the persons have to indicate how much they could accept the members of the given group as relatives, colleagues or neighbours, etc.

Stahlberg, Dagmar, Frey, Dieter: Attitűdök I. Strucure, measurement and fuctions. In Hewstone, M., Stroebe, W., Codol, J-P., Stephenson, G. M. (szerk.): Szociálpszichológia. Közgazdasági és Jogi Könyvkiadó, Budapest, 1995.

Think about, for example, your attitude to students who are good at sport and its three components: What do you know and think about them? Do you like them: How do you behave with them? Similarly, you can examine, for example, if your attitudes towards male and female students differ from each other.

The dynamics of attitudes

The various theories describing the dynamics of attitudes try to account for how it is possible to change attitudes as the goal is often to change the unfavourable attitudes of others. Sometimes it would be good to know how we could get the students of class *A* not to hate the ones in class *B*.

All three of the following theories are based on the experience that people try to reach that their various cognitive contends should harmonise and they do everything for this harmony.

Heider's balance theory

According to this theory there are three important things in the structure of attitudes: the person (P), another person (O) and an attitude object (X), their relationship can be illustrated by a triangular-relation. This structure can be balanced (the product of multiplication of the three relations is positive) or unbalanced (their product of multiplication is negative) (see Animation 1).

If the relationship is unbalanced, we experience tension, which we try to decrease by changing our opinion about either the person or the attitude object. 63 , 64 .

Imagine that you like one of your students very much, about whom you think that he/she is a clever and nice student. Some time later, he/she, however, joins a youth subculture, which you refuse, what is more it deeply upsets you. How do you feel? What do you do? Do you get to like this style trend of young people? Or perhaps you don't like this student any more?

Osgood's congruity theory

In Osgood's view when to meanings meet they try to harmonise with each other. However, meanings are not only positive or negative, their intensity also matters. In our mind there can be congruity (I.e. cognitive

⁶³ Forgách József: *The psychology of social contact*. Gondolat, Budapest, 1993.

⁶⁴ Hatvani Andrea, Estefánné Varga Magdolna, Taskó Tünde: Personality- and social psychology. EKF, Médiainformatikai Intézet, Eger, 2001.

congruence) or incongruity (incompatibility between two cognitive contents. The relation of two things can be incongruous if:

- there is dissonance between the meanings (for example a friendly tax inspector could be like that).
- their intensity is not the same.

In the case of incongruity we try to counter balance the relationships by the following methods:

- Revaluation: we change the other meaning in the direction of a meaning of stronger intensity.
- Rationalization: we look for excuses; we apologize so that we can keep both contents of consciousness in spite of the fact that their relationship is incongruous.
- Doubting: simply we don't believe either meaning.⁶⁵

Festinger's cognitive dissonances theory⁶⁶

The term cognitive dissonance refers to the fact that the contents of consciousness don not match, the one does not follow from the other and vice versa. It results in tension which we try to eliminate. It also happens that we do not even experience because elimination happens so quickly.

Imagine the situation mentioned before with some change, namely that you are requested to be the mentor of the young people who belong to the subculture that you refused before for a considerable sum of money by competition. If you accept it, what contents of consciousness will clash? How can the contradictions be resolved? How do you account for the fact that you have undertaken it?

We can reduce dissonance by applying among others the following mostly unconscious techniques:

- Changing our behaviour: we don't do what contradicts our attitudes, value system.
- Changing our views: we change our attitude in in accordance with our action.
- Rationalization: we try to account for why is the behaviour which is in contrast with our attitude still right.

⁶⁵ Hatvani Andrea, Estefánné Varga Magdolna, Taskó Tünde: *Personality- and social* psychology. EKF, Médiainformatikai Intézet, Eger, 2001.

66 Aronson, Elliot: *The social being*. Közgazdasági és Jogi Könyvkiadó, Budapest, 1994.

1.1.1. Stereotype

The concept and features of stereotypes

In order to understand the phenomenon of prejudice, we have to clarify the concepts of attitude and stereotype. We dealt with attitude in the previous chapter of the lesson, now we will discuss stereotypes.

The concept of a stereotype: An emotionally evaluative attitude formed about a given social group built on categories which are stable in time, supposed to be generally valid, and based on exaggeration.⁶⁷

In fact, a stereotype means that we identify a person as a member of a social group on the basis of some trait of theirs (skin colour, gender, country, etc.) and we suppose that they have all the features of this group identified by us. Its types are: e.g. ethnic, racial, national and gender stereotypes. It means a distinction not necessarily malicious, and everybody has stereotypes to a certain extent.

Its features

- It is based on experience: it is formed via some previous personal experience by means of generalization.
- It has an adaptation function: it serves adaptation by simplifying the huge amount of information of the world.
- It homogenizes and heterogizes: people within a group seem to be very similar, and it fades the individual differences between them while it enlarges the differences in comparison to other representatives of the group.
- It stigmatizes: it highlights certain characteristics.
- It is stable in time and withstands changes.

Its advantages and disadvantages

Among the advantages it is worth mentioning that it provides cognitive economy, i.e. we can orient ourselves from little information by it as well (we think we know hidden information) as well as the world becomes more understandable by stereotypes. Stereotypes increase group cohesion by the fact that it strengthens the group if they profess something together.

⁶⁷ Aronson, Elliot: *The social being*. Közgazdasági és Jogi Könyvkiadó, Budapest, 1994.

However, its disadvantages follow from its advantages: it can distort the world by distorting the process of information processing (if the presupposition is wrong, see in the case of person perceptions), due to its rigidity it conserves as a stereotype is usually stable although the world changes. ^{68,69}

? What groups could you name in a class into which children could be categorised easily? What dangers can these categorizations hide?

3.2.3 Prejudice

If a negative attitude is attached to a stereotype, we talk about a prejudice.

Prejudice is a hostile or negative attitude which is based on generalization coming from wrong and not complete information.⁷⁰

Unfortunately, prejudice is a not uncommon phenomenon. We can say that everybody has a certain amount and degree of prejudice. Next we will discuss the possible causes supposed to be in the background of the formation of prejudices.

The causes of the formation of prejudices⁷¹

- The necessity of self-justification: in accordance with the cognitive dissonance theory if somehow we have caused some damage for a group of people even at a social level we devaluate that group in order to justify our action as we have quasi acted rightfully and we do not have to feel bad.
- The necessity of status and power: at the bottom of the social hierarchy those who have a low status and power feel it necessary that there should be such people against whom they can feel superior.
- Economic and political rivalry: when the available resources (job opportunity, food, etc.) are scant in a society, it is possible that the majority group will try to push the minority group into the background in order to gain material benefits.

Aronson, Elliot: The social being. Közgazdasági és Jogi Könyvkiadó, Budapest, 1994.

 $^{^{68}}$ Aronson, Elliot: *The social being*. Közgazdasági és Jogi Könyvkiadó, Budapest, 1994.

⁶⁹ Forgách József: *The psychology of social contact*. Gondolat, Budapest, 1993.

⁷¹ Aronson, Elliot: *The social being*. Közgazdasági és Jogi Könyvkiadó, Budapest, 1994.

- Scapegoating: when the aggression caused by frustration cannot be turned against its causer (because, for example, they cannot be caught or are too powerful in comparison to us), people transfer their aggression towards a well confinable, weak and otherwise disliked group.
- Conformity: prejudiced behaviour can also be caused by the adaptation to the prevailing norms in society.
- Prejudiced personality: According to Adorno's examinations persons liable to authoritative behaviour are more prejudiced. Authority can be traced back to childhood experience and parental behaviour.
- We should notice that these processes also function in the classroom, for example, it can happen that children may be aggressive towards their less popular companions because of the teacher's humilating behaviour.
- In the TV programme titled By the way: Man by Kepes András we can see some famous social-psychological experiments related to prejudice, and interviews with Aronson and Zibardo, respectively. Let us observe what effect the one single day long experiment which formed artificial stereotypes and prejudices on the basis of the children's colour of the eyes had. As another aspect of watching the film notice what methods were effective to reduce and eliminate prejudices.

https://www.youtube.com/watch?v=F0IAGNDxr2s

Eliminating prejudice

With proper care, it is possible to reduce and eliminate prejudices. The most commonly used methods are as follows:

 Equal-status contact: this method tries to eliminate prejudice by changing behaviour. On the basis of experience if the group inflicted by prejudice and the prejudiced group get in direct contact in an equal status relationship, prejudices will decrease.⁷²,⁷³

Aronson, Elliot: The social being. Közgazdasági és Jogi Könyvkiadó, Budapest, 1994.

Kovács Mónika: The causes of prejudices and the possibilities of their moderation. – A social psychological approach. In. Kovács M. (szerk.): Az előítéletek feltárása és csökkentésük. Alkalmazott Pszichológia, 12 (1-2), 2010. 7-27.

- Unavoidable contact: on the basis of the principle of cognitive dissonance the mere fact that we know that somehow we will certainly get in contact with the members of the group inflicted by prejudice can change the prejudice felt against us.⁷⁴,⁷⁵
- Mutual dependence: if two groups get into a situation which they can solve only together, it can reduce prejudices. That is why the cooperative method (also the mosaic-method) in schools can reduce prejudices, but it is important that the members of the group inflicted by prejudices and the members of the majority society should participate together taking on equal tasks.⁷⁶
- Common identity: Should the groups redefine themselves in such a way that they should belong to one super-ordinated category, it can reduce hostility. Thus we emphasize a common identity which the original groups become a sub-group of. However, it works against prejudices only if the person does not identify himself/herself too strongly with the original group.⁷⁷
- Direct teaching: the targeted, organised acquaintance with the culture of the group inflicted by prejudices can help to reduce prejudices by reducing the fear from the unknown. The role of tolerant, open-minded pedagogues is also important in this question.⁷⁸
- Cathartic experiences: sometimes some dramatic experience (experiencing the severe forms of prejudiced behaviour) or some emphatic experience can change a person's prejudices.⁷⁹ Such can be, for example, when the whole class visits together the exhibition of the invisible, which shows the experience of blind people.

⁷⁴ Aronson, Elliot: *The social being*. Közgazdasági és Jogi Könyvkiadó, Budapest, 1994.

Kovács Mónika: The causes of prejudices and the possibilities of their moderation. – A social psychological approach. In. Kovács M. (szerk.): Az előítéletek feltárása és csökkentésük. Alkalmazott Pszichológia, 12 (1-2), 2010. 7-27.

⁷⁶ Aronson, Elliot: *The social being*. Közgazdasági és Jogi Könyvkiadó, Budapest, 1994.

Kovács Mónika: The causes of prejudices and the possibilities of their moderation. – A social psychological approach. In. Kovács M. (szerk.): Az előítéletek feltárása és csökkentésük. Alkalmazott Pszichológia, 12 (1-2), 2010. 7-27.

Kiss Paszkál: The role of opinion, opinion formation and attitudes in education. In. N, Kollár K., Szabó É. (szerk.): Pszichológia Pedagógusoknak. Osiris, Budapest, 2004. 368-394.

⁷⁹ Kiss Paszkál: The role of opinion, opinion formation and attitudes in education. In. N, Kollár K., Szabó É. (szerk.): Pszichológia Pedagógusoknak. Osiris, Budapest, 2004. 368-394.

3.3 Summary, questions

3.3.1 Summary

The lesson gives an overview of the phenomena which can influence social relationships. During person perception we form an image about another person while we often only make inferences about the characteristics that cannot be observed directly. Therefore this process can be influenced and distorted by many factors. Several theories have been created to describe the process of making imagery and impressions. The most important models are the arithmetic models, the central-trait model, the principle of addition, and the theories of hidden personality.

Attribution is a special aspect of person perception: it means causal judgement, i.e. making inferences about the causes of others' behaviour. There can be boundless explanations for people's behaviour. Some theories make an attempt to discover some kind of a system in these explanations, these are the attribution theories.

Attitudes mean our evaluative reaction to the things of the world. They have three components: the cognitive, affective and conative (behavioural) ones. The functions of attitudes can be ego-defensive, instrumental or knowledge related. The major theories related to the dynamics of attitudes are Heider's balance theory, Osgood's congruity theory and Festiger's cognitive dissonance theory.

A stereotype is an attitude formed about a given social group. Stereotypes help us to systemize the information related to other people and at the same time even because of this simplification they can also distort reality.

Prejudice is a hostile or negative attitude which is based on generalizations coming from wrong or not complete information. Research supposes several different reasons in the background of their development. The lesson also presents some methods of how to reduce prejudices.

3.3.2 Questions for self-assessment

- In what way is person perception different from object perception?
- What are the main ideas of the various theories of perception perception?
- Enumerate some mechanisms distorting person perception.
- What are the components of attitudes?
- What theories related to attitude-dynamics could you mention?

- What are the advantages and disadvantages of stereotypes?
- Enumerate the possible causes of prejudices.
- What possibilities are there to eliminate prejudices?

3.3.3 Practice tests

Which person perception model supposes rational calculation in the background of imagery?

- A) The summation model
- B) The averaging model
- C) Theory of the central trait
- D) Both A and B

Which component does not belong to the three-element model of attitudes?

- A) Emotional
- B) Motivational
- C) Cognitive
- D) Behavioural

Decide which of the following statements are true and which ones are false.

- A) Stereotypes make is easier for us to orient ourselves in the world.
- B) From the aspect of belonging to a group it is all the same what attitudes we have.
- C) The formation of a common new identity can reduce prejudices in every case.

The correct answers are: D, B, I, H, H

4 THE SOCIAL WORLD OF THE SCHOOL

4.1 Objectives and competences

The goal of the lesson is to give an overview of the features and changes of interpersonal relationships in the school environment, as well as the characteristics of classroom communication. We will have a look at the various situations of social existence with special attention to their appearance in school.

Having studied the material, teacher trainees will be able to to satisfy the following requirements:

- They will be able to name the skills necessary for social behaviour, and describe the development level of these at lower elementary age and in adolescence.
- they will be able to explain the phenomenon of side-changing,
- they will be able the enumerate the major features and socialpsychological characteristics of a school class as a group,
- they comprehend the norm-formation process and the possibilities of influencing them, and
- they will be able to describe the method of sociometric as the method measuring the social situation of the individual in a school class.
- They will be able to identify some factors which influence stimulus of the presence of companions,
- they will understand the main points of competition and cooperation, recall their advantages and disadvantages,
- they will be able to enumerate the primary conditions of cooperative education.
- They will be able the name the causes of conflict formation according to their differentiation types and enumerate some factors that can contribute to the formation of conflicts at school,
- they can describe the most effective method of conflictmanagement,
- they are familiar with the concept of altruism,
- they will be able to define and explain the concept of communication, know and understand the general model of communication,

- they are familiar with the differentiation types of communication according to the channels of communication and levels of communication,
- they will be able to enumerate the components of effective teacher's communication, and
- they will understand the role of teacher's communication in disciplining and behaviour regulatation, and they will be able to enumerate the features of teacher-communication that discipline learners well.

Acquiring the material of the lesson can provide the basis for the following teacher competences:

- They will recognise their own role in the formation of the habits and norm systems of a school class, and have the appropriate methods to influence them.
- They will have proper knowledge and methodological tools for the course material and creation of the most suitable learning situation for the class.
- They will recognise and will be able to form the class community with appropriate methods; they will be able to deal with exclusion experienced in the learner group properly.
- Their communication skills will facilitate effective teaching, including information-transfer and feedback, as well as creating the desirable emotional atmosphere and disciplining.

The Social What kind o developm school class ower elementary skills The school development of social classroom The social world of the The groups and informal school of boys and girls group The features of classroom communication Competition Aggression The cooperatio The types of Individual communication erformance Altruism the presence of The concept teachers Communicatio nd general mode as a means of Conflicts regulation

4.2 Course material

Figure 5 A mind map about the structure of the lesson

4.2.1 Social relationships at lower elementary school age and in adolescence

Related to socialization discussed in Lesson 2, it has already been mentioned that man is a social being and their social environment and adaptation to it are of fundamental importance in their development. This sub-chapter will be concerned with the development of social skills and social behaviour at lower elementary age and adolescents.

The development of social skills

The ability of social behaviour is called social competence. It requires the appropriate development level of intelligence, emotion and the self and vice versa, these are also influenced by the social experience. Therefore, although children show an interest in their peers at a very early age (at about 1 year old), the 6-7 years mean a turning point in the development of social relationships. By then the ego-centric thinking will have finished, which is also facilitated by social connections and joint play. In addition to this, communication skills improve (the refinement of

accent and mimicry; balancing of the speaker-listener role) and the development of self-control functions. Social development is also considerably determined by the change of self-image: comparison with the peers starts to play an important role in self-evaluation. Together with this the perception and the judgement of people also changes; from the age of 8 the characterisation of others will be more realistic; they judge other people rather by psychological features than by subjective aspects. From lower elementary age the abilities of taking other peoples' intentions and emotions into consideration and the correctness of making inferences about others' thoughts are developing gradually. Social competence changes not only with age but is also shows individual differences how effective somebody is their social relationships.⁸⁰

The development of social behaviour

The first and the most important social relationship is meant by the relationship with parents; in connection with family socialization we have seen that it determines the individual's development for a life time. Around lower elementary age this strong bond changes – the child turns to other adults and peers with more and more interest. At about the age of 9 we can observe the phenomenon of the so called "side-changing", when the exclusive role of the parents stops; the opinion of peers and other adults also become important. After that the influence of adults is gradually driven back during development. In adolescence neither parents nor teachers are idealized, which is important for teachers to bear in mind.

The relationship with peers means a completely different social relationship from adult-child relationship. The behaviour of peers is very important at lower elementary age and in adolescence because it serves as a model of behaviour. Peer relationships change during development; for example, children become gradually able to do co-operative work effectively in larger groups. Due to regular contact and co-operation social behaviour will be more and more refined. In general, approaching adolescence children quarrel less and less, and they apply less physical aggression (The other aspects of aggression are discussed in chapter 11). In older children and adolescents other forms of hostility appear, for

⁸⁰ VAJDA Zsuzsanna: The development of social relationships and behaviour from lower elementaty age to adolescence. In Mészáros Aranka: Az iskola szociálpszichológiai jelenségvilága. ELTE Eötvös Kiadó, Budapest, 2004. 145-161.

example, insult.⁸¹ Starting from side-changing, a peer group plays an important role in school socialization: it is the source of the so called "hidden curriculum", which determines the expected behaviour, attitudes and the conditions of success in the group.⁸²

Friendship, a closer, more intimate form of peer relationships is important in children's life. Whether somebody has a good friend in the class or not determines public life in school. Friendship is mostly a dyadic relationship (one pair) and is based on mutuality in any case. The formation of friendships shows a development of the age group: at the age of 8-9 it is based on external factors (they live at the same place, e.g. children); at around the age of 10-11 it is determined by the same norms and in adolescence the main point of friendship is the mutual understanding and emotional support of each other.⁸³

The groups of boys and girls

Before adolescence boys and girls form informal groups of the same sex within the class. The social behaviour and groups of boys and girls differ considerably from each other. Girls tend to form smaller groups of 2-3 members (mostly a dyad with their best friend) whereas the groups of boys are bigger. Hierarchy is less typical in the groups of girls, and mutuality is important in their relationship. In the groups of boys there is usually a leader, the most popular child, and there is more unreturned sympathy response.

? Do you think that a teacher should take friendships formed in the classroom into consideration? If yes, why and in what ways?

4.2.2 The school class as a group

In this sub-chapter we will examine the socio-psychological aspects of the school class as group. We discuss the features and change of groups in the subject "The theoretical and methodological possibilities of the teacher-learner personality and ability-development"; here we will touch upon only their most important issues related to the school classroom.

⁸¹ VAJDA Zsuzsanna: The development of social relationships and behaviour from lower elementaty age to adolescence. In Mészáros Aranka: Az iskola szociálpszichológiai jelenségvilága. ELTE Eötvös Kiadó, Budapest, 2004. 145-161.

⁸² TÓTH László: *Psychology in teaching*. Pedellus Tankönyvkiadó, Debrecen, 2000.

⁸³ VAJDA Zsuzsanna: The development of social relationships and behaviour from lower elementaty age to adolescence. In Mészáros Aranka: Az iskola szociálpszichológiai jelenségvilága. ELTE Eötvös Kiadó, Budapest, 2004. 145-161.

What kind of a group is a school class?

? How can a school class be classified: as an informal or formal group?

Formal groups

Formal groups are those which are formed for a definite social goal, mostly in organisations. The characteristic of the individual does not matter, only the role that the individual is important. The members have specific tasks in the group, and it is characterised by the subordinated-super-ordinated relation.

Informal groups

The members join informal groups voluntarily, and they stay in it voluntarily. The goal of the group function is not some superior goal but to satisfy the own personal needs of the members. Individual characteristics are essential in the group.

The school class

The school class is both a formal and informal group in one. It is formal as the members did not join voluntarily; it is formed by regulation, tries to satisfy formal goals and rules brought from the outside prevail in it. This is what gives the formal framework of the function of the class. At the same time, it is also an informal group because sympathy relationships and friendships are made and a group structure different from formal roles will be formed with informal roles (with a leader and informal norm system).⁸⁴

Reference group

A school class mostly serves as a reference group as well. When judging our own situation, we take the situation of others as a basis, and comparison results in our dissatisfaction or satisfaction. The reference group is what we compare our performance with, which forms the basis of social comparison. It has two functions: the *normative* function means that we accept the norms and behaviour prescriptions of this group valid

⁸⁴ TÓTH László: *Psychology in teaching*. Pedellus Tankönyvkiadó, Debrecen, 2000.

for us while the *comparative* function refers to the fact that we evaluate our performance, abilities and personality traits in relation to this group.⁸⁵

Norms in the classroom

In the classroom which is being formed, group norms are developed gradually during regular interactions.

Norms are rules based on agreement and expectations of group members. Norms determine how we should behave in certain situations, what we should think about certain things, what is wrong and what is right.⁸⁶

It is often not declared what the norm is. Thus it is not easy for group members in school, either, to identify norms, i.e. the acceptable and expected behaviour. Students try to imagine what kind of reaction to their behaviour they will get from their teachers and classmates, and in the light of experience they modify these assumptions continuously. Adapting themselves to new norms mostly causes difficulties for the students in school if the family is different from the average; it belongs to another subculture in comparison to the majority, and it has a rule and norm system considerably different from that of the school.

A teacher has an important role in forming norms. At lower elementary school age when teachers' opinions are accepted unconditionally, and they are expected to give continuous guidance, it is easier to influence the formation of norms than later in adolescence when the opinion of peers is relevant. However, even at lower elementary age it has to be taken into account that it is not good if the teacher does not take the specific characteristics and needs of the pupils into consideration knowing all these and adapting themselves to them, teachers should form the norms in such a way that the needs of students of a socialeconomic situation different from the average, representing a different subculture should be met as well. A school atmosphere that accepts and tolerates other people's differences can favourably influence the formation of informal norms as well. In adolescence resistance to the traditional values of the school will increase, mainly if it means uniformisation. In this case it is very important what the informal norm system of the class is, how much it matches the formal school norms.

⁸⁵ SZABÓ Éva: The primary mechanisms of group development and function. In Mészáros Aranka: Az iskola szociálpszichológiai jelenségvilága. ELTE Eötvös Kiadó, Budapest, 2004. 162-178.

⁸⁶ SZABÓ Laura: Norms in the classroom. In Mészáros Aranka: Az iskola szociálpszichológiai jelenségvilága. ELTE Eötvös Kiadó, Budapest, 2004. 196-204.

Here we refer back to the norm formation in lower elementary age: if the norms were formed by taking individual needs and interests into consideration at the beginning and every pupil can feel themselves important and valuable in their own class, in adolescence much fewer problems related to deviance can be expected.⁸⁷

The transmission of expected behaviours is related to socialization. Revise what you have learnt about the manifested and hidden socialization procedures in the lesson about socialization.

Social position and informal group structure

Besides the informal casting there will be a structure formed in each group which will be determined by the sympathy relationships between the members. As we could see before, it can be true in a school class as well. Besides having formal roles (class secretary, student on duty, etc.), the position of students in the group and their popularity index can be different. It makes a difference what social position somebody has in their class. The social position determines performance motivation, self-evaluation, the general wellbeing of students, and thus school performance as well.

Newcomb's research (1993) described four possible kinds of peer status and related learner characteristics:

- Popular students: they are socially open, have cognitive skills over average and are self-asserting
- Rejected students: they are reserved, have cognitive skills of a lower level and are more aggressive.
- Students behaving contradictorily: they are skilful at forming relationships and have intellectual capacities above average, but they are the most aggressive.
- Outsiders: are neither reserved nor aggressive, but they do not want to join in the life of the group intensively and they are not bothered by their peripheral position, either.
- Think of your class at primary school and high school: try to find examples for each category among your classmates.

⁸⁷ SZABÓ Laura: Norms in the classroom. In Mészáros Aranka: Az iskola szociálpszichológiai jelenségvilága. ELTE Eötvös Kiadó, Budapest, 2004. 196-204.

The system of informal relationships can be explored by Moreno's sociometric method. The first step is a questionnaire, which asks questions about sympathy choices (who would you like to share your room with on the class trip, who would share your cake that you brought from home with, etc.) (a sociometric questionnaire can be attached here). Then on the basis of sympathy choices the relationships between children who have chosen mutually each other could be drawn, this relationship network is called sociogram. It must be analysed on the basis of various indicators and aspects. Typical figures are, for example, a pair, a chain, a star, and typical patterns are, for example, a loose pattern, a one-centred and a multi-centred pattern. A school class can function optimally if its pattern is multi-centred, there are a lot of relationships between the students, and few are in a peripheral position.⁸⁸

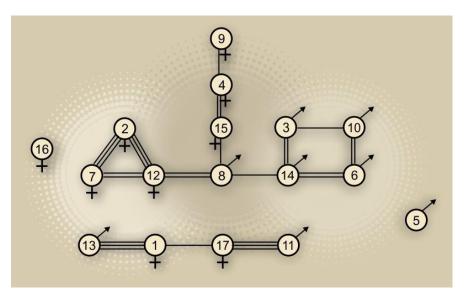


Figure 6 The sociogram of a group at college⁸⁹

You can read more about the method of sociometry and you can look at some typical patterns at the link below:

http://www.tankonyvtar.hu/hu/tartalom/tkt/szocialpszichologia/ch09s03.html

⁸⁸ TÓTH László: *Psychology in teaching*. Pedellus Tankönyvkiadó, Debrecen, 2000.

⁸⁹ http://www.tankonyvtar.hu/hu/tartalom/tkt/szocialpszichologia/ch09s03.html

4.2.3 Peer positions in school

Individual performance in the presence of peers: peer encouragement and inhibition

The presence of others has an effect on our performance. It is an old observation that it is better to work with others together.

The encouraging effect of the presence of peers is called social facilitation.

In a classical experiment Triplett observed that monotonous work (spooling a spinning reel) went better if people did that in each other's company than when they did that alone. Allport also showed experimentally that performance increased in the presence of others even when the others were spectators.⁹⁰ However, it also turned out from his experiment that if the task to do is more complicated, the presence of others is rather hindering.

The inhibiting effect of the companions' presence is called social inhibition.

How is it possible? Zajonc explained this phenomenon with the fact that the presence of others always causes excitement and tension, which has a good effect on performance in the case of easy and boring tasks. However, in the case of difficult and complicated exercises it raises the tension above the optimal excitement level (see the optimal arousal level in the subject called "The psychological bases of teacher's activity"), which deteriorates performance. Consequently, the nature of the task is an important determinant of the encouraging or inhibiting effect. Another determining thing is group structure, in a school environment the atmosphere and the informal structure of the class as well.⁹¹

When planning school exercises, we must pay attention not only to these more general phenomena. In the effect of the peers' presence influencing performance individual, personal factors such as self-evaluation, success orientation, failure avoidance and anxiety, etc. also play an important role.

SZABÓ Éva: The primary mechanisms of group development and function. In Mészáros Aranka: Az iskola szociálpszichológiai jelenségvilága. ELTE Eötvös Kiadó, Budapest, 2004. 162-178.

⁹⁰HATVANI Andrea, Estefánné Varga Magdolna, Taskó Tünde: Personality- and social psychology. EKF, Médiainformatikai Intézet, Eger, 2001.

Competition and cooperation

As we have seen before, peer relationships have a significant role in the performance of students and the whole learning process. Therefore it is very important how we form the contact and relationships between students as a teacher. One place of influencing interactions is the organisation of the learning situation, which can be cooperative, competitive or individualistic. The individualistic situation means that learners do not get into interaction with each other, they acquire the material by themselves and testing is also individual. Bearing the goals of the lesson in mind, we deal with the two other situations in detail.

Competition

Competition is a regular attribute of social life. It is unavoidably present in several fields in schools as well. The continuous comparison with peers is also competition, but it can be experienced both in the school system itself (entrance examination, grading, study competitions and scholarships), and in different areas of education (children have to compete for the teacher's attention, for a popular role in the class, etc.). Competition is an important learning motivation, and therefore it worth taking advantage of the involved possibilities. An important question related to competition is what kind of effect it has on particular learners and under what condition, how and in whose case it has a beneficial effect. How and what learners competition has an effect on, and whether it gives preference to competitive situations depend on various factors, such as cognitive skills, the social-economic background, level of anxiety, external and internal control attitude or differences of sex. 92

In the light of all these, competition has plenty of advantages, but disadvantages as well. For example, if somebody doesn't get the possibility to win, there are no situations in which somebody with their abilities can "win", the series of failures can reduce or can even eliminate their motivation of learning, however, learners with anxiety and with good skills don't feel good in constant competition, either. The damaging impact of competition on the atmosphere and relationship structure of peer groups is illustrated by the experiment carried out by the couple called Sheriff in which among groups of camp children – who otherwise had had shown sympathy with each other earlier – the continuous sport competitions and other competitive situations triggered hostility and aggression, which was very difficult to eliminate.

⁹² FÜLÖP Márta: Competition in school. In Mészáros Aranka: Az iskola szociálpszichológiai jelenségvilága. ELTE Eötvös Kiadó, Budapest, 2004. 221-245.

Examples for competitive situation in education: The one who does the exercise first without mistakes will get a five; learning the material by discussion; grading where not the scores are important, but the performance of children compared with each other is relevant; but a sport competition is clearly a competitive situation as well.

Cooperation

Cooperation has traditions in education as well. Earlier it was used mainly in reform pedagogy (beginning with Dewey's project method), in general, every alternative programme prefers the cooperative teaching situations to frontal teaching. Today doing exercises in groups, the cooperative teaching methods are becoming more and more popular even in traditional schools although they are still pushed into the background due to competitive situations. Children like helping each other, and cooperation has a favourable impact on the formation of group structure. In the experiment of the Sheriffs mentioned above, by using goals and exercises requiring cooperation they managed to eliminate hostility and restore sympathy between the groups. In order to facilitate cooperation we must use learning situations in which learners have to cooperate, and parallel with it we must develop the need and the skill of cooperation in children besides emphasising helping each other and cooperation with peers as a value and norm.⁹³

- In the learning situation cooperative work forms offer possibilities for cooperation:
 - the mosaic-method: it was developed by Aronson while doing research related to prejudices. The main ideas of the method are that every group member gets a different part of the material and they have to teach each other their own part. First the ones who work on the same part from each group prepare themselves together coming back to their own group to teach the others their material. Evaluation happens individually from the whole material.
 - group reward for individual performance: children practise the material in a group, and then their knowledge is tested individually, but evaluation will be made on the basis of the whole performance of the group.

⁹³ N. KOLLÁR Katalin: Cooperation in school. In Mészáros Aranka: Az iskola szociálpszichológiai jelenségvilága. ELTE Eötvös Kiadó, Budapest, 2004. 205-220.

The puzzle-method: it is built on differentiated exercises when the task of the group is so big that everybody's performance is needed. Learners get part exercises, of which the common whole will be made of.

If we arrange the desks in small groups and the students work on an exercise not separately but together, it is not cooperation yet. Cooperation must also be learnt and there are some general rules that must show up. For example, the work forms mentioned in the example have some features in common which are some fundamentally important conditions of cooperative education:

- Positive interdependence: there is the dependence relationship between the participants and they can achieve the common goal of the group only by cooperating.
- Individual reporting: it ensures that there should not be any idling "stowaway", but everybody should have a share in the work.
- Heterogeneous group make-up: if learners with different background and abilities come together, it reduces prejudices and makes is possible for the good ones to support the weaker ones.
- Shared leadership: there is not appointed leader or they try to reach that everybody should have this role one by one.
- Shared responsibility: everybody is responsible for everybody.
- Both the exercise and the support of each other are emphasised.
- Social knowledge is learnt directly: the teachers plan consciously the exercise situations which facilitate the learning of co-operative behaviour.
- The teacher only organises the activity, and interferes only if it is necessary.⁹⁴
- Besides learning, the situations that require cooperative behaviour involve, for example, preparing the decoration for carnival or group games.

Competition or cooperation?

Acquiring both abilities is important for social success: for example, the ability of team work is highly appreciated on the job market today, at the same time so are healthy competition spirit and ambition as well.

⁹⁴ N. KOLLÁR Katalin: Cooperation in school. In Mészáros Aranka: Az iskola szociálpszichológiai jelenségvilága. ELTE Eötvös Kiadó, Budapest, 2004. 205-220.

Both forms can have a role with regards to learning motivation and school performance as well: competition enhances motivation, can make teaching more colourful and exciting, but in many cases and if it is used well, cooperation is a more suitable and effective work form in acquiring the material of certain lessons, and can also help to create a good social atmosphere.

The organisation of exercises and teaching situation in school must match, on the one hand, the nature of the exercise and the teaching goal. On the other hand, their impact on social relationships and the school atmosphere must also be taken into consideration. The present view is that competition and cooperation are not opposing behaviours which exclude each other mutually, but rather they also exist parallel, even within one situation.

Think it over how it is possible that competition and cooperation exist together. Watch the lecture given by Marta Fülöp, the most important researcher of competition in Hungary about cooperative competition at the link below.

https://www.voutube.com/watch?v=DY8I9rgqQ5Q

Conflicts

The word conflict comes from the Latin word "confligere", which means clash of arms. In everyday term a conflict expresses clash, opposition.⁹⁵

Conflicts are indispensable parts of human life; we encounter various conflicts day by day. Although it is an unpleasant feeling because it involves the lack of peace; and unresolved conflicts lead to durable tension, but resolving a conflict can also be a positive phenomenon facilitating development.

The types of conflicts

The level of conflicts can be threefold:

- Intrapsychic (internal, within an individual, for example in the case of contradictory attitudes).
- Interpersonal (appears at the level of interpersonal relationships).

⁹⁵ HORVÁTH-SZABÓ Katalin: On school conflicts. In Mészáros Aranka: Az iskola szociálpszichológiai jelenségvilága. ELTE Eötvös Kiadó, Budapest, 2004. 261-283.

 Social conflicts (they are formed between bigger groups of society, e.g. between people's groups, representatives of political ideologies).

In this lesson we deal only with interpersonal conflicts. School interactions can unavoidably create conflicts in relation to teacher-student, student-student and teacher-teacher as well. According to the causes of their formation we can distinguish the following conflicts:

- Interest-, need-, and goal conflicts: in this case the conflict emerges due to the different or opposing interests, needs or goals of the parties.
- Structural conflicts: in this case the conflict is triggered by rigid rules, the organisational structure and uncleared roles.
- Value conflicts: in this case the source of conflict is that somebody tries to force their own values on others or if it is not possible for them to take on and declare their own values.
- Conflicts formed from relationship disorder, relation conflicts: they
 emerge when rules related to relationships are interpreted
 differently (mostly due to different social background), the parties
 don't know them or don't obey them.⁹⁶

Factors facilitatiing the formation of conflicts in school

Some of the many school conflicts are not about what they look like first, but they are the symptoms of some deeper problem. The root of the problem often lies in the school structure, the style of the leadership and the deficiencies of the curriculum. The following circumstances in the class are likely to trigger conflicts: a too competitive atmosphere, a distrustful atmosphere, the violent way of expressing emotions, weak conflict resolving abilities, teacher abuse of power, and the weakness of communication skills.

The management of school conflicts

The prevention and treatment of school conflicts are of course not independent of the school organisation. The teacher has to find a solution within this framework. It is very important for teachers to be able to resolve conflict situations or perhaps avoid them: as conflicts have an impact on the performance of students, the atmosphere of the class, the

⁹⁶ HORVÁTH-SZABÓ Katalin: On school conflicts. In Mészáros Aranka: Az iskola szociálpszichológiai jelenségvilága. ELTE Eötvös Kiadó, Budapest, 2004. 261-283.

teacher's own professional socialization, and the teacher-student relationship, etc. The methods of conflict management are usually classified into the following types:

- The competitive strategy: the individual wants to enforce their own goals, intention at the expense of the other person, for them victory is the goal, and they use everything to achieve it. It is a commonly used means of conflict management by teachers mainly to protect teacher's authority.
- The adaptation strategy: the individual gives up their own goals, intentions so that the intentions of the other will win. It is a kind of self-sacrifice, often from constraint.
- The avoidance strategy: it means avoiding confrontation; the individual acts as if there was no conflict or tries to put off resolving it for another time.
- The compromising strategy: it means negotiating for a compromise; the individual is willing to give up some of his/her goals as long as it is acceptable for him/her, and if he/she can also expect from the other party; the intentions of both of them will be partly fulfilled.
- The problem-solving strategy: by collaborating with the other party, the individual tries to find a solution which satisfies the goals and intentions of both of them maximally. It involves revealing the depth of the problem and they spend a lot of time and energy on solving it.⁹⁷

The given conflict, situation plays a crucial role in what the best method of resolving the conflict is. It is worth having a closer look at the latter as this strategy can be regarded to be the ideal one to resolve conflicts, and it can be applied successfully in almost every situation. The study by Gordon (The development of teacher effectiveness, 1989) based on the principles of humanistic psychology offers such a constructive solution for the effective individual treatment of school conflicts. He regards a conflict as a problem situation. Gordon recognised that affectionate, honest communication and the personal relationship can be very effective in education and solving problems. Among others he finds it important that in the case of improper behaviour we should not direct our criticism at the behaviour and not at the whole personality, and in a problem situation we should try to find a solution in which neither

⁹⁷ HORVÁTH-SZABÓ Katalin: On school conflicts. In Mészáros Aranka: Az iskola szociálpszichológiai jelenségvilága. ELTE Eötvös Kiadó, Budapest, 2004. 261-283.

party is the winner or the loser, but we should try to find the best solution together with the student. During various further education courses there are several opportunities to learn and practise effective problem solving and conflict management within the framework of conflict management.

Aggression

Aggression is an intentional action which aims at causing damage or suffering.⁹⁹.

Conflicts between children often involve aggression, verbal abuse or physical assault. We will discuss aggressive behaviour in school in Lesson 11 in detail (Behaviour and socialization disorders). In this chapter we will touch upon the theoretical background of aggression.

Various types of aggression can be distinguished. Such a behaviour can be autotelic. At this time the goal is destruction itself. However, in the majority of cases aggression is like a means, i.e. instrumental. Instrumental aggression has two types: the first type is prosocial aggression if the goal of aggressive behaviour is to help and protect others. The other type is the antisocial one if we are aggressive in our own interest, for example to rob somebody.

There have been several theories developed to explain what aggression is:

According to psychoanalysts aggression is an inherited, instinctive property of people. Freud called death instinct one group of basic instincts, which means destructive compulsions. In Freud's view if aggression cannot find an outlet, it will be accumulated and lead to an illness. It is the task of the individual to find the socially acceptable norms of finding an outlet for tension. Such can be, for example, doing some kind of martial arts.

Other researchers applied biological approaches to reveal the causes of aggression. Accordingly, certain areas of the limbic system of the brain are responsible for aggressive behaviour. Certain chemical substances, for example, alcohol increase the likelihood of aggressive behaviour, while other substances, like marihuana decrease aggressive compulsions.

The behaviourists Dollard and Miller created the frustration - aggression hypothesis. In this view, frustrating (hindering, frustration

⁹⁸ Kósáné Ormai Vera: What is Gordon's message to pedagogues? Új Pedagógiai Szemle, 10, 1995. 63-72.

⁹⁹ Aronson, Elliot: *The social being.* Közgazdasági és Jogi Könyvkiadó, Budapest, 1994.

triggering) situations lead to aggression. For example, aggression can often occur when social inequalities are perceived, but even in school situations which learners feel to be unjust.

Social learning theories start from the fact that people experience day by day that violence reaches its goal, it pays off. When we see that others are rewarded for their aggressive behaviour, we will also be more inclined to behave aggressively, even when the observed aggression is not followed by a reward. Even today, there has been much research examining the personality damaging effects of aggressive TV programmes as well. 100

Altruism

Of course, in school we can often experience positive behaviour towards each other. Besides collaboration another positive manifestation is altruism, which means giving unselfish help to others. Students sometimes really help each other even if they can get into an unfavourable situation; think, for example, of when learners help each other while writing a test paper. The reason for that can be maintaining self-evaluation, positive self-image or the fact that helping others is a proper behaviour expected by norms. According to the exchange theory, it is also possible that unselfishness is not so unselfish at all as we can rely on return when we need it later. (In the school environment we can disregard the socio-biological explanation, according to which the goal is the survival of the genomes' similar to ours.)

4.2.4 The characteristics of classroom communication

Discussing classroom communication is especially important because it has a significant role in the performance of students, as well as in the formation of the interpersonal connections between teachers and students. 102

Let us start at the beginning and make some basic terms clear in connection with communication, focussing on classroom communication.

HATVANI Andrea, Estefánné Varga Magdolna, Taskó Tünde: Personality- and social-psychology. EKF, Médiainformatikai Intézet, Eger, 2001.

HATVANI Andrea, Estefánné Varga Magdolna, Taskó Tünde: Personality- and social psychology. EKF, Médiainformatikai Intézet, Eger, 2001.

SZITÓ Imre: Communication in school. Iskolapszichológiai Füzetek, 7., 1987. ELTE, Budapest.

The concept and the general model of communication

Communication is sharing and exchanging emotions, ideas via common codes and symbols used by the communicating parties.¹⁰³

The commonly used model of communication today applies the principles of cybernetics for human communication (see Figure 7). Based on this, the components of the process of communication are as follows:

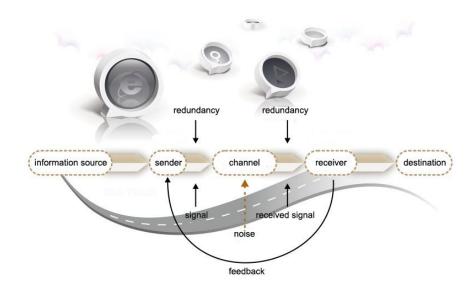


Figure 7 The model of communication

The sender is the initiator of the communication, who encodes the message generated in the source of communication in a transmittable form, i.e. it transforms it into a signal. (The source of communication is logically mostly the brain of the sender.). The message is transmitted via some channel (speech, writing or non-verbal signals, etc.) to the other person, who decodes the message from the signal for the addressee. This other person is the receiver; the addressee is his/her brain. Any factor disturbing the exact transmission of the information is the noise. ¹⁰⁴ If the message has been received, it is followed by some reaction, feedback.

¹⁰³ SZITÓ Imre: Communication in school. Iskolapszichológiai Füzetek, 7., 1987. ELTE, Budapest.

¹⁰⁴ TÓTH László: *Psychology in teaching*. Pedellus Tankönyvkiadó, Debrecen, 2000.

Communication always takes pace in some specific context, relation system which gives an interpretation frame for the message communicated. In fact, context means the participants of communication have some pre-knowledge and experience, they consider this previous information to be familiar, given by their prior knowledge and relate the message to these. ¹⁰⁵ Within this the given situation also determines the goal, mode and pattern of communication.

In the classroom the teacher is mainly the sender, in most cases it is he/she who initiates communication, whose main goal is traditionally teaching, transferring information. On the basis of examinations carried out in the classroom, in three quarters of all speech time it is the teacher who talks. By the spread of cooperative techniques this rate changes somewhat, but directing communication and its effectiveness is invariably the teacher's responsibility. It is all the more true because in today's pedagogy besides information-transfer education, formation of the personality and socialization also play an important role in education-teaching in schools. Instead of punishment disciplining and behaviour regulation is also done by teacher's communication tools.

Types of communication

Of the several different possibilities to classify communication, we will discuss only two types of grouping which in our view are the two most important ones with regards to classroom communication.

On the basis of the channel carrying message we can make a distinction between verbal and non-verbal communication. Verbal communication is bound to language referring to speech and written words. By non-verbal communication we mean all the non-language-bound phenomena which manifest themselves in human interactions (e.g. posture, mimicry, look, space regulation as well as some non-language bound phenomena of speech, such as tone of voice, volume, etc.). Non-verbal communication is not equivalent with meta-communication. The latter means unconscious communication about communication (such as the situation, the message and our relationship with the communicator, etc.). The difference that is emphasised between the two is the intentional or unintentional character of the signal as it is

BUDA Béla: Communication in the classroom. The communication tools of teachers' work. In Mészáros Aranka: Az iskola szociálpszichológiai jelenségvilága. ELTE Eötvös Kiadó, Budapest, 2004. 17-26.

¹⁰⁶ SZITÓ Imre: Communicaton in the classroom. Iskolapszichológiai Füzetek, 7., 1987. ELTE, Budapest.

¹⁰⁷ TÓTH László: *Psychology in teaching*. Pedellus Tankönyvkiadó, Debrecen, 2000.

really true that metacommunicative signals are mostly (although not always) transmitted by non-verbal channels but metacommunication is always unconscious: its manifestation can be kept less under conscious control.

Let us look at a situation in which all three are present. In a lesson the lecture of the teacher (the speech itself) is going on through the channel of verbal communication. In the meantime one student is waving to another, which is a non-verbal signal. If the teacher notices it, he is likely to react to it, perhaps also by a non-verbal signal, let's say he/she frowns or lifts his/her forefinger as a warning or perhaps by verbal communication (e.g. "I'd like you to listen to me."). Some students may lose the thread of the lecture, start yawning or picking their nails - this is already metacommunication: they don't send a message intentionally in such a way, but all this is a signal for an attentive teacher that his message does not get to the students.

On the basis of the level of communication we can make a distinction between intrapersonal, interpersonal and group communication. Intrapersonal communication goes on within the individual, in fact, it is internal speech (such as thinking, speaking aloud in ourselves or taking notes, etc.). Intrapersonal communication takes place in the classroom when, for example, students do an exercise by themselves or read silently. It is not good if the teacher uses only frontal teaching, and there is no feedback about comprehension as the teacher will not know in this way what is going on in the students' mind. Interpersonal **communication** is a communication act which takes place between two people, where the role of sender and that of the receiver are continuously changed - such as teacher-student and student-student interactions. In the classroom examples for it are learning and doing exercises in pairs, but also when a teacher asks one student questions about the material. Group communication is the most common in the classroom, between the teacher and learner's groups or the communication between one student and a learner's group belongs to it. Group communication includes giving a lecture, explanations and doing an exercise in groups, etc. This form is strongly structured, as otherwise the train of thought can be easily diverted in a larger group. 108

¹⁰⁸ SZITÓ Imre: Communication in the classroom. Iskolapszichológiai Füzetek, 7., 1987. ELTE, Budapest.

The communication skills of teachers

In order to be trustworthy and effective, teachers can acquire some communication skills easily by awareness raising and practice. Next we will describe some of the factors that play an important role in teacher's communication.

Collect the characteristics about which you think that they determine whether a teacher teaches well, and is a good communicator.

The skills of sending and transmitting a message are especially important in teaching: the teacher transmits information and also regulates the reception of the information by maintaining attention and motivation. First of all, we must mention rich vocabulary and exquisite and polished speech related to this. Apart from these, it is also important – among others – how much a teacher can maintain students attention (how interesting it seems to be what he is saying), how much his/her explanations match the children's cognitive skills in a given group of a certain age, etc.

What is feedback concerned, teacher empathy is an important communication tool as it helps to understand the relations of certain students as well as those of whole student groups. In fact, empathy means the ability to perceive and understand the non-verbal communication signals, and making learners aware of the characteristics of the communication context, and the communication situation to a greater extent. The skill of empathy provides important feedback about what image was formed about the teacher in the students as well as about how much they have understood the material. It makes a difference what the teacher's attitude to students and teaching itself is like, how much he/she believes that students can be developed or in the effectiveness of his/her own work.

BUDA Béla: Communication in the classroom. The communication tools in teachers' work. Mészáros Aranka: Az iskola szociálpszichológiai jelenségvilága. ELTE Eötvös Kiadó. Budapest. 2004. 17-26.

HATVANI Andrea, BUDAHÁZY-MESTER Dolli, HÉJJA-NAGY Katalin: Teacher personality development and attitude formation. http://www.ektf.hu/hefoppalyazat/tanszemfejl/index.html

BUDA Béla: Communication in the classroom. The communication tools in teachers' work. In Mészáros Aranka: Az iskola szociálpszichológiai jelenségvilága. ELTE Eötvös Kiadó, Budapest, 2004. 17-26.

HATVANI Andrea, BUDAHÁZY-MESTER Dolli, HÉJJA-NAGY Katalin: Teacher personality development and attitude formation. http://www.ektf.hu/hefoppalyazat/tanszemfejl/index.html

On the basis of Check's examinations (1986) students think that teacher effectiveness has three components: good appearance, good communication skills and emotionality. In their view, a teacher who has a pleasing appearance, does not stand at one place, involves students into activities in the lesson (he/she does not only give a lecture, and the lecture is also interactive), is easy to follow, and illustrates what he/she says by examples and is understanding and helpful with students.¹¹³

How can all these skills mentioned above be acquired? The first and most important step is always self-observation and making ourselves conscious of our own communication. Some factors are the question of endowments (such as voice or maximal volume of voice). We must make ourselves aware of these, rely on our strengths, and compensate our weaknesses. A teacher speaking in a low voice can rely on interesting explanations, audio-visual aids and can turn her tone of voice into an advantage: children will remain quiet in order not to miss interesting things. However, certain skills can definitely be developed by persistent practice. In training courses you can learn verbal communication skills such as assertive (confident and self-assured) communication. The development of the non-verbal communication channel is mainly focused on the control of metacommunication, and especially on trustworthiness: if there is harmony between the various channels (i.e. somebody says what he/she says with deep inner conviction), communication is very effective. Development in such a way aims at improving self-knowledge and creating emotional-motivational harmony.

Developing empathy and interpersonal sensitivity can also be a useful aspect of improving teacher communication skills. There are several types of methods to develop it ranging from individual developing methods (studying the academic literature, self-observation and self-reporting questionnaires) through two-person situations (developing conversation, counselling and psychotherapy), to group methods (psychodrama, communication skills development trainings and assertive trainings). 115

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¹¹³ SZITÓ Imre: Communication in school. Iskolapszichológiai Füzetek, 7., 1987. ELTE, Budapest.

BUDA Béla: Communication in the classroom. The communication tools in teachers' work. In Mészáros Aranka: Az iskola szociálpszichológiai jelenségvilága. ELTE Eötvös Kiadó, Budapest, 2004. 17-26.

HATVANI Andrea, BUDAHÁZY-MESTER Dolli, HÉJJA-NAGY Katalin: Teacher personality development and attitude formation. http://www.ektf.hu/hefoppalyazat/tanszemfejl/index.html

Communication as a means of behaviour regulation

A great difficulty of a teacher's work is that disciplining and regulating activities must actually be done at the same time as teaching. If there is no discipline, the teacher cannot create the fundamental conditions of teaching in the classroom. Teachers differ in how easy it is for them to create discipline with regards to the same class, the same students. In an old series of examinations Kounin (1970) drew the conclusion that it is the easiest to prevent indiscipline. In his view, a teacher who disciplines well has the following activities and skills among his/her tools:

- the lesson is well planned and prepared,
- the lesson is lively and dynamic,
- the whole class is involved into the activities,
- watchfulness, constant presence at all levels of the class in every situation,
- interfering on time in the case of improper behaviour.¹¹⁷

In connection with how it is worth interfering and how problem situations and conflicts can be treated well, the method by Thomas Gordon related to conflict management mentioned before should be followed. Consequently, communication should be directed at problematic behaviour and not the whole personality, and we should try to find the real cause of the problem in such a way that understanding and affectionate teacher communication should help us to reveal it.

Besides disciplining, another important aspect of how teacher communication can determine student's behaviour is the so called Pygmalion-effect. In the first experiment for justifying the phenomenon Rosenthal and Jacobson (1968) made primary school pupils do an intelligence test, but they gave the teachers wrong feedbacks about the results: they said about randomly selected pupils that they are expected to have great intelligence performance. After repeating the test 8 months later, the intelligence-scores of these pupils increased indeed; they were really much higher than those of the other students. Teacher expectations and their communication seem to be in the background of the phenomenon. On the basis of numerous examinations researchers came to the conclusion that teacher expectations are transmitted by four main factors: the emotional atmosphere created by the teacher, what

BUDA Béla: Communication in the classroom. The communication tools in teachers' work. In Mészáros Aranka: Az iskola szociálpszichológiai jelenségvilága. ELTE Eötvös Kiadó, Budapest, 2004. 17-26.

¹¹⁷ SZITÓ Imre: Communication in school. Iskolapszichológiai Füzetek, 7., 1987. ELTE, Budapest.

exercises they give to students, how much they support students' answers, and how they respond to the answers that they have heard. Depending on what a teacher thinks about a student, she/she creates the conditions in a different way. If a teacher's expectations are more positive towards a student, he/she will create a warmer, more accepting atmosphere for him/her, supports more their giving answers (he/she waits longer, is not impatient), gives him/her the exercises more optimally matching his/her skills (he/she gives him/her neither too easy not too difficult exercises), and praises him/her more. Negative expectations really result in negative student performance and lower motivation in the long run. In fact, learner performance can indirectly be the reason why behaviour problems emerge. In their analysis Szitó and Katona pointed out that unfavourable, negative teacher communication can also maintain problematic behaviour in the class.¹¹⁸

As we can see, it is worth paying attention and devoting time and energy to the development of teacher communication as it is an indispensable tool of teacher's work and it determines considerably teacher effectiveness.

4.3 Summary, questions

4.3.1 Summary

The ability of social behaviour is called social competence. The appropriate development level needed for this in terms of intelligence, emotion and ego development by lower elementary age facilitate the closer, more effective forms of social relationships. The phenomenon of side-taking appears at the age of 9, and from this time on the relationship with peers and other adults also plays an important role besides parents. The behaviour of peers serves as a model, and their performance provides the basis for social comparison.

A school class is both a formal and informal group in one. It is formal as the members did not join voluntarily; it is formed by regulation, tries to satisfy formal goals and rules brought from the outside prevail in it. This is what gives the formal frame of the function of the class. At the same time, it is also an informal group because sympathy relationships and friendships are made, and a group structure different from formal roles will be formed with informal roles.

The school class mostly serves as a reference group as well, and as such it has a normative and comparative function. The norms of the

¹¹⁸ SZITÓ Imre, KATONA Nóra: The effect of teacher communication on learners' behaviour. Pedagógiai Szemle, 11, 1986. 1059-1069.

class, its behaviour rules accepted for everybody are formed gradually, and the teacher plays a considerable role in it. The social position in the class has an impact on students' general wellbeing and learning motivations. Friendship relationships are very important for students, the friendship relationships and informal groups of boys and girls can have different characteristics. The system of informal relationships can be measured by Moreno's sociometric method.

The presence of peers can have an impact on our behaviour. Whether children's performance increases or decreases in the presence of peers, depends on several factors: such as the nature of the exercise, the formal structure and atmosphere of the class, and personal characteristics such as the level of anxiety, self-estimation, failure avoidance or success orientation, etc.

It is very important how we form the contact and relationships between students as teachers. One place where we can influence interactions is the organisation of the learning situation, which can be cooperative, competitive or individualistic. The organisation of the exercises, the learning situation should, on the one hand, match the education goal. On the other hand, their impact on social relationships and the school atmosphere must, however, be taken into consideration as well. Both competition and cooperation have advantages and disadvantages; these forms must be applied consciously. At the same time the present view is that competition and cooperation are not mutually exclusive, opposing behaviours but rather they exist parallel, even within a situation as well.

Conflicts are unavoidable parts of human life; we encounter conflicts day by day in schools as well. Conflict solution can be a positive phenomenon that facilitates development, and therefore is it fundamentally important that a teacher should have proper conflict management skills.

In schools we can often experience positive behaviour towards each other. Besides collaboration another positive manifestation is altruism, which means giving unselfish help to others. An explanation for it can be the hope of future return, maintaining a positive self-image or that is behaviour according norms.

Communication is sharing and exchanging emotions and ideas via the common codes and symbols used by the communicating parties. On the basis of the channel transmitting message we can make a distinction between verbal and non-verbal communication (which cannot be confused with unconscious metacommunication), according to the level of communication we can talk about intrapersonal, interpersonal and group communication. Classroom communication plays a significant role

in student performance as well as in the formation of interpersonal relationships between the teacher and students.

The skills determining teacher trustworthiness and effectiveness are, for example, exquisite, polished speech, a rich vocabulary, the ability to present the material in an interesting way, maintaining motivation and attention and empathy.

One great difficulty of teacher's work is that disciplining and regulating activities must actually be done at the same time as teaching. If there is no discipline, the teacher cannot create the fundamental conditions for teaching in the class. A specific phenomenon of what impact communication can have on behaviour is the Pygmalion-effect.

4.3.2 Questions for self-assessment

- What is side-taking called? By what age does this phenomenon emerge?
- What do we regard a school class to be both a formal and informal group in one?
- What does the term of reference group mean?
- What method can we reveal the informal structure of a class by?
- What are the advantages and disadvantages of co-operation and competition in school environment?
- What methods of solving conflicts do you know?
- What do we call altruism?
- Enumerate the components of the process of communication.
- What are the components of effective teacher communication?
- Enumerate the characteristics of a teacher keeping discipline without making efforts?
- What is the Pygmalion-effect?

4.3.3 Practice tests

- By what age does the phenomenon of side-taking emerge?
- A) by the age in nursery school because peer relationships are regular by this time
- B) by the age of 6-7 because the high level of social skills are typical by this time
- C) by the age of 9 because the opinion of peers will be relevant by this time
- D) by the end of adolescence because children break away emotionally from their parents at this time

Which statement is NOT true for competition?

- A) It generally increases learning motivation.
- B) It strengthens friendship bonds in a class.
- C) Personal characteristics can also play a role its effectiveness.
- D) When used excessively it can cause anxiety in learners.

Which conflict resolution method is suggested by Gordon?

- A) adaptive
- B) competitive
- C) problem solving
- D) avoiding

Match the proper concepts.

- A) It functions unconsciously.

 1. verbal communication
- B) It means language communication 2. non-verbal communication
- C) e.g. banging your fist on the table. 3. metacommunication

The correct answers are: C, B, C, A-2, B-1, C-3

5 LEARNING AS INFORMATION PROCESSING

5.1 Objectives and competences

The goal of the lesson is to give an overview of how school learning as information processing can be determined, what role complex learning has in developing knowledge, and what role motivation for learning and metacognition play in cognition. Furthermore, it aims at presenting what consequences information explosion and the change in the learning environment have, and what new challenges life-long learning poses in addition to presenting the results of the major international monitoring examinations.

Having studied the material, trainee teachers will be able to satisfy the following requirements:

- They will know the main points of the IPOO model, will be able to name the learning problems emerging the the particular phases of the model.
- they will know and understand the role of complex learning in the ecquisition of knowledge; they will be able to give the types of mental representations,
- they will be able to name the levels of the motivation for learning,
- they will be able to recall the concept of metacognition and selfregulated learning,
- they will know and understand the role of self-regulated learning,
- they will recognise the role of metacognition in the process of learning,
- they will be ble to name the major international monitoring examinations and recall their most important results,
- they will be able to recall the concept of life-long learning,
- they will be able to enumerate the basic categories of purposeful learning activities and understand their main ideas, and
- they will know and understand the effects of electronic learning related to the change of teacher-learner roles.

Acquiring the material of the lesson can provide the basis for the following teacher competences:

 Having the knowledge they will be able to recognise the importance of metacognition and self-regulated learning with regards to the learner's personality development, and

- they will find the problem of teaching learning important and will be committed to teaching students to become self-regulated learners.
- They will understand the significance of serving as a model for their learners as a teacher.

Acquiring the material of the lesson takes about one and a half hours.

5.2 Course material



Figure 8 A mind map about the structure of ther lesson

5.2.1 Learning as information processing

School learning primarily means learning – understanding, elaborating and memorizing - the information of the course material and reproducing it in the form of tests, answering teacher's questions and exams. On the basis of all this we can say that learning in school is nothing other than the processing of operations with information. The IPOO model of

learning is based on this idea, which was first published by Ferenc Mező in 2002. According to the IPOO model of learning, learning is regarded to be as an information processing procedure, it means that we have to go through the various phases of information processing (The term IPOO is an acronym made up of the intitials of the phases):

Input (the phase of collecting data: selecting the theme, studying and using sources);

Process (the phase of information processing; information processing, memorizing);

Output (the phase of reproducing and applying information);

Organising (organising of learning, – scheduling time, choosing circumstances, practice, etc. – which determine the effevtiveness of the previous phases.¹¹⁹

Accordingly, learning can be defined as the result of the various phases of information processing. The performance in the various phases can strengthen or weaken each other's effect. Sometimes it is possible thatthere is learning without processing (suferficial learning), or learning when which we gain knowledge that we have never applied before.

Similarly, learning can be well-organised or impulsive, unorganised and even chaotic as well.

Every phase is built on the basis of particular knowledge, skills and methods. The mutual effect of these bases with the current learning situation can fundamentally influence the success or failure of learning.

Its practical importance can be illustrated easily by a simple example: in organised learning circumstances (e.g. in primary, secondary or higher education and courses, etc.) the learning process is organised by others, the topic is determined by others, and the sources are given into our hands. Under such circumstances even a learner who is not familiar with organising the learning process, choosing a topic or studying source material can perform well. However, the same student may fail if he/she has to determine and organise all these alone, and can even get into the state of complete disorganisation and helplessness. In other words: the various learning situations (e.g. school learning or independent learning) require different levels of familiarity with information processing. There are places where teachers teach by "spoon-feeding", there are schools where students themselves

¹¹⁹ MEZŐ Ferenc: The strategy of learning for students and adults. Pedellus, Novitas Kft. Kiadó, Debrecen, 2002.

have to find a topic or a problem to be studied. Although there are many similarities between the two learning situations, there are several and important differences between them as well.

Approaching learning from the side of information processing, we can give an explanation for several learning methodological difficulties and problems. In one or some of these phases, and in the worst case in all of them we can often discover in their background some methodological deficiencies making effectiveness impossible.

Learning problems in the input-phase:

- Choosing the topic: the student has no topic to study;
- Studying sources: there is a topic, but there is no information source:
- Using information sources: there is an information source, but its application is not effective.

Learning problems in the process-phase:

- Information processing: information is available, but it cannot be understood and/or it is too much and/or it has to be completed and reorganised;
- Memorizing: the student understands the information but he/she cannot take notes about it.

Learning problems in the output-phase:

 These are related to information presentation or reproduction of knowledge (e.g. oral presentation, writing tests, doing exams).

Problems related to organising learning:

- what, where, when, with whom, how much, in what circumstances should a (adult) student learn?
- Make self-reflexion: Think it over which phase you have problems in. How do you think these problems could be remedied? Collect your ideas.

By revealing learning problems and transferring proper methods, we can develop creative learning. Its result will be that the balance of the input and output phases of learning shifts favourably: the learner will know much more after learning than the amount of information he/she took in. This specific info-economy can be demonstrated easily on the basis of the three basic relations of the input and output phases of learning:

1. Input > Output

This relation is regarded to be learning of low efficiency and involves information loss. This happens when, for example, we "learn" a text containing five important pieces of information (concepts, fact or data, etc.), and we can reproduce only about 0-4 pieces of information in tests.

2. Input = Output

This is the relation of swotting or reproductive learning. This case can be regarded to be learning almost without processing. If we take the previous example, it means a relation if we can recall five pieces of information of the five pieces of information of the course material – however perfect (100%) our learning performance seems to be, in many cases it is not more than only deceptive "bogus knowledge".

3. Input < Output

We can talk about productive or creative learning in this case. Its result is that by the creative collection, processing and application of information the balance of the input and output learning phases will shift, and the learner will know much more after learning than the amount of information he/she took in. If we consider the previous examples: we acquire not only the five pieces of information in the text, but also the possible mutual relationships between them, as well as how they are related to our previous knowledge and ideas we had while learning. 120

As a demonstration by an example, imagine that by using an analogy, the learner is an empty jug which we want to pour water into. In the case of the first relation we have to see that there is a hole at the bottom of the jug, and some of the the water we fill in will always be lost. In the case of the second relation the analogy with "the jug of water" will be modified in such a way that I can pour out of the jug as much as I poured in previously – not a bit more. In the third case we fill a litre of water into the "empty" jug and pour five litres out of it.

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MEZŐ Ferenc, MEZŐ Katalin (2005): The development of learning strategies on the basis of the IPOO-model. Tehetségvadász Stúdió – Kocka Kör Tehetséggondozó Kulturális Egyesület, Debrecen, 2005.

Collect ideas related to how/by what a teacher can help learners struggling with methodological deficiencies in the various phases.

5.2.2 The role of complex knowledge in the acquisition of knowledge

Human learning can be regarded to be complex knowledge in which besides the associations between events and sitimuli and even beyond them the more complex aspects of the world will be mapped and get in interrelated with each other.

Two types of mental representations are distinguished in the literature:

- Analog representations (visual, auditory, olfactory, tactile or kinetic images based on sensory impressions).
- Propositional representations (capture the conceptual content of the mind, are language-like).
- It is worth revising the knowledge related to complex learning such as mental representations, the relationship of cognitive psychology with learning, the characteristics of instructive and selective learning in the subject titled "The psychological bases of teacher activities".

Psychologists usually label something with the term "knowledge" if that piece of information is mentally represented in some concrete form or is organised, structured in some way (Eysenck, 1997). This complexly organised knowledge (cognitive schema) gives the framework for accepting new information, and the new information fits into the schema or modifies it. Consequently, when we acquire new knowledge, we fit it into the frameworks of the prior knowledge system making it possible for our knowledge to be reorganised.

Complex learning comprises acquiring flexible and applicable knowledge and requires the highest possible degree of guided and predicted performance ability. Favourable self-evaluation of the learning result is an important prerequisite for complex learning. These internal personal interpretations change continuously, which comes from the fact that idividuals keep attaching their own experience to the newly acquired knowledge. However, we must also see that it is not possible to achieve performance success without proper motivation.

DÁVID Mária: The development of learning effectiveness in higher education by the method of group counscelling. Doktori értekezés. Debreceni Egyetem, Bölcsészettudományi Kar, Debrecen. 2004.

5.2.3 Learning motivation

To identify learning motivation, we ourselves consider the definition by Réthyné (2003) the most suitable one, according to which:

"Learning motivation is a generalized disposition which is a compelling force for activities in a concrete situation. It energizes, activates, coordinates and integrates the learning activity which is formed in the system of the relationships of school requirements." ¹²²

From the pedagogical aspect learning motivation has four different kinds of levels:

- Internalized learning motivation: learners learn for reasons of conscience, guided by "a sense of duty"; always listen to teacher explanations; do their homework and want to meet both school and parental expectation. Their attitude to learning and their behaviour are guided by internal factors; learning is for them a moral duty.
- 2. Intrinsic learning motivation: learners are driven by the interest in the material, curiousity and the desire for knowledge. Their have an interest in the given science discipline and thus they would be interested in the given topic if it wasn't taught in school, and they would also look up the information, try out procedures and satisfy their free time voluntarily for it, independently of the quantity of compulsory exercises.
- 3. Extrinsic learning motivation: learning for learners is only a means to reach some external goal. For example, learners are driven to get a good mark or a material reward or they want to meet the expectations if certain persons (parents, teachers or friends), or perhaps just in the contrary thy would like to avoid negative consequences (reprimand by parents or bad marks). When a learner has moved further away from learning, the presence of external learning motivation can be of great help to reach the first success, but also to reach further successes in learning.
- 4. Prestige motivation is between extrinsic and intrinsic motivation. Its source is self-assertion, and to reach goals related to the roles and situations of social organs. Thus, in this case learners are

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RÉTHY Endréné: Motivation, learning, teaching. Why do we learn well or badly? Nemzeti Tankönyvkiadó, Budapest, 2003. p.115

motivated by both internal, assertive tendencies and external competitive situations. 123

- In order to be able to develop learning motivation, we must get familiar with the motives already present, activate them by the tools of padagogy, or if there aren't any like that, we must develop new ones. In the relation of learning and motivation, motivation is a condition, a means and an end at the same time. It is a condition because it helps to get students to learn, an end because we try to reach intrinsic motivation, and a means because we facilitate learning of proper efficiency by it.
- Fill in the questionnaire about the attitude to learning which can be found (at the end of the course material, in chapter 14 Appendicies 14.1. Questionnaires. 1. Questionnaire), and evaluate the results you obtained. How do you agree with the results obtained?
- ? What style of motivation is characteristic of you? Do you think you should change your motivation style? Justify your decision. If you think you should, think it over how you could do it.

When individuals encounter a task, they first consider their own competences (in its judgement individual psychic traits, positive or negative self-image, the level of anxiety, performance motivation, external or internal control, etc. influence learners.), then they compare it with the estimated difficulty degree, complexity and novelty of the task.

All these together result in judging whether they will be able to do the task or not, which determines motivation. Thus self-regulation emerges as a key term from the theory of learning motivation, and so we must regard learning motivation as a part of a learner's self-regulating processes, which makes the learner (from the metacognitive, metacommunicative and behavioural aspect) an active participant of his/her own learning process.¹²⁴

5.2.4 The role of metacognition in learning

Learners' knowledge related to their learning plays an important role in the efficiency and success of learning. 125 The concept of metacognition

125 CSÍKOS Csaba: Metakognition in teaching and learning. *Iskolakultúra, 2004, 2*, 3-12.

¹²³ RÉTHY Endréné: Motivation, learning, teaching. Why do we learn well or badly? Nemzeti Tankönyvkiadó, Budapest, 2003.

RÉTHY Endréné: *Motivation, learning, teaching. Why do we learn well or badly?* Nemzeti Tankönyvkiadó, Budapest, 2003.

was originally defined by Flavell (1979), who meant the experience and knowledge related to our own cognitive processes by it. 126

metacognition is the knowledge about the individual's cognition and the ability of regulating cognition." 127

From the aspect of learning development, the formation of knowledge related to the cognitive skills that are used for learning and in learning is important because learners can observe (monitor) what causes them difficulty in learning, in what cases it is easy for them to solve a given problem, and then they gain important knowledge and experience by it, which can increase the success and efficiency of learning later. Consequently, of the components of metacognition we can emphasise metacognitive knowledge.

"Metacognitive knowledge means knowledge about our own or others' mental state." 128

Metacognitive knowledge does not fundamentally differ from the knowledge forms of explicit memory stored in the long-term memory.

It can be divided into three areas:

- Person variables, i.e. the ability to think about our and others' abilities and, in general, about man's abilities properly.
- Task variables, which means interpreting the difficulty of a task properly.
- Strategy variables, where distinction must be made between cognitive and metacognitive strategies. Cognitive strategy serves to reach the cognitive goal whereas the task of metacognitive strategy is, for example, to state with certainty that we have reached the cognitive goal.

The relation of metacognition and self-regulation

Flavell (1979) regarded self-regulation as one of the metacognitive strategies, and connected it to the selection of the appropriate learning strategies.

Similarly to other scholars, Lappints (2002) mentions self-reflexion and awareness as the two important characteristics of metacognition.

¹²⁶ FLAVELL, J. H.: Metacognitive and cognitive monitoring: a new area of cognitive developmental inquiry. *American Psychologist*, *1979*, *34*, 906–911.

KALMÁR Magda: Metakognition. In: Báthory Zoltán és Falus Iván (szerk.): Pedagógiai lexikon. 1997. p.462

FLAVELL, J. H.: Metacognitive and cognitive monitoring: a new area of cognitive developmental inquiry. *American Psychologist*, *1979*, *34*, 906–911.

The concept of self-reflexion: "... due to the self-reflexion related to learning, the individual recognises their own possibilities, dispositions and propensities. They can compare their experience about their own learning with the expectations of their environment, and accordingly, they can modify their learning methods, habits and change their learning style. This is already a high level of self-development...". 129

Metacognitive knowledge can be examined from three aspects. Declerative knowledge can be interpreted as the ability to recognise thinking strategies (to know what), procedural knowledge as the ability to apply the selected strategy ("to know how") whereas conditional knowledge as the abilility focussing on the circumstances of the application ("to know when").

Think it over what tasks a teacher has in the formation of declarative and procedural meta-knowledge. How can it be integrated into the process of a lesson?

Following Pintrich's theoretical approach, Molnár (2002) differentiated between four main phases of self-regulation:

- Goal setting planning activation (formulating a learning goal coming from internal compulsion, reflexions related to a problem how the learner identifies the task (easy/difficult, interesting/boring, etc.) activating prior knowledge, predicting the difficulty of the task and estimating his/her own efficiency, etc.).
- Monitoring keeping track (keeping track of the event or the context of the activity, perceiving and keeping track of endurance and effort, raising awareness of motivation and emotion; and estimating struggling strategies, etc.).
- Controlling regulating (correcting and modifying the event kept track of: selecting and applying the cognitive strategies of learning, choosing the appropriate motivational and emotional strategies, increasing or decreasing effort, influencing behaviour, and then, if needed, changing and reinterpreting the task).

Reactions – reflexions – feedback (learners compare their performance with the expectations formulated in the goal setting, criticism of self-reflection, evaluation and attribution about their own performance within the given task. ¹³⁰

¹²⁹ LAPPINTS Árpád: *Learning pedagogy*. Comenius BT. Kiadó, Pécs, 2002. p.111

- Interpret the following sentence: During self-regulated learning the task of a teacher is partly to transmit new knowledge but the same emphasis must be placed on raising awareness about the processs of acquiring new knowledge as well.
- What must a teacher call the attentions of learners to? Plan a lesson related to your own subject, which you integrate the realization of the four phases of self-regulation, teacher activities and tasks into.

They theory developed by Pintrich és Schunk (1996) reveals the relationship of self-regulated learning and metacognition. In their view, learners become self-regulated if they own all the knowledge, strategies and attitudes which are expressed best by the affective and cognitive components. The main idea of the theory is summerized in Figure 10.

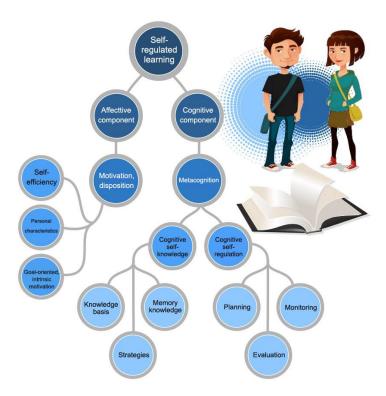


Figure 9 The components of self-regulated learning

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¹³¹ PINTRICH, P. R., SCHUNK, D. H.: *Motivation in education: Theory, research, and applications.* Prentice Hall, Englewood Cliffs,1996. p. 448

We have already outlined the self-knowledge and self-regulation factors of metacognition before. Within the affective component an important factor is that learners determine themselves the goal of learning, and it is also important that they find the goal valuable from their own point of view. Students who are not able to set their own goals, or achieve only the goals determined by their environment are less able to learn efficciently than students who are guided by their own goals in learning. Self-efficiency expresses how the individual is sure of his abilities to achieve some specific goal. High level of self-efficiency has a positive impact on commitment, endurance and influences the goal image and the components of learner perpormance such as the type and amount of the applied strategies. Personal characteristics account for learning successes and failures. Three of these characteristics belong to the causal group such as stability (short-term or long-term effects), controllability (verifiability or unverifiability), and the factors according to the place of regulation (internal and external causes).

In fact, the starting point of the learning methodological development is the "active learner", who tries to understand what he/she has learnt, and is able to apply what he/she has learnt when solving new problems and in new situations, i.e. the transfer works. The major helper of an "active learner" is the teacher and the major setting of "active learning" must be first of all the school. The goal is to achieve that the process of reflective self-regulation be developed, (Ridley, 1991), during which the main feature of the learner is that he/she depends less and less on the momentary external circumstance. He/she always compares the external effect/she he experienced with the previously acquired experience, and he/she can even reevaluate the evaluation obtained. Thus, this kind of reflective self-regulation is based on the interference of intellectual, emotional, motivational and volitional components, and at the same time it influences the formation of self-image, which affects the intellectual, motivational, emotional and volitional components.

During development we must bear in mind that metacognition interacts with several other factors: abilities, personality and learning style, etc. Exploring and knowing the relationship between these factors

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NIEMI, H.: Active learning – or a desired culture change in teacher training and schools. *Pedagógusképzés 2005. 3, 3,* p. 87-116

¹³³ MESTER Dolli: New possibilities of developing learning motivation. *Pedagógusképzés*, 2010. 8,37, p. 87-97

and metacognition is fundamentally important to understand and develop metacognition (Sternberg, 1998). 134

5.2.1 International monitoring examinations

One important efficiency indicator of educational-teaching work is measuring whether it prepares learners for the future properly, and whether it provides them with all the knowledge and skills which they will need later in their everyday life. A further aspect of it is to find out what role education plays in arousing children's interest in learning, strengthening their self-confidence, and how effectively it can transfer effective learning strategies as the success of education depends more on these factors than it was supposed before.

The results of Hungarian 15-year-old learners in the twelve years of the PISA survey showed some changes. The results of the first three (2000, 2003, 2006) years practically were not different from each other; our results in sciences were average, the scores in reading comprehension and in mathematics were below average in all these years. PISA 2009 brought some changes with respect to reading comprehension: at that time the performance of Hungarian students improved reaching the OECD average. This relatively favourable situation changed by 2012: although it changed to different extents, all our results got worse; and neither in printed nor in digital tests does the performance of Hungarian learners reach the OECD-average in any of the fields of measurement.

The results of Hungarian students in the PIRLS and TIMSS examination slightly differ from those of PISA, but on the whole, they can be regarded to be good in spite of the fact that in the test of reading comprehension they were 12 points worse than in 2006. The worse results in reading comprehension can be put down to the worsening performance of mainly boys and weaker learners.

The average result of Hungary in the field of natural sciences has not changed for two cycles; in comparison with the first examination of 1995 it has, however, improved to a great extent, by 27 ability points. This improvement is primarily related to the increase of the rate of gifted students.

The result of mathematics seems to be the weakest of the three fields as our students exceed the TIMSS-scale average of 500 (515 points) in this field in the slightest degree. We can mention as something positive

TASKÓ Tünde: Examining the cognitive and affective factors influencing learning in primary school learners of classes 6-7 from the aspect of school under-performance. Doktori értekezés. ELTE Budapest, 2009.

that in Hungary the rate of gifted students in this age group is high compared to the countries where students' performance was at the same level as that of ours, and that rate of lagging behind can be regarded to be average.

Study and compare the results of the PISA tests. In which fields did considerable changes, worsening/improving of performance happen between the surveys? How do you think the differences can be explained?

5.2.1. Information society, changes in the learning environment

The phenomenon identified by expressions like "information explosion", "quickening time", "future shock" and others have been shocking the education system of the most developed countries for about a century. Information explosion is actually the revolution of information technology, in the course of which totally new possibilities for storing, sending and processing information emerged. These resulted in the birth of the information society.

One important basic document of the EU's education strategy published in 1995 is the White Paper (White Paper on Education and Training – Teaching and Learning –Towards the Learning Society), in which after giving an overview of the challenges for the community, the authors highlight three important elements:

- the acceleration of the scientific and technical development,
- the economic activity becoming international and
- the appearance of the information society.

Due to the acceleration of the technological and scientific development, the information revolution going on has brought significant changes in the fields of education, training, further education and self-training even so far and will trigger other changes in them in the future, too.

Information and Communication Technologies Education (ICT), the open learning environment, the digital teaching materials mean daunting challenges for teachers using traditional teaching methods and organisational forms.

"ICT in education is a comprehensive pedagogical strategy of organising education on the bases of cybernetics, systems theory and communication theory, which ensures the effective acquisition of the course material by using

up-to-date information carrier materials, tools and methods together." ¹³⁵

The appearance and spread of E-learning has brought significant changes in different settings of education.

- "E-learning is an open educational form independent of spatial and temporal limitations and accessible through the computer network - that, organizing the teaching/learning process, places in a unified framework and makes accessible for students the course material and student sources, the tutor-student communication, and the interactive tutorial software, in the possession of effective, optimal knowledge transferring and learning methods."136
- ? What do you think the advantages and disadvantages of elearning are from the aspect of learners and teachers?
- Look up what the difference between e-learning and blended learning. How do you think the two learning-teaching forms can be used with regards to your subject? Collect some alternatives that can be realized.

It can be observed that content and infrastructure developments at national level have been going on for a long time (Közháló, SDT, Sulinet), however, the use of information technological tools in school lessons has not grown significantly in the last few years although more than 90% of children find an ICT lesson more enjoyable that traditional education (Havas, Zolnay, 2010). Behind the low level of the intensity of using ICT we can find both infrastructural, learning-organisational and pedagogical reasons, as well as the fact that preparing and having an ICT lesson means a considerable amount of additional work for teachers.

Besides bringing changes in the content and structure of education, the information society requires a renewal of methodology and new pedagogical practices, and makes life-long learning general and indispensable.

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¹³⁵ KIS-TÓTH Lajos: The ICT components of teacher activity. Tézisek. Habilitációs disszertáció. 2009. p. 123

FORGÓ Sándor: The concept of e-learning. In: HUTTER Otttó – MAGYAR Gábor – MLINARICS József: *E-learning* 2005. (eLearning kézikönyv), Műszaki könyvkiadó, 2005. p. 14.

5.2.2 Lifelong learning

In the 21st. century the time spent in the education system will be longer and longer, more and more students study in higher education. However, the time of learning will not be stopped for those who leave public education, either, if they don't continue their studies in higher education as it can be seen that the knowledge acquired becomes obsolete and unusable very quickly in a fast changing environment. There is one thing that seems to be constant: the necessity of continuous learning. This is what foretells a paradigm shift which brings the learning process instead of teaching into foreground, puts the individual into the centre of the process, and extends it for the whole life career. Basically, the creation of a new learning culture is required.

In the "European report on quality indicators of lifelong learning" the concept of life long learning is defined as follows:

"Lifelong learning is seen as encompassing all purposeful learning activity, whether formal or informal, undertaken on an ongoing basis with the aim of improving knowledge, skills and competence."

Purposeful activities have three basic categories:

- Formal learning is realised in education and training institutions, and is completed with a degree or qualification officially recognised.
- Non-formal learning takes place outside the systems providing basic education and training activities, and is finished without an official certificate. It includes labour-force trainings, professional further education trainings and trainings within the activities of civil social organisations and groups (e.g. youth organisations, trade unions, political parties, and art or sport associations), which were created with the aim of complementing the formal system.
- Informal learning is learning that goes on in daily life, and can be received from daily experience. In contrast with the formal and non-formal forms of learning, it is not necessarily a conscious activity, and it is possible the not even the ones concerned recognise that their knowledge and skills have increased.

The long-term goal is to change the system in education, according to which traditionally, formal training is still dominant, and non-formal and informal training are of little importance.

There are two primary things needed to realise lifelong learning: learning motivation and interest, which is associated with the grasp of the fact being education and knowledge are values as well as various

competences by which learning motivation can be realised (Achtenhagen-Lempert 2000). The most important key competences which encompass the most important knowledge, skills and attitudes necessary for life, work and education are as follows:

- Communication in the mother tongue
- Communication in a foreign language
- Mathematical literacy and competence in science and technology
- Digital competence
- Effective independent learning
- Social and civic competence
- Initiative and entrepreneurship competence
 Aesthetic-artistic awareness and expression

These competences a learner needs in society can be sub-classified into two dimensions: *the personal dimension* includes the basic skills (reading and counting), the mathematical competence and the basic competence in science and technology, entrepreneurship competence and information and communication technologies (ICT) competence and use. The competences belonging to *the cultural dimension* are: learning to learn, social skills, knowledge of a foreign language and general culture.

In summary, it can be stated the one of the most important tasks of schools to develop the competences that make lifelong learning possible, and the emphasis is shifted on the development of the skills needed for independent learning.

5.3 Summary, questions

5.3.1 Summary

The lesson outlines how learning as information processing can be modelled, in which we must go through the four phases of information processing as well as it presents the various levels of the relation between information the input and output of information. It touches upon the importance of complex learning and its role in the continuous reorganisation of knowledge. In the next parts it describes the levels of learning motivation and explores why metacognition, self-reflexion and awareness related to our own learning activity are important in the background of more efficient learning results.

The lesson deals with the most important international monitoring examinations and their major results, which called the attention to the necessity of developing the competences related to independent learning and preparing students for lifelong learning in different educational

settings due to the information explosion experienced in our days, and the changes in the learning environment.

5.3.2 Questions for self-assessment

- What phases is the IPOO model made up of?
- What levels of the learning motivation can be distinguished?
- What is the relation of metacognition and self-reflection?
- Why are self-reflexion and self-regulation important in effective learning?
- Recall the concept of lifelong learning. What competences are necessary to create this new learning culture?
- What are the basic categories of purposeful learning?

5.3.3 Practice tests

Which is not a part process of the input phase of the IPOO model?

- A. studying sources
- B. choosing a theme
- C. memorising
- D. using sources

What does not characterise effective teacher personality according to Rogers?

- A. empathy
- B. identification
- C. trustworthiness
- D. congruence

The correct answers are: C, B

6 THE GENERAL QUESTIONS OF IPMROVING LEARNING, THE EXTERNAL AND INTERNAL FACTORS INFLUENCING LEARNING, LEARNING MOTIVATION

6.1 Objectives and competences

The goal of the lesson is to outline what methods of improving learning has. In the lesson we can get acquainted with the concept and main questions of the direct and indirect improvement of learning. We will give an overview of how much the improvement of learning can be realised in schools taking the characteristics of the age group into consideration, and what external-interal factors influence the success of the improvement of learning as well as we can get familiar with the role of motivation in making learning more effective.

Having studied the material, teacher trainees will have to satisfy the following requirements:

- They will be able to define the concept of direct and indirect improvement of learning and that of the external and internal motivation.
- they will understand what the difference is between the direct and indirect improvement of learning.
- They will be able to interpret they types of motivation in school.
- They will be able to enumerate the major tasks of improving learning and what task refers to improving which area.
- They will understand how the tasks of improving learning change with increasing age.
- They will know the areas in which learning improvement occurs.
- They will be able to recall the types and components of motivation.
- They will know and understand what the difference is between the motivation theories of the various psychological approaches.
- They will be able to enumerate the examination methods of learning motivation, and will be able to characterise them on their own.

Acuiring the material of the lesson can provide a basis for the following teacher competences:

- In possession of knowledge they will be able to recognise their own strengths and deficiences in learning as a teacher, and by using this experience, they will try to help and support students to be more successful in learning.
- They will recognise and will be able to influence the motivation deficiencies of particular learners by using proper methods and trying to arouse learners' interest in the lesson and keeping individual needs in mind.
- They will understand the importance of their playing a key role in the learning methodological development and support learners as teachers keeping in mind and facilitating the creation of the proper motivation background for learners in their work.

Studying the lesson will need about one and a half hours twice.

6.2 Course material

The structure of the lesson is like this:

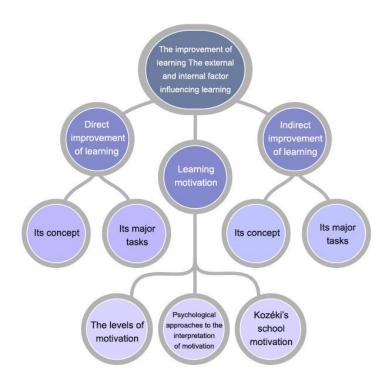


Figure 10 Aind map about the structure of the lesson

6.2.1 The major methodological fields of developing independent learning

The central question of learning methodology is to facilitate and support the development of independent learning. By the end of adolescence the strategies that characterise the individual's knowledge acquisition will be formulated. However, in many cases it can be observed that the learner is not successful in learning just because he/she does not have the ability to develop strategies, and this leads to poor results in school.¹³⁷

Panchara's (2000)¹³⁸ model regards the joint presence of three components as necessary for the development of independent learning (see Figure 11).

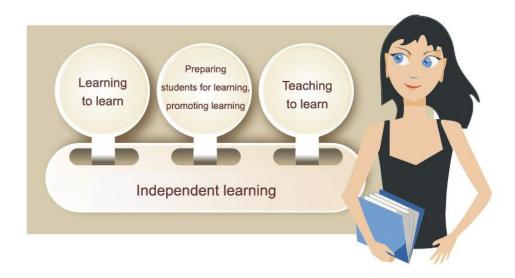


Figure 11 Panchara's model (2000) about the development of independent learning

Learning to learn means the active participation and engagement of learners in learning. It refers to the activity when they learn not only the material in the learning process, but also the learning technique itself (e.g. highlighting the main points or paraphrasing, i.e. retelling what they have read in their own words.

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¹³⁷ LAPPINTS Árpád: *Learning pedagogy*. Comenius BT. Kiadó, Pécs, 2002.

DÁVID Mária: The development of learning competence – the theoretical background. In: *Alkalmazott pszichológia folyóirat, 2006. VIII. évfolyam, 1. szám (51-64. p.)*

Preparing students for learning, facilitating learning: it means the the child's environment being active, support from mainly parents and teachers.

Teaching to learn means the direct methodological improvement of learning which makes learning more effective.

Starting from Panchara's model (2000), David distinguishes four main methodological possibilities of improving independent learning:

- Applying methods built on activating children in education (cooperative techniques, differentiated improvement).
- 2) Indirect methodological improvement of learning
- 3) Indirect methodological improvement of learning Learning counselling (treating learning problems on a person by person basis, improving metacognition related to learning, direct methodological improvement of learning-on a par with the learning problem). 139

Next we will detail the concept and major tasks of the indirect and direct methodological improvement of learning.

The indirect methodological improvement of learning means that in a direct way we improve the intellectual capacities of learners which make it possible to develop more effective learning strategies.¹⁴⁰

Basically, intellectual capacities create the intra-psychic conditions for the learning techniques to function. Balogh¹⁴¹ considers four joint capacities necessary, which play a direct role in individual learning methods. These are as follows:

- attention
- comprehension
- memory
- problem solving thinking

DÁVID Mária: The development of learning competence – the theoretical background. In: Alkalmazott pszichológia folyóirat, 2006. VIII. évfolyam, 1. szám (51-64. p.)

¹⁴⁰ BALOGH László, TÓTH László (szerk.): Chapters from the domain of educational psychology. Neumann Kht., Budapest, 2005. http://mek.oszk.hu/04600/04669/html/index.htm

BALOGH László, TÓTH László (szerk.): Chapters from the domain of educational psychology. Neumann Kht., Budapest, 2005. http://mek.oszk.hu/04600/04669/html/index.htm

The principles of developing skills: providing an environment with abundant stimuli, regularity, playfulness, complexity, keeping track of development, adjustment to the given capacity level of children and progress in small steps. It is important to point out the development of abilities must take the age of children into consideration as well, because at the different age levels different psychic functions become mature, and the task of improvement is to support their becoming mature and to correct their deficiencies.

- Make a list of the points in the course material you have chosen which create opportunities for conversations that facilitate comprehension, thinking and memory.
- Try to find exercises that develop abilities at the site egyszervol.hu/jatek.
- Visiting the site http://www.tanulasfejlesztes.ektf.hu/?valaszt=feladat as well as in Learning methodolody- for secondary school students written by Péter Oroszlány, 142 you can find useful exercises developed for the major fields of the direct improvement of learning.

6.2.2 The major tasks of the direct methodological improvement of learning

The direct methodological improvement of learning means that we make children practice the learning techniques which are missing from their learning methods. Thus the new techniques are likely to be incorporated into their learning activity; and in this way a more economical and efficient knowledge processing, learning can be developed.¹⁴³

Teaching to teach can primarily be realised while we improve learning using direct methods. Improving learning can take place in various lessons in school, within the framework of a special learning-methodological subject or training, or individual or group learning-related counselling. On the basis of a literature review of the topic the tasks of improvement can be classified in the following way:

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OROSZLÁNY Péter: Learning methodology – advice, methods, exercises to develop learning ability. Metódus Tan, Budapest, 2010. 99-126, 189-206.

BALOGH László, TÓTH László (szerk.): Chapters from the domain of educational psychology. Neumann Kht., Budapest, 2005. http://mek.oszk.hu/04600/04669/html/index.htm

Developing efficient learning habits

A habit is defined as an automatized activity by a high number of repetitions in the literature. Habitual activities occur according to the situation and quickly without any particular psychic efforts and control. Their significance is that they ease the mind and release large amounts of energy to be able to do higher-level intellectual activities effectively. It is necessary to develop a habit system in which the learner will know exactly when, where, what and how to learn so that organising learning will not take away energy from the learner. The condition for developing habitual actions is regular practice, at the beginning with help, under control of an adult, and then the various habit systems will be formed gradually and become more and more independent.

Creating the optimal learning conditions is a crucial question of an effective habit system of learning. For regular learning it is important to have a customary place for regular learning, and for storing the customary books and stationery; and to create the rhythm of packing in and unpacking school things. The learner should be surrounded by peace and quiet and proper light to be able to pay attention to the learning activity effectively.

Scheduling time means integrating the time spent on learning at home into the learner's pattern of life, and it structures the life of the learner. It is important for a daily rhythm (or if it is not possible, then a weekly rhythm) to be developed; one part of it is planning the learning time needed for particular subjects as well as thinking over when to have a rest and how much free time the learner can have to spend as he/she likes.

Developing the habit system of the learning process primarily means dividing up the materials to be learnt, the order of learning (the succession of learning written and oral materials); and optimising the number and time of revisions.¹⁴⁴

 Some useful advice: it is worth starting learning with the most
difficult subjects and the easier ones can come after these. You
should leave the written exercises at the end. Finally, if there a lot
to homework to do in one subject, to avoid getting bored with it
you should divide it into two parts and deal with other subjects
between the two.

DÁVID Mária: The development of learning competence – theoretical background. In: *Alkalmazott pszichológia folyóirat, 2006. VIII. évfolyam, 1. szám (51-64. p.)*

Taking the above advice into consideration, make a weekly schedule for the next week by organising your activities on a daily and within this on an hourly basis.

Forming the relationship to learning, developing the motivation for learning

This field of development deals primarily with enhancing motivation for learning:

- It is important to create a learning atmosphere in which the learner can speak, ask questions and express his/her opinion bravely. According to Rogers' principle such atmosphere is characterised by affectionate acceptance, trust, empathy and confluence creating the optimal conditions for learning.
- The difficulty of the given exercises should be on a par with the level of the development of children. Exercises of optimal difficulty are considered to be the ones which require some effort from learners to solve them, but they are not inexecutable because they are close to the current level of development. By doing such an exercise well, learners will feel a sense of success; and they will experience that the level of aspiration and competency experience can be enhanced.
- Applying methodological elements based on arousing learner interest and learner activity in education and development makes it possible for the material taught to be integrated into the competence system of learners by becoming competency-level knowledge.¹⁴⁵
- Collect some alternatives of how you would arouse learners' interest in a topic of the subject you will teach in school (exercises and activities).
- You can find some useful advice, interesting things and exercises related to learner interest and motivation at the following site: http://www.tanulasfejlesztes.ektf.hu/?valaszt=feladat_t3f1.

Practising successful learning techniques and strategies

It is fundamentally important for successful learning that learners should be able to apply the various learning techniques, strategies and methods at competency level. The major fields of development can be the following:

¹⁴⁵ KAGAN, Spencer: *Cooperative learning*. Önkonet KFT., Budapest, 2001.

- Elementary learning techniques (reading aloud and silently, retelling the text they have read, repetition, previous or subsequent review, asking questions, looking for key terms, etc.).
- Complex learning techniques: the joint application and combination of the elementary learning techniques (taking notes, making summaries, tables, sketches and mind maps).
- Practising subject specific learning techniques (e.g. the various methods of learning words in the case of foreign languages).
- Developing learning strategies; planning the execution of the learning tasks purposefully; arranging the learning techniques to series of unified operations.
- Developing metacognition related to learning.

As a setting for teaching learning techniques the most optimal would be if it took place by embedding them into the lessons within the framework of subjects. However, it is rarely realised in practice. That is why special trainings, development programmes and specialized books containing "Learning guidelines" emerge.

See The methodological solutions in the studies by: Oroszlány, 1995, Horányi, 2002, Kovácsné, 2003, Fisher, 2000 and Mező 2002.

6.2.3 The development of learning and the tasks of improvement at various age levels

The tasks of improving learning differ at various age levels. The age related characteristics of children and the material that must/can be taught also determine what and at what age period becomes the dominant task of the methodological improvement of learning. Next we will systemize the relationships between the age-related characteristics and the tasks of the methodological improvement of learning based on how it is described in literature.¹⁴⁶

At lower elementary age

Lower elementary age brings significant changes in the development of learning from several aspects. Learning becomes the main form of activity for a child, and the emphasis is shifted from spontaneous learning

DÁVID Mária: The psychological background of individual learning: Tompa Klára (szerk.) "Az elektronikus tanulás a 3. évezred pedagógiai kihívása" EKF, Líceum Kiadó, Eger, 2003.

to purposeful learning. As was pointed out by Jenő Salamon,¹⁴⁷ in lower elementary children the propensity for the mechanical inculcation of the material can be experienced if we don't teach them to learn in a different way. He considers vocabulary deficiencies and a lack of understanding to be the reasons for this. In his view a child cannot interpret the main points of the material on his/her own till the age of 9, lacking the conceptual basis around which he/she could group the material to be learnt.

At the same time, Cole and Cole (1997) point out that at the age of 7-8 memory strategies such as repeating and memory organising emerge. The knowledge basis of children increases, which new knowledge is connected to, and metamemory appears which means perceiving the proper functioning of memory.¹⁴⁸

The major tasks of improving learning at lower elementary age

Preparing students for doing tasks independently by using methods which are based on their activity.

The major tasks of the direct methodological improvement of learning:

- teaching and practising elementary learning techniques (writing, reading, repletion, review talking with peers about the information they have learnt). Learners must be prepared to use these techniques at competency level.
- developing an effective learning habit system at home and in school (creating a place for learning, scheduling time, developing habits related to the learning process, e.g. the order of subjects to be learnt).

Improving learning by using indirect methods and remedying possible deficiencies experienced in the minimum competences in learning play a significant role at this age.

Prepuberty and puberty

Prepuberty and puberty is of key importance in the development of learning due to the quality change that can be experienced primarily in the development of thinking.

There is a significant leap experienced in the development of learning and memory around the age of 9. The size of memory increases, the rate

COLE, Michael–COLE Sheila R.: Developmental psychology. Osiris Kiadó, Budapest, 1997.

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¹⁴⁷ SALAMON Jenő: *The developmental psychology of cognitive activity*. Nemzeti Tankönyvkiadó, Budapest, 1993.

of verbal abstract memory increases gradually, and all forms of memory become more sensible, lasting and comprehensive. Due to the development of memory functions and thinking, a high level of sensible learning will be developed by adolescence, at the same time an inequality can be experienced in learning; adolescents learn the material interesting for them, and neglect the one they don't find interesting. At this age the direct methodological improvements of learning play less role, the direct methods of improvement come to the forefront.

The major tasks of improving learning in prepuberty and puberty

The major tasks of the direct methodological improvement of learning: the emphasis is placed on sensible learning. It is important to develop highlighting the main points and to recognise relationships, and to teach complex learning techniques (taking notes, making sketches, tables, and figures. Practising subject-specific learning techniques. By the end of secondary school planning learning, scheduling time and developing metacognition related to learning.

Youth

Youth can be regarded to be the summit of memory performance. In Salamon's view (1993), the methods of sensible learning, highlighting main ideas, making sketches and plans, and integrating the new material into the system of old knowledge in a sensible way can already be developed spontaneously in youth.

Thus, at this age from the aspect of the methodology of learning it is necessary to deal with young people who have learning problems due to some reason and those who cannot switch over to the different learning situation (from secondary education to higher education)

- Compile a workbook containing at least 12 exercises. Group the exercises according to what learning ability they are meant to improve. Indicate also which age group the relevant exercise is recommended for, and which direct methods of improving learning you would match them with.
- ☐ You can find ideas and inspirations in the studies written by Oroszlány Péter (1995, 2010).

MEZŐ Ferenc: The strategy of learning for students and adults. Pedellus, Novitas Kft. Kiadó, Debrecen, 2002.

¹⁴⁹ SALAMON Jenő: *The developmental psychology of cognitive activity*. Nemzeti Tankönyvkiadó, Budapest, 1993.

6.2.4 Learning motivation

Learning motivations are usually classified by researchers into two categories: intrinsic and extrinsic. From pedagogical considerations we distinguish three levels:

- Internalized learning motivation, when learning becomes a moral obligation towards parents, teachers and ourselves.
- Intrinsic learning motivation: this motivation arises from the definite personality traits of the learner or the characteristics of the learning situation.
- Extrinsic learning motivation, in the case of which learning is only a means to reach some external goal. Thus the learner learns in order to get a good mark, social recognition or to avoid negative consequences.
- You can find exercises and help related to arousing interest and motivation at the site: http://www.tanulasfejlesztes.ektf.hu/?valaszt=feladat_t3f1.

In order to understand and improve learning motivation effectively, it is important for us to study the personality, the environment as well as the pedagogical, psychological, sociological and aesthetical effect mechanisms together.¹⁵¹ It is also a fact that we must view learning motivation as a part of learners' self-regulated processes, which makes learners (from the aspect of metacognition, metamotivation and behaviour) an active participant of their own learning processes.¹⁵²

The interpretation of motivation; the integrative model

Learners' motivation for learning can be influenced by many factors even in itself. The various theoretical approaches (behaviourism, cognitive and humanistic approach) indicate different reasons why certain learners want to work better in a given learning situation than others, and consequently they also see the basic principles for the development of techniques of motivation differently.

The **behaviourists** emphasise strengthening desirable behaviour and the success of external motivation while the scholars of social learning theories call the attention to the importance of imitation and identification. According to the cognitive approach to motivation, people perceive the world surrounding them in a different way, and it has an impact on their

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¹⁵¹ NAGY József: The 20th century and education. Osiris Kiadó, Budapest, 2000.

¹⁵² RÉTHY Endréné: Motivation, learning, teaching. Why do we learn well or badly? Nemzeti Tankönyvkiadó, Budapest, 2003.

behaviour and conduct. According to this theory, the emphasis is on intrinsic motivation in the processes of learning and cognition, and the individual acquires things because the tilting of the internal cognitive balance and experiencing deficiencies in his/her knowledge drive him/her to do so.

According to representatives of the **humanistic** approach, one of the most important characteristics of people is self-fulfilment as an internal aspiration, and this internal need for development forces them to set goals and to do everything to achieve these goals by using their abilities and resources.

All perspectives have their own barriers, which can be resolved only by an integrative approach. The integrative, three-dimensional model of motivation was created by Kozéki (1980). This model tries to grasp the pedagogical effects, psychological processes and they dynamic structure of the motivation system at the same time. ¹⁵³

The model distinguishes 3 dimensions (See Figure 12.)

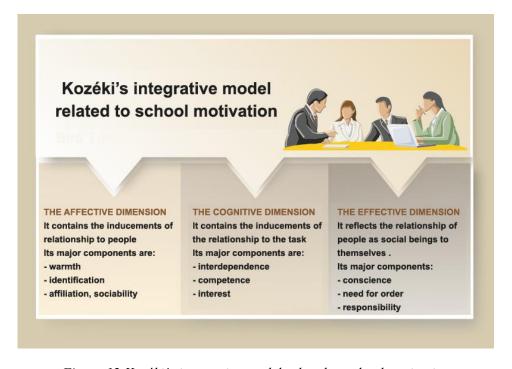


Figure 12 Kozéki's integrative model related to school motivation

¹⁵³ MESTER Dolli: The new opportunities of developing learning motivation. Pedagógusképzés, 2010. 8,37, 87-97p.

- Fill in the questionnaire related to Kozéki's school motivation (it can be found at the end of the whole course material in the chapter 14. Appendices 14.2. Questionnaires 2. Questionnaire). Collect some examples for how the particular dimensions can be strengthened and how motivation can be enhanced in school lessons.
- ? In your opinion what can be the relationship between the strength of learning motivation and performance at school?

6.3 Summary, questions

6.3.1 Summary

The theoretical part of the lesson gives an insight into the main theoretical questions of improving learning, the major tasks of the direct and indirect improvement of learning, and highlights the importance of taking age-related characteristics into consideration in planning improvement.

It explores the various approaches to school motivation from different perspectives, and presents Kozeki's integrative model, which describes the components of school motivation by eliminating the deficiencies of the particular approaches.

The practical exercises of the lesson make it possible for teacher trainees to think over the psychic, social and environmental factors of learning consciously in their own learning activities, as well as they show examples for developing exercises in particular fields of competence.

6.3.2 Questions for self-assessment

- How can the concept of the direct and indirect improvement of learning be defined?
- In what fields of competence does indirect improvement of learning take place? Choose one and enumerate the possibilities of its development.
- What are the main fields of the indirect improvement of learning?
- Why do you find it important to develop effective learning habits?
- Recall in what way the exercises of improving learning differ in particular age groups.
- Present Kozéki's model of school motivation.

6.3.3 Practice tests

Which statement is true in connection with the affective dimension of motivation?

- A. It contains the inducements of relationship to people.
- B. Its important component is the feeling of competency.
- C. It reflects the relationship of people as social beings to themselves.
- D. It has a role in solving the problem related to the task.

What belongs to the tasks of the direct improvement of learning?

- A. developing attention
- B. develoing thinking
- C. developing memory
- D. develoing learning techniques

The correct answers are: C, D

7 LEARNING STYLES AND LEARNING STRATEGIES

7.1 Objectives and competences

The goal of the lesson is give an overview of knowledge related to learning styles and learning strategies. In the lessons students can get acquainted with the concept, types of learning styles, and the most important theoretical approaches related to them. We will outline why it is important to get to know the relevant learning style in the learning and teaching process, as well as why it is important to acquire the elementary and complex learning techniques in accordance with the learning style in the independent learning activity.

Having studied the lesson, teacher trainees will have to satisfy the following requirements:

- They will be able to define the concept of learning style on their own.
- They will be able to enumerate the various types of learning style, and characterise them on the basis of the particular theoretical approaches.
- They will recognise what differences and similarities there are between the views of the theories of learning styles.
- They will get familiar with the possibilities of getting to know learning style and will be able to interpret it.
- They will be able to enumerate the elementary and complex learning techniques and characterise them on their own.
- They will understand what the difference is between a learning style and a learning strategy.

Acquiring the material of the lesson can provide the basis for the following competences:

- In the possession of knowledge they will be able to map the learning styles and learning techniques of learners, and accordingly, they will be able to plan the teaching-learning process in school.
- They will be able to facilitate the enhancement of learning efficiency due to the fact that they will recommend techniques matching the learning style, and teach them to learners.

Studying the lesson will take about one and a half hours twice.

7.2 Course material

The structure of the material is like this:

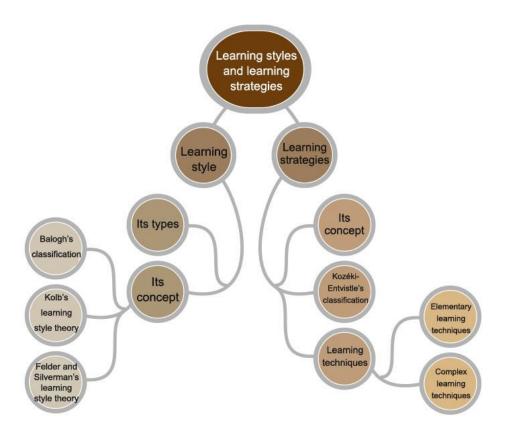


Figure 13 A mind map about the structure of the lesson

7.2.1 The concept of learning styles

From the beginning of the 1950s – while examining learning style – scholars tried to explore the biological, psychological and sociological characteristics of the individual, and his/her characteristics related to cognition and motivation, the description of which can help teachers to guide learning more effectively.¹⁵⁴

A learning style means the individual features of people that determine their learning, and differentiate them from

KATONA Nóra – OAKLAND, Thomas: Learning style, an integratve approach. Alkalmazott Pszichológia, 1999. 1. sz.18–29. p.

others'. It involves characteristics which are related to the uptake, processing and maintaining of information, as well as describe the preferred physical and social environment of learning, the habits developed in learning, and the perceptual and conceptual characteristics of the learner. ¹⁵⁵

7.2.2 The types of learning styles

There have been several various approaches to learning styles. The most commonly known classification takes sensory modalities, the social and motivational feature of learning, and the receptive and processing ability of the individual as a basis (Balogh, 2000). According to the sensory modalities, the learning style of the individual can be:

- The auditory style: they utilize verbal stimuli the best, their independent learning is aloud.
- The visual style: they rely primarily on what they have seen; they
 both fix information in their memory and recall them in pictures.
- The kinaesthetic style: they learn with physical movement and activities most effectively; they also facilitate memorization with physical movement.

According to the social environment they can be:

- The individual style: they like peace and quiet, the presence of others is disturbing for them, but they don't like noise, either.
- The social style: they learn in the presence of others effectively, need the presence of others in the different stages of learning.

According to the reaction type of the individual they can be:

The impulsive style: they speak first and often react in an intuitive way, and this can worsen their performance.

 The reflective style: first they think, analyse, and then they answer, perceive mistakes.

According to motivation:

 The style working with external incentives: physical reinforcement, e.g. a present and social reinforcements, e.g. a teaches or a parent are necessary.

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DÁVID Mária: The development of learning competence – theoretical background. Alkalmazott pszichológia, 2006. VIII. évfolyam, 1. szám (51-64. p.)

 The style working with internal incentives: they are driven by curiosity, interest, need of competency and recognition.

According to receptive style:

- The logical style: they fix the material in their memory by trying to find sensible connections and to understand it.
- The mechanic style: they reproduce what they have learnt word by word without logical relationships.¹⁵⁶
- Get to know your own learning style. Fill in the questionnaire about learning styles (it can be found at the end of the whole material, 14. Appendices 14. 1. Questionnaires 3. Questionnaire), and then comment on how you could make learning more effective and successful within the particular types.
- ? How do you think teachers could use the results of learners obtained from the questionnaire titled Learning style in their work?

Of the theories describing the types of learning style, the theories that were developed on the basis of the particular components of the process of cognition are the most elaborated ones. They place a great emphasis on formulating recommendations for both learners and teachers about how to make the teaching-learning process more successful. Next we will present two complex theories of learning styles.

Kolb's learning style theory

The starting point of David Kolb's theory (1984) is that due to the effect of whether capacities or learning experience such featues will be developed in each person which have an impact not only on learning but they can influence the whole life of people in a more complete circle. They can even dedetermine what career they will choose for themselves. In Kolb's view learning style can be interpreted in the process of perception, intake and processing information:

According to perception and information intake it can be:

- Concrete Experience (CE),
- Abstract Conceptualisation (AC).

According to information processing it can be:

¹⁵⁶ BALOGH LÁSZLÓ: Learning strategies and styles, the psychological bases of development. Kossuth Egyetemi Kiadó, Debrecen, 2000.

- Active Experimentation (AE),
- Reflective Observation (RO).

According to his theory learning is a cyclically repetitive circulation, in which the four stages that can be clearly separated are experience, observation, conceptualisation and testing. Learners are required to have different competences, attitudes and behaviour at the particular stages to go through them successfully. However, the characteristics of learners are different in these areas.¹⁵⁷

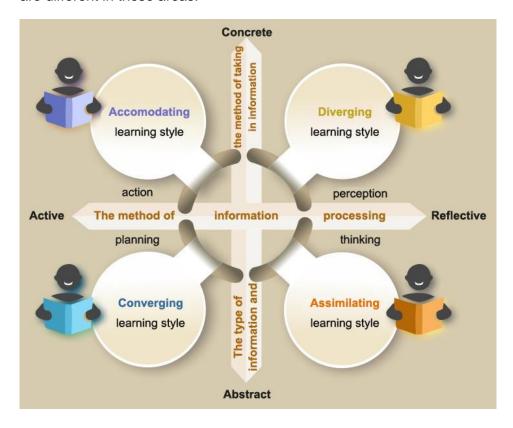


Figure 14 The interpretation of Kolb's learning styles

Thus, in the two-dimentional system we can distinguish four kinds of learning style, (Figure 15), which quite different learning attitudes and methods belong to. Learning can be:

 Accommodating (active processing of concrete information), where action is dominant,

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¹⁵⁷ KOLB, D. A.: *Experiential Learning*. Prentice Hall. 1984.

- Assimilating (processing based on observation and understanding of information), i.e. thinking-centred,
- Converging (active processing with application of abstract concepts), where *planning* has the main role,
- Diverging (processing based on observing and understanding concrete information thoroughly), where the emphasis on perception.

Kolb developed a questionnaire, which can also show the dominance of these characteristics as well.

- Kolb observed in the case of university students that it can lead to the worsening of performance if the learning expectations of their subject do not correspond to their well-established learning characteristics. If there is a correspondence between them, learning will be more successful.
- What learning style do you have? Fil in Kolb's questionnaire and interpret the results you obtained (it can be found at the end of the whole cource material in chapter 14. Appendices 14. 1. Questionnaires 4. Questionnaire).

Kolb's model goes beyond exploring and describing learning styles. He describes a "learning cycle" ("Kolb's cycle"), which takes the needs of all four categories one by one, and thus he touches upon each learning style. The course of teaching planned according to Kolb's cycle is created by asking the following questions:

- Why do we learn the given material?
- What are the key points of the topic?
- How can we you the knowledge acquired in the topic?
- What conclusions can we draw from these contents which are valid in other contexts as well?

However, Kolb's cycle determines not only the course of the teacher' activity and that of the lesson (i.e. the guidance of teaching), but it can be interpreted as the effective strategy of independent learning (self-regulated learning), in which the learner tries to find the answer to the questions of the cycle in processing the material.

Plan a lesson coonected to your subject, which you integrate the questions of Kolb's cycle determining the course of teaching into.

Felder and Silverman's learning style theory

Richard Felder and Linda Silverman took over and integrated Kolb's two dimensions related to perception and processing although they use the word *sensing* (as taking in information requires considerable involvement of senses) instead of the concrete term, and the word *intuitive* (it means the intuition of essential relationships) instead of the abstract term. However, they complemented these with three other further dimensions: related to perception (*visual - verbal*), to conceptualization (*analytic - global*) and the process of cognition preferred by the learner (*inductive - deductive*).

Table 2 The dimensions of Felder and Silverman learning style

DIMENSION	SPEC	TRUM
Observation, perception, interpretation	Sensing Organising data, Facts and observations	Intuitive Creating symbols
Input	Visual Information obtained by seeing	Verbal or auditory Information obtained by hearing
Process	Active Action, cooperation	Reflective Self-analysis, individual work
Understanding	Analytic, Sequential Linear relationships, small units	Global Holistic relationships, comprehensive picture
The process of cognition	Inductive Facts and observations	Deductive Principles

Barbara Solomon developed a questionnaire, by which four of Felder and Silverman's five dimensions can be measured directly: the sensing-intuitive, visual-verbal, active-reflective and analytic-global one. We can draw conclusions to the process of cognition (inductive-deductive) from the sensing-intuitive and the analytic-global one. In Solomon's view, those who can be characterised by being both sensing and analytic, and are less intuitive and global, prefer the inductive way, while dominantly

intuitive, and global ones feel like at home in the world of deductive conclusions.¹⁵⁸

- Get familiar with Felder's the questionnaire about learning style (it can be found at the end of the whole course material in the chapter 14. Appendices 14. 1. Questionnaires 5. Questionnaire). Fill it in and reflect on the results you have obtained.
- Plan the learning procedures which can help you most to be able to learn successfully in your own learning style you got acquinted with. For example, what teaching aids and materials can help to take in concrete and abstract information? How can you achieve that you learn the material by the activity and reflection matching your own style? By using what procedures you can facilitate your own learning if it is rather of a visual type, and by what means if verbality dominates in it?

Felder has also formulated suggestions for teachers starting from the fact that the learning style of particular individuals can be found between the two poles of bipolar dimensins and not the the end point, and thus both poles refer to all of us in some particular rate typical of us. Accordingly, he suggests a balance between the two extremes of the poles in teaching (and also in learning). Montgomery—Groat):

- We should give a sense to the discussed theories, i.e. try to find a link between the theories (global) and the learners' everyday experience (analytic).
- There should be a balance between the theory, the model (intuitive), the illlustrations and the examples connected to them (sensing).
- We should use pictures, drawings, tables and diagrams (visual) to complement our explanations (verbal) in our teaching.
- We should use data (inductive) as frequently as possible to be able to deduce the theory from them, as well as to illustrate it with them (deductive) in our teaching.
- We shoud devote enough time to learners being able to participate actively in the lesson (active) and form an opinion about the material (reflective).¹⁵⁹

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DÁVID Mária, ESTEFÁNNÉ VARGA Magdolna, FARKAS Zsuzsanna, HÍDVÉGI Márta, LUKÁCS István: Effective learner cognitive techniques. SuliNova, Budapest, 2006.

? Which of the suggestions mentioned above do you use in your own learning?

7.2.3 Learning strategy

One common cause of weaker study performances is that learners don't have proper and effective learning techniques and strategies, the ability to develop them, they cannot carry out the particular strategies and methods appropriately. In their lack, it is difficult to process information and do exercises successfully.

We can help learners to find the effective techniques and methods matching their personality by using and making learners acquire the learning techniques and methods matching learning styles so that they can learn more successfully. That is why if we manage to get to know the strengths and weaknesses of the learning style of the learner, then we can develop learning strategies by which possible deficiencies can be reduced or eliminated.

The concept of learning stategy: "a learning strategy is the system of plans and determinations related to learning which are directed at specific goals, and which is characterised by a certain arrangement and durability." 160

At the same time, in the field of collecting, processing, maintaining and recalling information they are characterised by adaptivity and variability. Consequently, they can be improved and changed adjusting them to the given task or situation. What learning strategy a learner uses can arise from both the educational practice, the teacher and the learner's self-instruction based on his/her former favourable experience as well.

We can find a lot of different classifications of learning strategies in the literature. The classification that can be best used with regards to the practical improvement is the one by Kozéki and Entvistle (1986), who distinguish three basic types of learning strategies: extensive, organised and mechanic.

The **profound** learning strategy tries to understand new things in which primarelly the dominant role is played by grasping relationships, attaching new knowledge to old one, a wide overview, drawing conclusions and system view.

LAPPINTS Árpád: *Learning pedagogy*. Comenius BT. Kiadó, Pécs, 2002.89.p

MONTGOMERY, Susan M. – GROAT, Linda N.:Student learning styles and their implications for teaching. CRLT Occasional Paper NO.10.1998. http://www.crlt.umich.edu/sites/default/files/resource_files/CRLT_no10.pdf

The **organised** *learning strategy* is characterised by regularity, good organisation of work, dividing up and structuring the material to be learnt well.

The **mechanical** learning strategy is built on remembering details, the primary aim of learning recalling knowledge in the short run as accurately as possible. Revealing relationships hardly plays a role in this method. ¹⁶¹

Elementary learning techniques

Learning strategies are made up of so called elementary learning techniques.

Elementary learning techniques refer to small learning tricks and methods which facilitate to understand, fix in the memory, recall from it, and find the various relationships between the elements of the material to be learnt.

The most common learning techniques are as follows: (Balogh, 2005):

- Reading a text aloud.
- Silent reading.
- Retelling a text we have read from memory (by keeping the sentence structure of the original text or by paraphrasing).
- Silent repetition of the text that we have read or that was told to us.
- Telling some text to other persons, conversation with peers about the information we have learnt.
- Review (previous title, sub-titles, major chapters, etc., subsequent – highlighting, comparing with our own notes or sketches made at school).
- Defining unknown words (interpreting the context, review of materials learnt before, books and lexicons).
- Highlighting.
- Paraphrasing (reformulating particular sentences, parts of a text; telling a text by using our own words).
- Key terms (highlighting and/or giving a definition for them).
- Making sketches/taking notes (andbreaking them up visually).
- Making figures, interpreting teacher sketches, outlines.

¹⁶¹ BALOGH László: Learning strategies and styles, the psychological bases of development. Kossuth Egyetemi Kiadó, Debrecen, 2000.

- Trying to find relationship between terms, fixing them in memory. 162
- Think it over what elementary learning techniques match learners with auditory, visual and kinaesthetic learning style. Write as least thre examples for what learning techniques facilitate learning the material more successfully for your students having the auditory learning style.
- Choose a learning technique and show it through an example how you would make your students practise it in teaching your subject.
- You can find a lot of usuful advice and help to facilitate learning and solve various learning problems at the site http://tanulasmodszertan.hu.

The complex learning techniques are developed by the joint usage and combination of the elementary learning techniques. Such complex learning method is the SQ4R technique, which was developed and described by Thomas and Robinson (1972). This strategy, the name of which is derived from the intitials of the English names of its particular steps, involves 6 steps of the process of acquiring the material effectively:

- 1. **S**can
- 2. Query
- 3. Read
- 4. Reflect
- 5. **R**ecite
- Review
- 1. **Scanning, previous survey**: Scanning the whole text. Glancing over the structure (chapters, sub-chapters, paragraphs), and stating what is known, and what is unknown from this, what the unknown parts are like, the mobilization of what knowledge already available is required by them. As a result of all this, we get a general picture of the contents to be learnt. Thus, the first learning step is global, related to the survey of the whole material to be learnt. Here learners don't strive to read the text throroughly by looking at every detail.
- 2. **Asking questions**: Texts in a course book usually contain declarative sentences, descriptions, exclamations, the acquisition of which expects the learner to be a passive receptor. By formulating

BALOGH László, TÓTH László (szerk.): Chapters from the domain of educational psychology. Neumann Kht., Budapest, 2005. http://mek.oszk.hu/04600/04669/html/index.htm

questions, the learner becomes from a passive receptor to an active creator who ceates knowledge.

- 3. **Reading the text thoroughly**: This step means taking in information, which makes it possible for the learner to give an answer to the questions he/she has asked in the previous step.
- 4. **Reflecting on the information**: The most important feature of this step is to understand the text. As a result, the learner will see connections, conceptual relations, the relationships between the knowledge acquired from different sources and at different time, which makes it possible for his/her newly acquired knowledge to find their place in the system of prior knowledge available.
- 5. **Reciting the contents reflected on before**: at this stage the learner recalls the answers both to the questions formulated in the first step and possibly to the ones that arose during reflection. It has two functions: a) going over the details is at the same time a kind of revision, and thus it helps the learner to acquire the material as effectively as possible; b) reciting also makes it possible for the learner to check the efficiency of his/her own learning (self-regulated learning, metacognition).
- 6. **Reviewing the material**: coming back to the global level, in the last step of the strategy, the learner reviews the logical system of the contents, the main meeting-points of particular structural parts, and the most important concepts he/she acquired in the material again. 163

This method facilitates profound learning strategy. We would like
to emphasise that this strategy is not necessarily to be followed in
all of its components. It shows the subsequent steps, and after
getting to know these, everybody will use the one, and develops a
strategy that they find to be the most appropriate and useful to
enhance their own learning efficiency.

Try the	SQ4R	method	during	your	next	learnin	ig ac	tivity.	What
difference	ces did	you ex	perience	in c	compa	rison v	with y	your e	earlier
strategie	es?								

7.3 Summary, questions

7.3.1 Summary

The theoretical part of the lesson outlines the theoretical approaches of learning style, presenting the psychological and environmental factors

BALOGH László, TÓTH László (szerk.): Chapters from the domain of educational psychology. Neumann Kht., Budapest, 2005. http://mek.oszk.hu/04600/04669/html/index.htm

which play a significant role in developing the unique characteristics in the individual which basically determine people's learning activities, determine the ways of their handling information, perceiving, thinking, and their efficiency in solving tasks and making decisions.

It points out that a crucial condition for independent learning is to use the methods necessary for learning at competency-level, for which it is necessary to get to know the learning style of learners so that they can acquire learning techniques and strategies which match their learning style, and contribute to enhancing learning efficiency.

The practical exercises of the lesson make teacher trainees acquainted with the examination possibilities of learning style. Furthermore, it provides them with exercises to think over how familiarity with learning styles, learning techniques and methods, and the ways of acquiring them can be integrated into the pedagogical activities.

7.3.2 Questions for self-assessment

- How can a learning strategy be defined?
- What types of learning strategies do you know? Characterise the pertical stytes according to the various approaches.
- What is the difference between a learning style and a learning strategy?
- Why do you find it important to get to know the learning styles and strategies of learners?
- Enumerate some elementary learning techniques.
- Why can the SQ4R method regarded to be a complex learning strategy? Recall the various steps of the method.

7.3.3 Practice tests

Which of the following is <u>not</u> an elementary learning technique?

- A. retelling a text aloud
- B. divergent thinking
- C. making notes, sketches
- D. paraphrasing

Which statement is true for Kolb's accommodating learning style?

- A. It can be regarded to be abstract in taking in information.
- B. It is characterised by reflectivity.
- C. Recongising relationships is based on intuition.
- D. It is primarily an action-centred learning style.

The correct answers are: B, D

8 FACTORS INFLUENCING LEARNER PERFORMANCE, THE DIFFERENCES BETWEEN LEARNERS. THE SYMPTOMS INDICATING DEVIATION FROM THE AVERAGE, AND GROUPS OF LEARNERS REQUIRING SPECIAL ATTENTION.

8.1 Objectives and competences

The goal of the lesson is to give an overview of what external and internal factors influence school performance, and in which fields there are differences between learners with respect to them. Furthermore, it aims at exploring the risk factors which can have an impact on the development of deviation from the normal course, and finally what groups of learners with special educational needs can be identified, and what the major criteria for classifying them into particular groups are.

Having studied the lesson, teacher trainees will have to satisfy the following criteria:

- They will be able to enumerate the external and internal factors of influencing school performance,
- they will know and understand the cognitive components of the internal condition systems for learning,
- they will be able to enumerate the basic and activity-specific abilities that can be regarded as the prerequisites of learning,
- they will be able to name the affective components of the internal condition system of learning,
- they will know and understand the effect mechanism of teachers, the social environment and the pedagogical situation with regards to success in school.
- they will be able to identify the somatic, psychic and environmental causes of the normal development's deviation from the average,
- they will know the groups requiring special attention and they will be able to determine the types of learners with special educational needs, and
- they will know the criteria of the social disadvantagous status.

Acquiring the material of the lesson can provide a basis for the following teacher competences:

- they will recognise and will be able to interpret the psychological connections underlying deviation from the normal development, and helping their interpretation,
- they will be able to take the individual characteristics of learners into consideration.
- they will find it important to choose the methods, plan and use procedures matching the goals of the teaching units, the age and interest of students with different capacities, abilities and prior knowledge,
- they will be able to cooperate with other experts, parents and persons and institutions that play a role in the learners' life.

8.2 Course material



Figure 15 A mind map about the structure of the lesson

8.2.1 Factors and system of conditions influencing school performance

The efficiency of learning is influenced by various circumstances and conditions, and it is an important task to create them as widely as possible, and provide access to them in planning teaching. On the basis of Lappints and Kulcsár's studies we can distinguish between an internal and external condition system (Kulcsár, 1982; Lappints, 2002). 164, 165

The internal condition system of learning:

the properties of learners (their biological and psychic characteristics)

The external condition system of learning:

- the characteristics of teachers
- social factors
- pedagogical factors

These can influence mutually how successful learning will be by interacting with each other.

> The internal, personality-dependent condition system of learning

This condition system comprises, on the one hand, the biological characteristics of the learner (endurance and health), and on the other hand, psychological factors which can be determined as cognitive (intellectual factors) and affective (emotional and motivational factors) components.

Cognitive conditions

The cognitive components determine in what way, during what time and what the learner is able to acquire. We can talk about three important factors within these:

1. Prior knowledge is our ability by which we can link the newly acquired knowledge with the available old knowledge, and thus the result of learning is changing our available knowledge. But we can modify only our available knowledge; therefore it is important

¹⁶⁴ KULCSÁR Tibor: The psychological factors of school performance. Tankönyvkiadó, Budapest, 1982.

¹⁶⁵ LAPPINTS Árpád: *Learning pedagogy*. Comenius BT. Kiadó, Pécs, 2002.

- to acquire a safe basic knowledge, because there is no progress and no new, higher knowledge without this. Greater available basic knowledge brings better results, while the ones with less basic knowledge will more and more lag behind.
- 2. The learning, learning organisation's ability is a group of abilities which with regards to its function creates new knowledge by taking in and revealing information. This category includes the ability of acquiring knowledge, creating and problem-solving. There are general abilities such as reading, but there are special ones among them as well, such as the ability of taking notes and making outlines. Knowing and using learning techniques, methods and strategies are important factors of the system of learning abilities.
 - Zsolnay (1982) mentions the ability group which supports independent learning and acquiring knowledge (self-control, planning learning, cooperating with teachers and classmates) by the term learning, self-regulated abilities.¹⁶⁶
- 3. General (intellectual) abilities: carrying out learning activities which are manifested in school exercises supposes the presence of certain abilities and development matching age. Following Zsolnai, we will highlight the following abilities as the preconditions for learning:

Basic abilities:

- abilities of perception (perception of form, space and of speech),
- imagination,
- attention (concentration, endurance),
- memory (verbal, visual memory),
- thinking (operations of thinking, analysis, synthesis, abstaction, comparison, complementation, generalisation, concretization),
- graphomotor skills (following forms, direction, ratio maintaining size).

Skill-specific abilities:

- communication skills
 - language skill (speech reproduction and comprehension, writing and reading skill),

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¹⁶⁶ OROSZLÁNY Péter: Teachers' manual to teaching learning. AKG Kiadó, Budapest, 1995.

- non-linguage communication skill (posture, gesture, mimicry)
- The category of social skills (social perception, social adaptation, attention and cooperation) involves the cencepts of perception, memory, imagination and thinking, which primarily determine learning and its efficiency.¹⁶⁷
- Brush up the parts of lesson 7 dealing with learning style, strategies and techniques.
- ? What is the relationship between the cognitive components? What impact the particular conditions have on each other?

Affective conditions

These conditions determine learners' learning disposition, attitude and their relation to learning. Their role ensures that we can make use of the possibilities determined by the cognitive conditions, and that we can get to the utmost limit of school success or stay below it.

The following conditions belong to this category:

- learning motivation,
- performance motivation,
- interest.
- stress and xiety of the learner,
- self-confidence, self-control, self-image,
- attitude related to school,
- attributions related to school efficiency,
- volitional properties.

The external condition system of learning

Learning and its efficiency are greatly influenced by conditions in which learning takes place. Depending on the conditions there can be quite big differences with regards to the quantitative and qualitative characteristics of the learning result. The external environmental factors can be classified into three areas:

- the role of the teacher
- the role of the social environment and the family
- pedagogical variables

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¹⁶⁷ OROSZLÁNY Péter: *Teachers' manual to teaching learning*. AKG Kiadó, Budapest, 1995.

From the aspect of the learning environment the most important task is to ensure the proper conditions for learning, and by this to make the optimal performance of the personality possible.

The role of teachers in the efficiency of learning

A school is regarded to be the major scene of learning, in which *the person of the teacher* plays a key role. Research and the literature related to the role and efficiency of teachers point out the importance of teachers' mental health, their basic personality properties, which can be described by the key words of humanistic psychology, Rogers' three core contitions (empathy, congruence and unconditional positive regard), the pedagogical competences (cooperation, communication skills, a flexible behaviourial repertoire, good situation recognistion and conflict management), as well as subject-related and methodological knowledge. 168

The leadership style and education-related attitude of a teacher can also play an important role in the emergence of differences in performance and/or behaviour that can be experienced in school.

Unlike cold attitude on the part of a teacher, warm attitude and learner centered-teaching result in an emotionally more balanced behaviour, and more even performance. It has been found and experimentally proved that there is a strong correlation between the personal kindness of a teacher, a creative atmosphere, low levels of anxiety and good learner performance.

In connection with the efficiency of learning we must also mention teacher expectations. The phenomenon of the so called "Pygmalion-effect" originally described by Rosenthal and Jacobson (1968), and research done in the topic show that the expectations reflected by the teacher have an impact on both the intellectual performance (cognitive expectation) and the behaviour of learners (normative expectation). However, it is also important to point out that teacher expectations have the greatest impact primarily not on the results measured by tests but on the subjective qualification of learning, i.e. on marks. The cognitive and normative expectations mostly affect each other mutually as we are more likely to have higher intellectual expectations for well-discipled learners, as we would also like to be satisfied with the behaviour of those of whom we expect better results. Teachers – possibly unconsciously – communicate to their students what they think of them, how they judge their skills, and accordingly, what they expect of them. Functioning as a

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¹⁶⁸ FALUS Iván: The pedagogue. In: Falus Iván (szerk.), *Didactica*. Nemzeti Tankönyvkiadó. Budapest, 1998.

self-fulfilling prophecy, these expections direct learners' behaviour towards the expectation. 169,170

Read the following study about the role of teacher expectations, and then answer the following questions:

What patterns of teachers' behaviour can we distinguish from each other? What relationship can be shown between particular patterns of teachers' behaviour and the Pygmalion effect? What factors influence the occurrance of the self-fulfilling prophecy?

http://magyarpedagogia.hu/document/2 133 Sallay%20Hedvig.pdf

The impact of the social environment on the efficiency of learning

A whole lot of pedagogical and sociological research has been examining the relationships between school performance, efficiency and success in life determined by society since the 1960s.

Within the social environment we must point out the role of the micromilieu, the family surrounding the child directly. Family background influences learners' school success to a great extent. Examining the effect of the family on learning, we should just think of the problems of children who are brought up in a one-parent family, and who "become a basketball tossed" between divorced parents. The effect of the family atmosphere can also be interpreted approaching it from the direction of guidance, control and emotional support.¹⁷¹

The 2012 PISA survey showed that in Hungary there is a strong correlation between family background and performance, 23,1% of the variance of learner performance comes from the differences of the ESCS-index. Of the European countries of OECD, we can find a similarly high ratio only in Slovakia (24,6%) and France (22,5%). The strong correlation between family background and performance refers to the fact that in Hungary the differences are bigger than the average according to learners' social, economic and cultural background, and there are much fewer learners than

TÓTH Péter, BÉKY Gyuláné: The impact of environmental variables on the efficiency of learning. Szakképzési Szemle, 2009, 4, 379-402.

TÓTH Péter, BÉKY Gyuláné: The impact of environmental variables on the efficiency of learning. Szakképzési Szemle, 2009, 4, 379-402.

DÁVID Mária: Effective learning – the theoretical background of learning improvement. 2008.

http://www.tanulasfejlesztes.ektf.hu/?valaszt=hatter_hatekony_tanulas

the average who achieve good results in spite of their poor social, economic and cultural background.

The social, economic and cultural index (ESCS-index) used by the PISA survey encompasses the factors which can grasp the social, economic and cultural capital of the family. Thus, the ESCS-index as a numerical, one-dimensional factor comprises the effects of all background variables that determine the results of students most. To calculate the index, the variables measuring the job and educational level of parents, as well as the cultural and material goods of the family (among others the number of books that can be found at home) are used to calculate the index.

A lot of surveys – for example, PISA, PIRLS-TIMSS – indicate that the socio-economic status also has a crucial significance as for the learners' chances at school. All this research shows that in Hungary the differences between learners are higher than the average according to their social, economic and cultural background, and there are much fewer students than the average who have achieved good results in spite of their poor social, economic and cultural background. Furthermore, the educational level and the labour-market position of the parents (mainly of the mother) is one of the most determining factors of the child's success. Consequently, the possibilities offered for today's schoolchildren also determine the perspectives of the future generation, and so the standard of school education is of crucial importance in creating chances for the social classes falling behind.

The international context of the PISA survey also highlights that Hungary reached an average result lower than the OECS-average beside the inequalities coming from a significantly greater family background than the OECD-average. From this we can also draw the conclusion that reducing the inequalities related to the socioeconomic status would result in the improvement of the average learner performance of the country at the same time.

The financial situation of the family, and whether there is a stimulus-poor or stimulus-rich environment for learning or not can also have a significant effect on efficiency. We can mention factors such as whether the child has a desk of his/her own, the infocomm resources (reference books, lexicons, journals, infocomm tools) that can be found in the family are varied enough, and whether the family can provide these resources at all. Besides the family, communities of friends and school communities are the ones that can have the greatest impact on the efficiency of

learning. This effect becomes even more pronounced in children whose family is beset with problems. It is also manifested in the fact that in transmitting values and goals peers play a greater role than parents, and in general adults. (Tóth, Béky, 2009).¹⁷²

☐ It must be noted that in Hungary the relationship between background variables and performance in mathematics is one of the tightest: the number of books that can be found at home, the educational level and the labour-market status of parents, as well as the financial situation of the family account for almost one third of the variables of the results.

In the case of Hungary *choosing school* also has a great impact on learners' expected knowledge and life expectancy, and this effect can be seen well even in the case of lower elementary pupils. In Hungary the difference between the knowledge of learners living in an average town and that of the ones going to school in a village of a smaller population is twice as much (48 points) than at the international level (25 points). On the one hand, this result can be put down partly to the infrastructural supplies, but on the other hand, the effects that indicate the combination of family/environmental disadvantages seem to be stronger.

In Hungary, a learner who goes to a school in which there are relatively a great number of students with a good family background is expected to be able to have a better result by 56-67 points in the PIRLS and TIMSS survey than the one in whose school the rate of students with a disadvantaged social background is high, and that of the ones with a good social background is low. On the global level, the average difference is 40-42 points. This figure is of even more importance if we take into consideration that in contrast to the international average of 35% in Hungary only one fifth of learners go to a school with a good background while almost the half of them (48%) attend a school which can be regarded to be socially disadvantaged, and this is more than one and a half higher than the international average (30%).

What follows from all these is that school education must do everything to reduce the social inequalities, and make sure that learners can develop their personal capacities in the highest possible way. Unfortunately, the figures of the PISA 2012 survey also justify the fact that in Hungary the education system seems to be ineffective opposite the socio-cultural disadvantages; the inequalities of knowledge resulting

¹⁷² TÓTH Péter, BÉKY Gyuláné: The impact of environmental variables on the efficiency of learning.. *Szakképzési Szemle*, *2009*, *4*, 379-402.

from the family and home environment cannot be reduced by pedagogical effects appropriately.

In the PISA survey 2012 the most successful countries were the ones the learners of which achieved a result above the average in every field and in both mediums (including Switzerland, the Netherlands, Finland and Belgium). It it worth pointing out of the best 16 countries the example of Estonia whose educational expenditure and national income per capita do not exceed that of Hungary but nevertheless it has excellect results in every area. There were 11 countries with mixed performance the students of which achieved a result above average in at least one field (e.g. Germany, Ireland, France, the Czech Republic, the United Kingdom, Danemark, Poland and Slovenia). The third group is represented by the countries which did not reach the OECD average in any of the fields, Hungary belongs to this category (also including Croatia, Russia, Spain, Greece, Serbia, Rumania and Bulgaria).

The effect of pedagogical factors on the efficiency of learning

Of the pedagogical factors we can point out the importance of *the system of school requirements* and *the educational methods*. It is indicated in the pedagogical literature again and again that the Hungarian educational system wants to teach children, and expect of them too much. In the view of N. Kollár (2002), school requirements resulted in over-burden, and the general increased risk for psychosomatic symptoms, and deterioration in the learners' subjective wellbeing can also be seen. Children meet the high performance expectations even at the expense of over-burdening if their family and home circumstances are favourable, and perform well in school. However, learning failure leads to the deterioration of efforts.¹⁷³ Her results are in accordance with the ideas of Réthyné (2003), who emphasises that success achieved in learning triggers emotional satisfaction, and develops positive motivation for learning whereas negative emotions can lead to strengthening the fighting of motives, and developing avoidance motives.¹⁷⁴

Too much teaching material and the short time that can be devoted to practising do not make it possible for the material learnt to be integrated

Nemzeti Tankönyvkiadó, Budapest, 2003.

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N. KOLLÁR Katalin: The effect of school burden on the amount of learning and learners' general state of health. *Alkalmazott pszichológia*. 2002. 4, 2, p. 29-45.
 RÉTHY Endréné: *Motivation. learning, teaching*. Why do we learn well or badly?

into the competences of children. These ideas led to the measurements of learner competences, which gave feedbacks about the deficiencies experienced in the basic abilities for teachers.¹⁷⁵

In order to satisfy the requirements formulated in pedagogical documents, teachers choose from a methodological repertoire that is becoming richer and richer. This possibility of choice refers to both books and teaching methods. Variety can be good for education if it went hand in hand with the efficiency of learning. However, this is not reflected by national surveys. In spite of the great number of methods and books for teaching reading there are basic problems with reading comprehension skills of the age groups leaving primary school, which basically makes independent learning impossible. Katalin Csabay (1999) even writes about "false-dyslexia" when she formulates the phenomenon that as an effect of the forced speed of teaching reading more and more learners show signs of difficulties in reading than it would be justified. School simply does not provide enough time to develop skills and practice. 176

The PIRL-TIMSS2011 survey also indicated that the most important tools of teaching and lessons in schools in Hungary – in accordance with most countries – are course books and workbooks. In lessons of mathematics teachers expect learners to do exercises by teacher guidance, and justify their answers they give to questions. In fact, they expect them to learn rules, procedures and facts at a significantly lower rate than the international average. Few of the Hungarian pupils in year 4 carry out scientific examinations with a regularity of at least every second week in their environmental science lesson, only 22% of pupils. The typical result at international level is 40%, but this is not surprising, either, as only 13% of the learners surveyed in Hungary attend a school where there is a science laboratory.

8.2.2 Deviation from the average, the causes of deviation from the normal course of development

The bio-psycho-social effects influence the normal course of development together. There are some among them which exert their effect unfavourably, and their consequences make healthy development

CSABAY Katalin: Fake dyslexia as an epidemic of our era. *Fejlesztőpedagógia*, 1999-es évi különszáma.1999.

SCHÜTTLER Tamás-VÁRI Péter: "Competence measurements indicate effectiveness primarily for schools" – Beszélgetés Vári Péterrel a teljes körű tanulói kompetenciamérések tapasztalatairól. Új Pedagógiai Szemle 2004, 1, 70-79.

difficult, hamper or even severely hinder this, and that the individual could adapt themselves to their environment successfully.

The group of biological, somatic causes

Under the influence of the genetic, innate or acquired defects of the biological genome, harmful effects on the development of the foetus can also appear at the early stage of life.

It is advisable to revise your knowledge related to embyology of the subject titled "The psychological bases of teaching activities".

Risk-factors during pregnancy and prenatal risk factors:

- harmful effects on the foetus (nicotine, alcohol, soft and hard drugs, radiation, preservatives, toxaemia of pregnancy, preeclampsia, i.e. inadequate food supply to the placenta),
- the mother's metabolic and hormonal disorders; high blood pressure
- anaemia,
- hormonal treatment, taking certain medicines, including psychopharmacological ones,
- more severe physical or psychological stress, which exerts its effects through the nervous –hormonal system on the foetus,
- environmental toxins, lead, mercury and carbon-dioxide,
- placenta-aging in the case of post-term pregnancy.

Perinatal risk-factors:

- respiratory, circulatory insufficiency, oxygen lack,
- the nervous system traumas,
- premature, precipitate or prolonged labour,
- weak contractions or no pain labour pains,
- the umbilical cord wrapped around the baby's neck,
- circulatory insufficiency in either mother or baby,
- blood loss, forceps delivery.

The harmful effects before, during and after delivery can cause problems in the processes of the sequential development, development and recovery of the foetus's and the baby's brain, which can trigger later function disorders.

Physical backwardness often goes with the change in the psychological development of the child. Physical injuries can cause e.g. slowing down of motion development, the problems of the development of the sense organs (seeing, hearing, touching and perceiving). The child learns to walk, run, get dressed, eat on their own, and their development of speech and language skills starts later. He/she will gain less and drabber experience about his/her environment.¹⁷⁷

The group of psychic causes

One of the most common causes is that learners do not have appropriate, effective *learning techniques and strategies* matching their *learning style* and the abilities to develop them or they are not able to carry out the particular strategies and methods properly. The lack of these makes it difficult to process information and solve exercises successfully.

Some of the typical problems include *concentration difficulties* (e.g. easy distraction), or just the opposite, *perseveration* (the inability to, or impairment in, switching tasks or activities); undulating *attention with changing intensity*; and *selecting problems* (i.e. the difficulty in selecting the essential stimuli for the exercise from the masses of stimuli).

The various *behaviour disorders* can also have an effect on performance, the characteristic of which is that learners are not able to regulate their activity level according to their social requirements, keep interfering into the lesson, interrupt or disturb other children's activities, can't wait until it is their turn, and have low frustration tolerance.

Defective self-consciousness, damaged self-confidence due to experiences of failure can also trigger learning problems. If a learner experiences a series of failures in school, his/her self-confidence will be shattered, will evaluate himself/herself less and less, and finally he/she will adapt his/her behaviour accordingly. A high level of anxiety will, on the one hand, make the learner's attention dispersed preventing him/her from concentrating on the current tasks, on the other hand, it can trigger defence manoeuvres, which, however, facilitate not the execution of the task, but the maintenance of self-esteem. Such defence manoeuvres, which can be a signal for teachers, can be daydreaming or doing a task hastily, but not uncommonly simulating illness or playing truant.

In the majority of cases, *insufficient motivation* can be traced back to beliefs related to abilities, strategies or efforts. In other words, the learner feels that he/she does not have the abilities necessary to carry out the

¹⁷⁷ N.KOLLÁR Katalin – SZABÓ Éva: *Pszichology for teachers*. Osiris, Budapest, 2004. p. 477-486.

task, the possible strategies do not lead to results, perhaps he/she estimates that to achieve the goals will require too much effort, which he/she is reluctant to do, or even his/her efforts will not bring any results as compared with the size of the task.

Learners also differ in how much they can be burdened physically and psychologically. If we don't take this into consideration when organising activities within and outside school, it can lead to *overburdening*, due to which children will be more restless, unquiet and live in a constant performance compulsion. All things considered, overburdening can lead to exhaustion, which prevents children from achieving their expected goals.

Environmental – school related causes

The biggest problem is that educational methods do not match properly the goals of the lesson, the characteristics of learners and the characteristic features of contents. Teachers know incorrectly the possibilities of methods, the conditions of their effectiveness and their attitude to solving pedagogical tasks. Besides, one group of teachers develops a method or a combination of methods, which seem to be effective for themselves, and apply them without taking the other conditions into consideration. In fact, they function with *didactic-methodological deficiencies*.

Apart from these, a problem that emerges frequently is that schools are more and more strongly *performance-oriented*. The quantity of the material to be learnt has increased, there is often no time and no proper methods for the learners to fix it their mind (or the material exceeds the receptive, apperceptive skills of the learners, or although it matches learners' comprehension, the quantity of the material is so big that they are not able to assimilate it). The speed of acquiring the material, and *the pace of progress* do not match learners' needs, either.

Further causes:

- learners are affected by two many stimuli and are not able to select among them
- school and school-organisational deficiencies
- meeting the expectations of the middle-layer
- neglecting mental health

Environmental causes – social causes

Environmental causes include *poverty*: A great number of families have limited financial resources available, most of which is spent on

making a living, so the expenses for education and school supplies are forced into the background.

The family's language use is related to social status, and besides, it reflects the relations within the family. In Bernstein's view (1975) the relationships within middle- and upper-class families are person-oriented, the members take each other's needs and aspects mutually into consideration, and their language use is characterised by the *elaborated code*. It means that parents take the language development and knowledge level of the child into consideration, they use complete sentences, few personal pronouns occur, there are more prepositions referring to temporal and spatial relations, and there are more "unusual" adjectives, more complex verb complementations, more object complements in the sentence, more pauses and their vocabulary is varied. The restricted language code is the opposite of what has been mentioned above, and it is more typical of lower-class families, where the basis of relationships is the position and status occupied by the individual in the family.

Considering the causes from the aspect of *educational habits and needs*, it often happens that children are affected by unfavourable social stimuli. The primary source of social-environmental harms is the family. Family harms come from partly from *an unfavourable family atmosphere* (bad marriage, divorce, growing up in a one-parent family, the family leading a loose life, and violence within the family), and partly from wrong educational methods (lack of education, too strict or too lenient parents, double education, education setting too high expectations, and education opposed to the school's values scale).¹⁷⁸

It is advisable to brush up the knowledge of Lesson 2 related to socialization, such as mother-child relationship, family bonding patterns, and the social functions of the family.

The accumulated presence of disadvantages hinders and prevents the individual's advancement opportunities, resulting in *unfavourable life* expectancies. Children born into a cumulatively disadvantageous environment and bad social system start their life with similar disadvantages as their parents. The disadvantages make their effect felt through generations. The most important causes of the situation deteriorating and becoming chronic are low level of education, lack of

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 $^{^{178}}$ TÓTH László : Psychology in teaching. Pedellus Tankönyvkiadó, Debrecen, 2002.

qualification, unemployment, poverty, strengthening inequalities in the area, and no possibilities of accommodation.

Another source of problem can also be social stigmatization, e.g. because of origin. Those who belong to a national or religious, etc. minority have to encounter several stereotypes and prejudices.

8.2.3 Children, learners requiring special attention

Children requiring special attention can be divided into big two groups due to the new regulations of 2011. The first group is composed of children who require special treatment; the other group is made up of disadvantageous and cumulatively disadvantageous children according to the law for the protection of children and public guardianship.¹⁷⁹

8.2.3. The principles of educating and developing children with special educational needs, and grappling with adaptation, learning and behavioural difficulties

The fact of special educational needs and that of adaptation, learning and behavioural difficulties will be stated by expert committees which function within a pedagogical special service at the initiative of a public education institute, a parent or other party determined in law. The frequency of their supervision is determined in relation to the child's state and age by the expert committees. The expert committees examine the provision of children with special educational needs at least once a year. The parents are entitled to apply for supervision if needed, but at least half a year after the previous the control examination. The first examination is followed by a control examination at least once a year as long as the qualification of "special educational needs" of the learner is valid. Educational teachers, who are employed by public education institutions or travel regularly, and other experts are involved in the appropriate development of children and learners requiring special treatment.

In educating children with special educational needs the goal is integration as complete as possible. It is guaranteed by law that every child and learner concerned should receive the necessary and appropriate provision. If it is justified, the child learns only in a partly integrated form, i.e. with a teacher developing core subjects, if needed, with a teacher of handicapped children in a small group until he/she can get integrated into the other programmes of the school.

¹⁷⁹ 2011. évi CXC. törvény a nemzeti köznevelésről. http://jogszabalykereso.mhk.hu/MK11162.pdf

The function of the expert committees as well as the number of lessons of rehabilitation development or rehabilitation, and the number of lessons of further development are prescribed by law. Furthermore, participation in special education for children with special educational needs or for the ones grappling with adaptation, learning and behavioural difficulties, and accommodation in a students' hostel including participation in the first basic-level art education are free of charge in every case. 180

8.3 Summary, questions

8.3.1 Summary

The lesson discusses the external and internal conditions influencing learning performance and efficiency, touching upon the determining role of the teacher and the pedagogical situation, as well as the effect of the narrower and broader medium. It presents the background of the biological, psychological and environmental causes of the deviation from the course of normal development, and within the environmental ones the background of the causes coming from the school and family environment. The last bigger unit of the lesson explores the characteristics and the classification of children requiring special treatment, and the ones with disadvantaged social situation, and its relevant legal background.

8.3.2 Questions for self-assessment

- Enumerate the components of the external and internal condition system of learning.
- What do the cognitive/affective conditions determine with respect to learning? What factors belong to these groups of conditions?
- What is meant by the Pygmalion-effect?
- What family background factors is success at school influenced by?
- What is the relationship between learning performance and the type of settlement, where the school is situated?
- How is learning efficiency influenced by the requirement system of a school?

¹⁸⁰ The CXC act on national public education of 2011.. http://jogszabalykereso.mhk.hu/MK11162.pdf

How can children requiring special attention be grouped?
 Characterise these groups on the basis of their main determining criteria.

8.3.3 Practice tests

Which factor does not belong to the internal, cognitive conditions of learning?

- A. general, intellectual abilities
- B. prior knowledge
- C. learning motivation
- D. abilities to acquire knowledge

What do we mean by the Pygmalion-effect?

- A. Teachers' expectations for the learners trigger behaviour matching the expectations from the learners.
- B. Learners disregard teachers' expectations
- C. The effect of learner expectations on the teacher
- D. The development of behaviour forms opposed to teacher expectations

The correct answers are: C, A

9 THE VARIOUS DEGREES OF THE SEVERITY OF LEARNING PROBLEMS, THE CHARACTERISTICS OF LEARNING DISORDERS, PART-SKILL DISORDERS, AND THE POSSIBILITIES OF GIVING PEDAGOGICAL HELP.
INTEGRATION-INCLUSION: THE FEATURES OF SEGREGATED AND INTEGRATED EDUCATION

9.1 Objectives and competences

The goal of the lesson is to provide basic knowledge for teacher trainees about the various severity grades of learning problems. Within this, they will get acquainted with the phenomenon of learning disorders, the main symptoms, causes of dyslexia and dyscalculia as well as what teachers could do about them. Furthermore, teacher trainees will get an insight into the characteristics of inclusive education, and the various realisation forms of integration. Another aspect of the lesson is to prepare teacher trainees to be able to recognise the learners with learning disorders, and to plan the pedagogical activities matching their needs.

Having studied the material of the lesson, teacher trainees will have the following competences:

- they will be able to recall the concept and types of learning disorders,
- they will be able to identify the symptoms of dyslexia and dyscalculia,
- they know the methods of treating dyslexia,
- they will know the concept of integration and inclusion,
- they will be able to enumerate the realization forms of integration,
- they will know the pedagogical special service available in their environment and how to access it,
- they will be able to plan tasks for learners who read poorly in a differentiated way,
- they will find the integrated education and development of learners with learning disorders important,
- they will have an acceptance attitude towards their students with learning disorders.

Learning Learning difficulty problems -lindrance n learning The possibilities Types of giving edagogical help disorder Dyslexia Dysgraphia Dyscalculia

9.2 Course material

Figure 16 A mind map about the structure of the lesson

Good school performance is very important in people's life. The psycho-social theory of personality development by Erikson points out what harmful effect failure at school can have on the development of personality. "School age is the first period when the intellectual and cognitive skills of a child are tested. It is expected of him/her to learn well, and his/her results are expressed in numbers and evaluated in an institutional way. A child can go through this stage successfully if he/she feels that he/she is able to do his/her tasks in a way that is accepted by others. The danger is that at lower elementary age chronic minority complex can be developed. It occurs when the child is brought by his/her parents and teachers into a situation by which he/she will consider what he/she does negatively, to be wrong, immoral or bad. Solving the conflict between performance and minority complex develops the competence of ego-quality – the feeling that we are able to do what others will evaluate positively." 181

We would think that learners with good abilities will also have good results at school, but we can find a lot of counter-examples in the history

¹⁸¹ CARVER, CHarles S., SCHEIER, MIchael F.: Personality psychology. Osiris Kiadó, Budapest, 1998.

of sciences as school performance can be influenced by several other factors. For example, Edison was qualified by his teacher as a learner who cannot be trained. The signs of dyslexia were identified later in his writings. "My teachers say I'm addled ... my father thought I was stupid, and I almost decided I must be a dunce". 182 Of all inventions by Edison the electric lamp using "a carbon filament or strip coiled and connected to platina contact wires" was of the greatest importance. After many long experiments, the first electric light flashed to life in October 1978 in Edison's workshop. 183

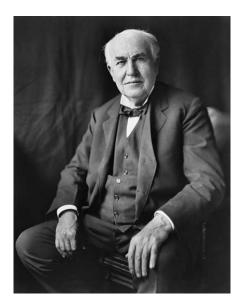


Figure 17 A photo of Thomas Alva Edison

Try to find at least one example for a famous person who had learning disorders in your own field of science, and how he/she was able to cope with this learning difficulty, and how he/she was able to become a well-known person in spite of the failures.

The example above also shows that it can happen to people with extraordinary abilities as well that they perform badly at school. It is fundamentally important for teachers to handle learning disorders tactfully to prevent causing problems of self-evaluation and minority complex. They are supposed to facilitate the correction and

¹⁸³ Edison's inventions http://www.huszadikszazad.hu/tudomany/edison-talalmanyai

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¹⁸² GYARMATHY Éva: Quotations about famous bad learners/ról http://www.diszlexia.hu/

compensation of weaker abilities by cooperating with experts, and by trying to find the strengths of learners, teachers should help them to perform successfully, and have a real sense of achievement at school.

9.2.1 The various degrees of severity of learning problems

Scholars categorise performance disorders at school from various aspects. Such can be, for example, the degree of lagging behind compared to syllabus requirements, deficiencies in the field of particular skills or classification even according to the triggering causes.

Failures of learning performance, and the difficulties in school progress can have various degrees of severity. Englbrecht and Weigert (1991) call the learning problems in school performance barriers to learning, and differentiate three degrees of severity: learning difficulties, learning disorder and hindrances in learning. (Figure 18)¹⁸⁴ All three concepts are used as collective terms to describe a special group of phenomena in the literature.

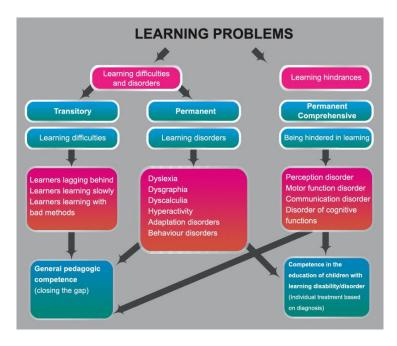


Figure 18 Classification of learning problems according their severity

ENGLBRECHT, A. – WEIGERT, H.: How can we prevent the development of learning barriers? avagy Nem jelenthet akadályt a tanulási akadály! Bárczi Gusztáv Gyógypedagógiai Tanárképző Főiskola, Budapest, 1996.

The background of learning problems is very complicated. In general, the specific groups of symptoms of learners are triggered by the joint presence of several different causes. This phenomenon is called multicausality in the literature. It is illustrated by Figure 19 how the physical (biological), psychological, social and school causes are intertwined in the background of particular manifested learning problems.

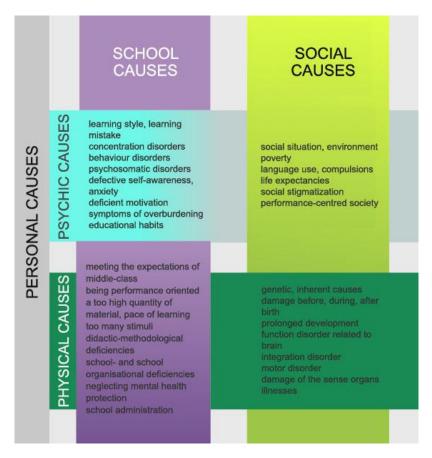


Figure 19 The intertwining of the causes of learning problems¹⁸⁵

The three types of learning problems can be compared, and circumscribed well from the aspects of symptoms, prognosis and treatment required.

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ENGLBRECHT, A. – WEIGERT, H.: How can we prevent the development of learning barriers? avagy Nem jelenthet akadályt a tanulási akadály! Bárczi Gusztáv Gyógypedagógiai Tanárképző Főiskola, Budapest, 1996.

9.2.1.1. Learning difficulty

It can be regarded to be the weakest learning problem, which is characterised by slow progress, transitory performance disorder during the acquisition of basic cultural techniques (writing, reading, counting), however, a slow improvement of learning results can be expected by differentiated development, the regular cooperation of parents and teachers, keeping track of school performances continuously, strengthening learning motivation, and improving the environmental factors. General pedagogical competence is often sufficient, it requires no special developments, no specific knowledge in the education of children with disabilities and disorders, but it is advisable to consult a special education teacher with regards to development and treatment.

It often occurs with an intelligence level lower than the average.

9.2.1.2. Hindrance in learning

It is the most severe one of the three categories in the above mentioned classification of learning problems, which appears in every field of learning (almost in every subject) in a generated, comprehensive and permanent way. Its main characteristics are the slow development of cognitive functions, speech, as well as attention and behaviour problems.

The literature mentions among the most common triggering causes of it damage of the nervous system of low degree, and/or the slowing down of biological maturity due to the permanently disadvantageous social environment, and the function deficiencies arising from these. It requires long, regular and intensive development and therapy by special education teachers, in order to use learning methods matching the ability level of the learner continuously and to reduce social disadvantages. Cooperation of the parents is needed in spite of the common social difficulties as well. Such learners are generally able to continue their studies in special vocational schools.¹⁸⁶

There exists a special type of school for those who struggle with hindrances in learning, but even if they participate in integrated education, they learn according a different curriculum.

9.2.1.3. The phenomena of learning disorders

Learning disorder is also mentioned as disorder in a part-skill in the literature. One or more areas can be affected by it. Disorders in part-skills can be regarded to be deficiencies that appear in the motor, perceptive,

¹⁸⁶ ZSOLDOS Márta (szerk.): Gyógypedagógiai diagnosztika és tanácsadás – Oktatási Minisztérium, Budapest, 2006.

speech and cognitive functions, which occur independently of the intelligence level. A part-skill isn't such a complex phenomenon as reading, writing or counting, but the combination of functions which serve as a basis for these abilities.

"The term learning disorder is a comprehensive definition of the heterogeneous group of disorders which can cause considerable difficulties in acquiring writing, reading and/or counting, independently of the level of intelligence, and the disorders can be traced back to the development and functioning of the central nervous system different from the normal." 187

Éva Gyarmathy considers learning disorders as a special way of information processing, and therefore she suggests using the term "learning differently" rather than the labels emphasising dysfunction.

http://www.diszlexia.hu/

"The special learning disorder is a chronic state supposedly to be of neurological origin, which interferes selectively by the development, integration and/or manifestation of verbal/non-verbal abilities. The special learning disorder means various disadvantages, and can differ in its form of manifestations and severity. This state can influence our self-esteem, education, profession, socialization, and/or everyday activities during our life." (The Learning Disabilities Association of America, Quoted by Elksnin & Elksin, 2004)¹⁸⁸

Children with learning disorders will be afflicted by inappropriate teacher's attitude, exaggerated performance-centeredness, disregarding the child's age-related characteristics afflict to a much greater extent than their peers. Failures suffered in learning go on deteriorating the situation even more.

Learning disorders include the phenomenon of dyslexia, dysgraphia and dyscalculia.

Dyslexia means reading disorder. In Ildikó Meixner's definition, dyslexia is a relation concept, i.e. the disharmony between the rightful expectations for children, e.g. the child's capacities, the time meant for teaching reading, writing, and the amount of practice as well as the result, i.e. the reading performance." ¹⁸⁹

There can be several different causes in the background of severe reading disorders, and the manifestation of particular causal factors can

¹⁸⁷ GYARMATHY Éva: Identifying children with learning disorders. Doktori értekezés. Kossuth Lajos Tudományegyetem, Debrecen, 1996.

HARMATINÉ OLAJOS Tímea: Who does learning disorder disturb? Pedellus Kiadó, Debrecen, 2014.

¹⁸⁹ CSÉPE Valéria: Drom word blindness to dyslexia. In MARTONNÉ TAMÁS Márta (szerk.): Fejlesztőpedagógia. ELTE Eötvös Kiadó, Budapest, 2002.

also be of different kinds. Quite a lot of research found that in the case of dyslexic children the functioning disorder of the language processing system can be the cause of dyslexia (The phonological deficit hypothesis). They have problems with short-term memory, their performance is weak for speech stimuli, as well as the typically show the disorder of refined and fast processing of auditory stimuli. 190

However, experts find it important that we should emphasise not only this deficiency in the case of dyslexics, since these learners generally have normal (or even outstanding) intelligence, they are also able to read and learn, only in a different way. Their strengths lie in their holistic way of looking at things, their abilities to solve problems, and their creativity. It is important for teachers to give preference to methods of information processing preferred by them in teaching. ¹⁹¹

The symptoms of dyslexia become obvious when the child starts reading, and makes more slower progress than his/her peers, makes a lot of mistakes, can't segment words into individual sound, reverses letters, and blends sounds when producing words, and no matter how much they practise it, these mistakes remain. It is generally around the second year in school when dyslexia can be diagnosed with great certainty, but symptoms of the risk of dyslexia can also be observed in the primary school.

Watch the symptoms of the risk of dyslexia at the following link. http://fejlesztok.hu/segedletek/pedagogiai-segedletek/139-adiszlexia-veszelyeztetettseg-jelei.html

The symptoms of dyslexia appear in the fields of reading – writing, such as slow reading pace, difficulty in blending sounds into words, frequent reversal of letters, omitting and/or inserting letters, and difficulties in understanding what they have read. The symptoms appearing in the area of speech can be: overdue development of speech, prolonged diffuse lisping, difficulty in finding words, and deficiencies in vocabulary. In other areas the symptoms that can often be experienced include the disorder of spatial orientation, left/right confusion, and laterality problem. Dyslexic learners often have specific behaviour

¹⁹⁰ CSÉPE Valéria: From word blindness to dyslexia. In MARTONNÉ TAMÁS Márta (szerk.): Fejlesztőpedagógia. ELTE Eötvös Kiadó, Budapest, 2002.

KONTRÁNÉ HEGYBÍRÓ Edit - DÓCZI-VÁMOS Gabriella – KÁLMOS Borbála: Learning English with dyslexia. Gyakorlati útmutató nyelvtanároknak. Akadémia Kiadó, Budapest. 2012.

problems. It often happens that his/her attention is diverted, gets tired very quickly, and is agitated and uneasy when reading.

However, besides these primary behaviour symptoms, secondary behaviour symptoms, or aggressive behaviour, or perhaps playing truant and compensatory symptoms can also appear as a result of a series of failures. Professional supply has of fundamental importance because by this it can be prevented that a severe behaviour problem could be developed besides the learning disorder. The symptoms of dyslexia emerge in the upper grades of the primary school and in the secondary school in a more moderate form — especially if the learner was given proper therapy, but poorer reading performance in comparison to his/her age group, slower pace of doing exercises, and the difficulty of learning words and languages can be observed in the future too, and the learner needs further support. ¹⁹² In more severe cases on the basis of the expert committee the learner can be granted an exemption from being given marks in certain subjects.

Dyscalculia is a state which affects arithmetic skills. Students with dyscalculia have difficulty to conceptualize numbers as they lack an instinctive ability of it; they have problems in learning simple arithmetic facts and performing arithmetic operations. Even if he/she gets a good result or uses the proper method, he/she does it in a mechanical way without self-confidence." ¹⁹³

The major symptoms are difficulties in understanding arithmetic operations, expressions and rules, in recognising and ordering numbers, problems in the sequence of numbers and illustrating them graphically, etc.¹⁹⁴

The school performances of children with dyslexia and dyscalculia can be much worse that what could be expected on the basis of their other skills. Their failures in learning can lead to secondary behaviour problems, which can deteriorate the situation of the learner even more.

It is important for teachers teaching such children to recognise students with learning disorders, and try to find proper professional help for them.

¹⁹² TÁNCZOS Judit: There is something wrong with learning. Methods for correcting learning disorders. Pedellus tankönyvkiadó KFT, Debecen. 2006.

BIRD, Ronit: *How to cope with counting difficulties*. Akadémia Kiadó, Budapest, 2011.

194 DÉKÁNY Judit – JUHÁSZ Ágnes: A diszkalkulia. in In MARTONNÉ TAMÁS Márta

⁽szerk.): Fejlesztőpedagógia. ELTE Eötvös Kiadó, Budapest, 2002.

9.2.2 Treatment of learning disorders

There are indications of learning problems even in the nursery school. However mild the symptoms can be, they must be dealt with. It is the duties of educational professionals to check, recognise and to prepare a development plan tailored to the individual.

It is difficult to diagnose learning disabilities at elementary school age, and it's the duty of expert committees. The task of teachers working in public education to recognise it and send the learner to specialist, and if the learning disability is diagnosed, they should provide differentiated instructions for the learner in lessons in cooperation with the specialist doing the development.

The special treatment of learners with learning disorders (dyslexia, dysgraphia, dyscalculia and in the case of their joint occurrence the mixed disorder of school abilities) is age specific.

In the school setting, learners take part in development and rehabilitation courses besides the lessons at school, and they can be granted exemption from being given marks in certain subjects on the basis of expert's opinion.

Please watch the short interview made with the director of the Budapest Speech Therapy Institute at the link below. https://www.youtube.com/watch?v=4nPVfDla821

Prepare at least three types of exercises which specialists use in treating dyslexia.

In Hungary Ildikó Meixner played a significant role in developing the therapy of dyslexia. She developed two approaches to treating dyslexia: dyslexia prevention and re-education. Dyslexia prevention tries to prevent reading problems. It refers to the preventive speech therapy sessions, or the method of teaching reading to prevent dyslexia in children with the risk of dyslexia at elementary school age. Re-education means the systematic practice and teaching reading again to learners who have already learnt to read somehow but can read very poorly. The special tools of development include: games, rugs, a body schema mirror, flash cards, the exercises compiled by Katalin Adorján and Ildikó Meixner, reading games, number stairs, disks, counting sticks, dice, and special computer programmes. 196, 197

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¹⁹⁵ MEIXNER Ildikó: The method of dylexia prevention, reeducation. BGGYTF Kiadó, Budapest, 1995.

DÉKÁNY Judit: What do you think? A book of games for developing attention-, memory- and thinking 1. Összefüggés, 2- Analógia, 3- Összehasonlítás, rendezés, elvonás. Logopédia Kiadó, 1997.

An excellent methodological exercise book for teachers of primary and secondary schools: TÁNCZOS Judit: There is something wrong with learning. Methods of correcting learning problems. (Pedellus tankönyvkiadó KFT, Debecen. 2006.)

9.2.3 Integration – inclusion: The characteristic features of segregated and integrated education

Among the theoretical and practical problems of pedagogy the question often arises whether to educate learners with special needs in special institution (segregated), or together with the learners in mainstream classrooms (integrated) is more effective. Segregation has been extensively debated in the literature for a long time.

Segregation

The term segregation 198 is of Latin origin meaning setting apart, separating, laying aside; isolating. In social life it is mostly a concept with a negative meaning because segregation often goes with discrimination. It can have several different forms of occurrence. The separation of white and black people in the United States was segregation based on racial discrimination. We can talk about gender segregation in occupations when men are preferred to be employed in certain positions to women with the same qualification, etc.

Segregation is a widely-spread practice of public education systems based on general compulsory school attendance in a special way.

The emergence of segregated institutions belongs to the history of the science of the special education of chidren with disabilities, and dates back to a long time. The first such institution was founded for blind people in Paris in 1770. In Hungary the first school for the education of children with disabilities with separate education called "Váczy Royal Hungarian Institute for the Deaf and Dumb" was opened on August 15, 1802. It was followed by the foundation of a series of other separate schools for various types of disabilities: 1825 – for the blind, 1875 – for the mentally challenged – Budapest, 1891 – Arad – for people with

¹⁹⁷ ILLYÉS Sándor: Basic knowledge in special education. ELTE BGGYFK, 2000.

¹⁹⁸ BAKOS Ferenc: Dictionary of foreign words and expressions. Akadémiai Kiadó Budapest, 1977. 729.

¹⁹⁹ CHÁZÁR András Egységes Gyógypedagógiai Módszertani Intézmény, Kollégium és Gyermekotthon honlapja: http://www.chazar.hu/tortenetunk/iskola_tortenete.htm

speech and language impairment, 1903 – Budapest – for physically disabled and mentally retarded people).²⁰⁰

Illyés²⁰¹ summarises the ideas that the segregated education of disabled children from the other children in the nursery school was regarded to be a good solution for a long time, and that segregated schools were created with the aim of not increasing disadvantage but with that of eliminating disadvantage. The reason why they were created was not the self-legitimating interests and the purpose of segregation of the schools for disabled children, but the lack of the accepting and retaining ability of mainstream schools, and it remained the cause of a situation which has existed for more than a century.

"The changes in law, among others the law of public education, which has been modified several times since the 1980s, as well as the 1998 "Act on the rights of persons with disabilities and their equality of opportunities" moved the system of legal regulation of Hungary towards their conformity with EU regulations. Emphasis was laid on the view that a person with a disability should not be a passive subject of various services but he/she should be able to take part in social coexistence via mobilizing his/her self-activity by using similar opportunities to healthy people." The approach which finds it desirable to educate children with disabilities together with other children started to evolve gradually from the change of the regime on.

The concept of integration – inclusion

Integration means assimilation, combining parts so that they work together or form a whole,²⁰³ and this is the term which is used for the education of handicapped learners or learners with disabilities together with the healthy ones. The implementation of integration can also differ in two qualities, and in general, its level that emerges in school is either admission (integration) or acceptance (inclusion).

In terms of **simple admission (integration)** the disabled child is usually admitted into a majority institution without really knowing his/her

²⁰⁰ CSÁNYI Yvonne, KERESZTY Zsuzsa: Inklúziós tanterv és útmutató a Magyarországi pedagógusképzés számára. Szociális és Munkaügyi Minisztérium, Budapest, 2009.

²⁰¹ ILLYÉS Sándor: The traditions and basic terms of Hugarian special education. In ILLYÉS Sándor (szerk.): *Gyógypedagógiai alapismeretek*. ELTE-BGGYFK, Budapest, 2000. 15-38.

²⁰² GEREBEN Ferencné: Special education in the changing world. Gyógypedagógiai Szemle, 2008. XXXVI. évfolyam, 3.

A collection of foreign words http://idegen-szavak.hu/integr%C3%A1ci%C3%B3

specific features, and he/she is expected "not to be out of line", to perform similarly to others. This requires the highest possible level of adaptation, adjustment to the levels of others from him/her.

In the case of inclusion, however, the teachers of the accepting institution represent the view of individual evolvement and development according to individual differentiation. Inclusion is the accepting practice of joint-education. It results in a change of view in which the institution also goes through an organisational change. The method of inclusion is that lessons are not conducted in the traditional way, but they are characterised by a pedagogical practice based on differentiation and self-evaluation.

The most important goal of the pedagogical change of view is to strengthen integrated education and teaching without eliminating separated education and teaching. The most developed degree of integrated education and teaching is inclusion, i.e. acceptance. The requirements set out for children are not adjusted to the course material, but the material to be taught is adjusted to the child by taking the real educational needs of the child into consideration. An inclusive school is a solution of admitting and accepting all children, satisfying all educational-teaching (human, environmental-material, economic) needs, and is open, child-centred. An institute undertaking integration can become an inclusive one.

The types of integrated education- and teaching

Local or physical integration: this is the simplest form. In this case only the building is shared, practically there is no kind of connection between the children.

Social integration: This form of joint education makes social approaching possible because the disabled group located in a mainstream institution is consciously united with a peer group in school during the time spent outside lessons. We can distinguish two degrees within this: one is the periodical social integration when a group of non-disabled learners meets the group of disabled learners only sometimes, only on certain occasions (school festivals, trips). In the other case, these groups meet regularly and continuously, for example they always have meals, or learn in the afternoon together.

Functional integration: This is the real goal and the highest level of integration at the same time. In the case of functional integration children with special educational needs also learn in lessons together with their

peers in mainstream classrooms. It can have two sub-groups: partial or complete functional integration. The simplest form of functional integration is partial integration, when the given child or group of children spends only some time and takes part in lessons of certain subjects with the others.

Complete integration: It is the highest level of functional integration, and actually the real goal of joint education, when the disabled child spends the whole time in the mainstream nursery school or school with one community with others children or learners.²⁰⁴

Parents, children and teachers are all affected by integration.

The advantages of integration that are often mentioned include the positive personal changes which result in the strengthening of the selfimage of learners with special educational needs, and the increase of self-confidence and tolerance; and the possibility of acquiring healthy behaviour patterns and communication strategies. They will experience multiplied social reciprocities, their adaptive ability will be developed, and their socialization will reach the highest level. The experience of being different will be integrated into the personality of healthy students, and their moral values (empathy, helpfulness and tolerance) will be developed. Their adaptive ability will be developed. They will learn the other forms of cooperation. They will value their own health more, and become more tolerant. Their self-knowledge and self-esteem will be strengthened. Joint education with non-disabled peers significantly facilitates social integration in adulthood as well. In Hungary in the 1980s a lot of people questioned whether integration is needed or not, but in our days even professionals have accepted this educational form as well. The primary question even today is that while special schools for disabled children create a chance, they also deprive them of chances due to their segregated character, and how the balance of advantages and disadvantages changes in mainstream schools at present."205 The inclusive view to be spread more widely can be facilitated by the fact that the differentiated organisation of the teaching process, the methodology of differentiation, and the increased enforcement of individualisation are already present already exist in the training of teacher trainees.²⁰⁶ In experience, it still occurs in institutions undertaking integrated educationteaching that the essential material and personal (objective and

²⁰⁴ CSÁNYI Yvonne, KERESZTY Zsuzsa: A inclusive curriculum and guidelines for teacher training in Hungary. Szociális és Munkaügyi Minisztérium, Budapest, 2009.

²⁰⁵ ILLYÉS Sándor: Being different and human quality. *Új Pedagógiai Szemle.* 1999/1.

²⁰⁶ NAHALKA István: The pedagogical bases of integrated education. http://www.nefmi.gov.hu/eszmecsere/Nahalka.htm

subjective) conditions for carrying out their tasks are missing. Apart from the fact that they provide the technical tools necessary for children with special educational needs to learn – the habilitation and rehabilitation lessons prescribed by law for them with the cooperation of teachers of children with disabilities in more and more cases nowadays, – it occurs that education does not adapt itself properly to meet the special needs, the physical and psychic state of children in their methods, requirements and the books and school supplies they use, and the building of education, either.

The integrated education of learners with special educational needs can be realized successfully by the mutual cooperation and team work of the school, expert committees, sprcial education teachers, developing teachers and teachers of particular subjects. With regards to the fact that learners mostly learn together with non-disabled learners in inclusive education, the tolerant attitude and professional knowledge of teachers of particular subjects are essential for successful integration. We would like to prepare teacher trainees for this as well by our course material.

Try to find the pedagogical professional service nearest to your place of residence on the internet. Describe their possibilities of access. Characterise their activities briefly, and how you can apply for their examination in the case of learning disorders.

9.3 Summary, questions

9.3.1 Summary

The ninth lesson discusses the phenomenon causing one of the problems that perhaps occur most frequently in schools – the types of learning problems. It describes the concepts of learning difficulties, hindrances in learning and learning disorders, and characterises briefly their symptoms and teacher tasks, and furthermore, it explores the characteristic features of integrated education. In addition, it prepares teacher trainees for recognising learners with learning disabilities, and planning the pedagogical work matching their needs.

9.3.2 Questions for self-assessment

- What grades of severity do learning problems have?
- What are the criteria of dyslexia?
- What do we mean by hindrance in learning?
- What are the specific features of integrated education?
- What does inclusive education mean?

9.3.3 Practice tests

Match the correct answer with the statement below. It means the joint education of learners with special educational needs with healthy ones.

- A. integration
- B. inclusion
- C. both
- D. neither of them.

Match the correct answer with the statement below: It means the admission of learners with special educational needs.

- A. integration
- B. inclusion
- C. both
- D. neither of them

Indicate which type of integrated education the statement below is true for: the group of disabled learners is placed in a mainstream institution, but the given child and/or group of children spends only one part of the time with other learners in a mainstream classroom.

- A. local integration
- B. social integration
- C. functional integration
- D. partial integration
- E. complete integration

Indicate which type of integrated education the statement below is true for: shared building, practically there is no kind of connection between children.

- A. local integration
- B. social integration
- C. functional integration
- D. partial integration
- E. complete integration

Indicate which type of integrated education the statement below is true for: the disabled child spends its whole time in the mainstream nursery school or school, in one group with non-disabled learners.

- A. local integration
- B. social integration
- C. function integration
- D. partial integration
- E. complete integration

The correct answers are: C, B, D, A, E

10 THE CHARACTERISTIC FEATURES OF LEARNERS WITH DISABILITIES, SENSORY DISABILITIES, PHYSICAL DISABILITY, SPEECHAND LANGUAGE IMPAIRMENT AND MENTAL RETARDATION

10.1 Objectives and competences

The goal of the lesson is to give an overview of the characteristic features of learners with various types of disabilities; to make teacher trainees acquainted with the special educational needs coming from disability; and prepare them to take the special educational needs of disabled learners learning integrated in mainstream schools in consideration in their teaching activity.

Having studied the material of the lesson, teacher trainees will have to satisfy the following requirements:

- they will know the groups of children requiring special attention, to determine the different types of children groups requiring special treatment,
- they will be able to enumerate the various types of disabilities,
- they will know the learning characteristics of learners belonging to the different types of disabilities,
- they will be able to name the differentiation possibilities coming from special educational needs, and integrate them into their lesson plan, and
- they will be able to name the somatic, psychic and environmental causes influencing the deviation from the average of normal development.

Acquiring the material of the lesson provides the basis for the following teacher competences:

- As teachers, in the possession of necessary knowledge they will recognise and be able to interpret the causes and symptoms of the deviation from the normal development,
- they will be able to take learners' individual characteristics,
- they will find it important to choose the appropriate methods, plan and use procedures matching the goals of teaching units, the age and interest of learners having different capacities, skills and prior knowledge,

 they will be able to cooperate with other special education professionals, parents and persons playing an important role in learners' life and institutions.

10.2 Course material



Figure 20 A mind map about the structure of the lesson

- ? Have you ever thought of what it is like to live with a disability?
- ? What do you feel when you see a blind person or a person in a wheel chair?
- ? Do you think that you will meet learners with disabilities in the school where you will teach?

The 10 lessons of our course material will prepare teacher trainees to be able to take the special educational needs of learners with disablities taking part in integrated education into consideration as well while planning, organising and carrying out their teacher activities.

10.2.1 The concept of special educational need and disability

In the Hungarian terminology the term SNI appeared as the mirror translation of the English SEN (special educational need). This expression refers to the child's needs, and its usage means a step forward as it emphasises not the lack, the "disability" but instead it points out that the learning environment must be designed in a different way because of the learner's specific needs.

In the present terminology both terms are used together, meaning roughly the same: the institution undertakes the teaching and education of SEN learners among its basic activities.

The CXC Act on National Public Education of 2011 formulates that – an important task of public education is infant development prior to school entry, furthermore, taking the specific needs of children and learners with special educational needs, and adaptive, learning and behavioural disorders into consideration. The act emphasises the importance of facilitating the most successful development matching the individual's abilities in order to promote social integration at the highest possible level.²⁰⁷ The act on national public education ranks SEN students among the learners that require special attention (see the animation in Lesson 8).

4.§ (25.) A child, a learner with special educational need is: "a child, a learner requiring a special treatment who grapples with cumulative disability, autism spectrum disorder, or other psychic developmental disorder (severe learning, attention –or behaviour regulation disorder) in the case of the movement disorder, the disorder of the sense organs, or mental disability or speech disorder, the joint occurrence of several disabilities on the basis of the professional opinion of an expert committee."

The term "special educational need" expresses:

a) the partial or complete modification of the learner's age related characteristics caused by a disability

²⁰⁷ The CXC Act on the national public education of 2011. Magyar Közlöny 162. szám, Budapest,

²⁰⁸ CXC Act on the national public education of 2011. Magyar Közlöny 162. szám, Budapest,

b) the specific way, the different pace of development, perhaps the partial or complete fall, under-development, the slower possibility of development at the level deviating from the average, for developing the necessary skills for learning in school. The special educational need can make it necessary to use greater differentiation deviating from the usual differentiation in contents and methods, special methods, complementary methods of development, correction, habilitation and rehabilitation, as well as teaching methods with therapeutic purpose."²⁰⁹

In Hungary committees that carry out expert- and rehabilitation activities within the framework of instates providing pedagogical professional services are entitled to determine the fact of disability. The task of the professional services is to help the educational work of parents and teachers, and educational institutions to carry out their tasks. The basis of stating the fact of disability is a complex examination, which is made up of a medical, pedagogical, special educational pedagogical and psychological examination. The result of the examination is an experts' opinion, which – among others – makes a suggestion for choosing and institute.²¹⁰

Disability is originally a medical term, meaning a pathological state developed after some kind of a disease which cannot be influenced by medical procedures any more.

"...the change of the biological state, the irreversible injury, impairment, damage, defect present in the characteristics of the body and nervous system"²¹¹

In the interpretation of the WHO World Health Organisation, the concept of disability comprises the field of the characteristics of emotions and actions while invalidity comprises the social characteristics.

According to the definition of WHO of 1980 disability can be interpreted as the following process: First – the disease or disorder – causes impairment, damage (physiological or psychological loss). It results in – the development of disability (the lack of function), which

²⁰⁹ 32/2012 EMMI regulation The directives of the education of children with special educational needs in the nursery school and of The publication of the directive of the education of special educational needs. Oktatási és Kulturális Közlöny IV. évfolyam 22. szám. 2012. november 9.

^{210 15/2013} EMMI regulation on the funtioniong of the institutions of pedagogical professional services http://net.jogtar.hu/jr/gen/hjegy_doc.cgi?docid=A1300015.EMM

²¹¹ ILLYÉS Sándor: The traditions and basic concepts of Hungarian special education. In: ILLÉS Sándor. (szerk.): Gyógypedagógiai alapismeretek, ELTE Bárczi Gusztáv Gyógypedagógiai Főiskolai Kar, Budapest. 2000. 25. oldal

finally leads to – *invalidity*, (the disorder occurring in people's social roles)²¹²

In 2001 WHO went on developing its views of disability. It involves a person's physical (biological), personal (activity) and social (participation) dimensions further on. The physical functions and structures are damaged, the activity becomes hindered, and participation in social life becomes limited. These disorders are called collectively by an umbrella term disability by the world Health Organisation.

Next we will characterise the different types of disabilities.

10.2.2 Sensory disabilities

The expression sensory disability is an umbrella term, which refers to the damage in the sense organs specialized for perceiving the stimuli coming from the outer world; hindered stimulus-intake; and the limitedness of the cognitive activity as a result. The impairment can occur in any sense of organ, but it is the impairment of hearing and seeing that means such a great degree of special educational need that it must be taken into consideration in organising learning.

10.2.2.1. Visual impairment

Visual impairment is a condition developed due to the damage of the eye, optic nerve or the cortical visual centre, which can significantly change the learners' cognitive learning activities, adaptive abilities and personality. Vision impairment can be defined from several different aspects, from the medical aspect (vision different from the normal), from the legal aspect (making use of allowances), from the aspect of labour (career fitness), and from the pedagogical aspect. The teaching of visually impaired children belongs to tiflopedagogy within the special education of children with a learning disability. 213

From the aspect of pedagogy, a person is visually impaired, when the best corrected visual acuity on the two eyes is 30% of the healthy vision (V: 0,3), or smaller than that, and the visual field is narrower than 20

KULLMANN Lajos: The traditions and basic concepts of Hungarian special education. In ILLYÉS Sándor (szerk.): Gyógypedagógiai alapismeretek, ELTE Bárczi Gusztáv Gyógypedagógiai Főiskolai Kar, Budapest. 2000.

HORVÁTHNÉ MÉSZÁROS Márta: Inclusive education – Suggestions for the competence-based development of children with poor vision or near-total blindness. Sulinova, 2006)

degrees.²¹⁴ The group of visually impaired people include people with low vision, the blind and the near-total blind. For the aspect of development it is important for teachers to know what visual acuity and visual functions are, because they must provide pedagogical development activities in relation to these for them. The way of learning is fundamentally determined by the degree of the remnant of vision, the time and conditions of the occurrence of visual impairment.

According to the time of occurrence, visual impairment can be

- inherent, in this case the child has no prior experience of vision
- acquired, in the case of which prior visual experiences can be used well

According to the form of disease, visual impairment can be:

- with a deteriorating tendency, progrediading
- the process of disease became stagnant, i.e. stationary²¹⁵

Learners with low vision: learners whose daily life is significantly restricted by degraded vision performance, but writing and reading can be taught via the eyes. They are able to acquire tactile writing by means of special low vision devices, good lighting, magnifiers, glasses, and large letters. Such learners are prepared for a way of life linked with seeing —hearing — touching.

Learners with severe visual impairment (the blind or the near –total blind) are those who are unable to acquire writing and reading via seeing and practise it for a longer time by using appropriate devices, either.

While educating and teaching learners with severe visual impairment, teachers rely on the form of teaching based on hearing and touching. (acoustic-tactile). Speech has a significant role in their education. They can learn reading and writing by using the embossed BRAILE writing.

It is important for teachers to choose a proper place in the classroom for learners with severe visual impairment. They should sit where there is good lighting for them to make use of their remnant of vision. It is important for them to hear well what has been said because it is teacher

215 HORVÁTHNÉ MÉSZÁROS Márta: Inclusive education – Suggestions for the competence-based development of children with poor vision or near total-blindness: SuliNova, 2006

²¹⁴ ÁMENT Erzsébet, FECSKÓ Edina, HEIMANN Ilona, KOVÁCS Andrea, KULCSÁRNÉ PAPP Enikő, MAKAI Éva, POÓR Zoltán: Inclusive education – everybody is similar in a different way – in integration. A teacher educating program for forming attitudes. A manual for teacher training institutions. Educatio Társadalmi Szolgáltató Közhasznú Társaság. Budapest, 2008.

explanation that carries most information for them. They need the necessary help to be able to get around in the classroom and in the building to avoid dangerous situations that can lead to accidents.

The learning devices, supplies and objects can be used, moved and found if their order is developed and can be maintained. Learners with severe visual impairment should be made aware of the place of learning devices and objects. Teachers should make use of the possibility of positive discrimination (modifying course material, special ways of evaluation.

Various allowances can be made use of to organise and perform surplus tasks of teaching and education in schools: a professional teacher with a degree in tiflopedagogy can be employed for executing rehabilitation tasks.²¹⁶

10.2.2.2. Hearing impairment

Hearing impairment is one type of sensory disabilities; it means the permanent, irreversible, or lasting disorder of hearing, which makes it difficult to perceive the auditory stimuli of the outer world, to understand and learn speech. The term hearing impairment is an umbrella term: it includes both people with are deaf and hard of hearing, independently of the degree, the severity and the type of their hearing loss. The treatment of hearing impairment belongs to the field of surdopedagogy.

Types of hearing impairment:

From the aspect of degraded perception of volume it can be grouped into the following categories taking the average hearing loss measured on the major speech frequencies as a basis:

- A. mild hearing loss: between 25–40 dB HL
- B. moderate hearing loss: between 40–60 dB HL
- C. severe hearing loss: between 60-90 dB HL
- D. a transition between severe hearing loss and deafness: 90–110 dB HL
- E. totally deaf: over 110 dB HL.

According to age of onset hearing loss can be:

- Prelingual, i.e. before language is acquired.

²¹⁶ HORVÁTHNÉ MÉSZÁROS Márta: Inclusive education – Suggestions for the competence-based development of children with poor vision or near total-blindness: SuliNova, 2006.

Postlingual, i.e. after language and speech are acquired.

Hearing loss occurring before the development of loud speech can significantly hinder the development of speech.

The state of hearing is examined by an audiologist in the polyclinic. The result of the hearing test is fixed on an audiogram.

Hearing impairment can make it difficult to detect the various acoustic stimuli according to the degree of severity of hearing loss, and thus it can significantly hinder to acquire verbal communication and speech. Different kinds of medical devices, e.g. hearing aids enable people with hearing impairment to detect speech primarily by their own hearing, but in complete understanding it is lip reading that helps learners with hearing impairment.

A transmitter-and a receiver are a special kind of hearing aids. It amplifies only the so-called useful signals, namely the sound of the speaker, the person wearing the transmitter, and filters environmental noises. As a result, it creates much better conditions for hearing than other hearing aids. The transmitter is always with the speaker while the receiver with the learner with hearing impairment, connected with his/her hearing aid. In schools it can be used in the following way: the transmitter – is on the way –it goes to the person who talks for a longer time, e.g. when the teacher explains something or when the student gives a presentation. This device is especially important in integrated education.

Cochlear implant surgery: Cochlear implant surgery (CI) opened new perspectives for learners with severe hearing loss. Children with severe hearing loss undergo/have undergone this operation, and after an intensive therapy they are integrated into mainstream classes.

The consequences of hearing impairment: From the aspect of teaching the most crucial consequence is that speech perception and speech production will be impaired. If hearing impairment occurs before the development of speech, the natural speech development of children will be delayed. Their pronunciation won't be perfect, their intonation and speech rate will differ from the regular and normal patterns, as a consequence of which language comprehension will be impaired. The speech of learners with hearing impairment is characterised by narrower vocabulary, and grammatical mistakes - for example there is no agreement between the subject and the verb, and omit inflections. Learners with hearing impairment have disadvantages with respect to understanding speech and reading comprehension. The problem of understanding a text makes it more difficult for them not only to understand spoken language but it also occurs when they read. The difficulties of learners with hearing impairment in reading are generally related to this, and not to their reading techniques.

Pedagogical tasks: It is a general rule that learners with hearing impairment should be spoken to at average speaking volume and with the regular articulation!

The hearing deficiencies of learners with hearing loss can be compensated by making lip reading possible for them. We should try to find a place for our student hard of hearing from where he/she can see the explaining teacher from face to face. In experience, in the case of the traditional classroom arrangement the optimal place is at the side in one of the outside rows of desks, the 2-3. desk. The teacher should put every important piece of information on the board, which the learner with hearing impairment can copy. It can also help if the desk neighbour of the learner with hearing impairment puts down teacher messages, and then he/she gives his/her exercise-book to him/her to copy it. It is also good if the learner can ask the teacher to repeat his/her instruction or task.

A speaking environment forces the child to speak, and encourages him/her to make efforts, by which his/her speech production will improve. Being together with hearing peers can result in a higher level of speech. Social contact with hearing children, the example of their behaviour patterns can trigger positive changes in the child's personality. Continuous relationship can lead to the development of proper frustration tolerance. Children in such an environment can become more independent, and see their own performance more clearly, which can lead to a more realistic self-evaluation.²¹⁷

10.2.3 Physical disability

Physical disability occurs in a great number of different variations, with various degrees of severity, and consequently, learners can have many different needs for special help. The primary problem is caused by the impairment of the locomotor organ system, as a result of which the ability to change place and position, and performing refined movements become limited. The teacher specialised in the rehabilitation of people with physical disability is called conductor-teacher or a special teacher in somatopedagogy.

From the aspect of special education, the persons with physical disability are called the ones who are permanently limited in performing activities usual for their age-group, as a result of the impairment/lack of the structure and function of the support system and locomotion due to the

²¹⁷ NAGYNÉ TÓTH Ibolya: Suggestions for the competence-based development of children with severe hearing imparment. SuliNova, Budapest, 2006.

change of the ability of physical performance; and their education and personality development require transitorily or permanently special conditions and methods. A permanent change in the state of locomotion can occur at any stage of life. It can be inherent, or acquired at a later age, which means the partial or complete loss of the functions of movement motion that were learnt, resulting in a different quality of life.²¹⁸

Helping people with physical disability from the aspect of pedagogy depends on the time of the impairment occurrence, its form and the degree of limitedness.

Grouping forms of diseases from the aspect of pedagogy:

- 1. Limb reduction anomalies, acquired limb abnormalities.
- Forms of disease causing flaccid paralysis, e.g. transverse lesion or transverse cord injury caused by traumatic events, and muscle diseases.
- 3. Movement disorders due to brain injury:
 - According to its character: spasticity, athetosis, ataxia, and mixed forms.
 - According to the spread of the disease: monoplegia, paraplegia, memiplegia, triplegia, and tetraplegia.
- Other forms of diseases of other origin causing limitedness of movement (chronic bone fragility, the diseases of the spine, the hip and legs).

When integrating learners with physical disabilities it is fundamentally important to provide the objective conditions for them, to make the learning environment accessible to them, to help them use the special medical devices, and to use special teaching aids if needed.

During frontal work a child with physical disabilities will often be undermotivated, and it is important for him/her to see and hear well and not to take on bad posture. It is also important for a learner with physical disabilities to be able to get involved in group work as it is positive reinforcement that he/she can have an active part in the achieved results.

²¹⁸ ÁGOSTON Gabriella: Suggestions for the competence-based development of children, learners with physical disabilities. Text comprehension and production. SuliNova, Budapest, 2006.

Work done in groups can contribute to the development of social relationships. $^{219}\,$

Source analysis: Try to find on the internet the 32/2012 EMMI regulation, which contains The directives of the education of children with special educational needs in the nursery school and The directives of the education of children with special educational needs. Oktatási és Kulturális Közlöny IV. évfolyam 22. szám. 2012. november 9.

From page 3416 read the directives related to the joint education of learners with physical disabilities, and then write down your opinion of how you can imagine its implementation in the practice in the case of a learner with a severe physical disability, moving around in a wheel chair, but being able to use his/her upper limbs properly.

http://www.kozlonyok.hu/kozlonyok/Kozlonyok/32/PDF/2012/22.pdf

10.2.4 Speech and language impairment

"In general, everybody who has some kind of a speech problem, independently of its severity –, is called speech defective in the colloquial language. A speech defect is not different than a milder disorder of some factor of speech, which can be treated successfully by a professional therapy provided at such an early age as possible. (For example, the wrong pronunciation of a speech sound, or exchanging it with another, instead of kakas tatas, or instead of róka lóka, etc.). In contrast, speech and language impairment is a severe form of the disorder of speech development, which can be corrected only by intensive, professional help."220 The group of children with speech impairment is very heterogeneous with regards to both the occurrence and character of the symptoms and its severity. A child with speech defect or severe speech impairment will develop in a different way due to his/her sensory, motor or sensorimotor problem, and/or due to his/her behavioural disorder connected to his/her speech disorder. All these are manifested in the low level of the development of the mother tongue, the weakness of the speech organs, the lack of pronouncing speech sounds clearly, poor

²¹⁹ ÁGOSTON Gabriella: Suggestions for the competence-based development of children, learners with physical disabilities. Text comprehension and production. SuliNova, Budapest, 2006.

HERNÁDI Andrea: Inclusive education – Suggestions for the competence-based development of children, learners with speech impairment: SuliNova, Budapest. 2006. 7. o.

vocabulary, the lack of using memory images acquired about speech movements, bad grammar, and the weakness of the ability of imitating. Its development can be realised in an intensive and complex educational environment putting the education of the mother tongue into the centre, requiring special therapies, and keeping age-related characteristics and the principle of playfulness in mind.

A learner with speech impairment is the one who has considerable degree of impediments in speech due to the inherent or acquired function disorders of the nervous environmental effects. Consequently. transitory or permanent disorders can emerge in the learner's language, communication and learning abilities, and the development of social relationships. These impediments can be manifested in the problems of the correct pronunciation of speech sounds, in the disorders speech perception and comprehension, in impairment of speech rhythm, in the immaturity of graphomotor and visuomotor coordination, as well as in the loss of the particular skills related to general speech defects.²²¹

In learners with severe speech impairment various secondary psychic deviations (behavioural disorders) can be developed due to the difficulties in communication.

The provision of a child with speech impairment is the competence of a speech and language pathologist, also called a speech therapist. The Expert Committee concerned describes in its Expert opinion what kind of a health and pedagogy-related habilitation and rehabilitation provision the child should get in the institution of admission, and the necessary physical and personal conditions must be created for this. It is important for teachers in the nursery school and school to get proper information about the child's speech state, their own roles and tasks. Furthermore, cooperation and TEAM work with the speech therapist, parents, and if needed with other experts (e.g. psychologist) are also important.

Classification of speech impairments:

The anomaly of intonation –dysphony

JENEI Andrea: Inclusive education – Suggestions for the competence-based development of children, learners with speech impairment. SuliNova, Budapest. 2006.

- Speech and language disorders: delayed speech development, dysphasia, the disorder of speech perception and speech comprehension
- Articulation disorder lisping (dyslalia), twanging (dysarthria)
- Fluency disorder stuttering, gabbling
- Reading and writing performance disorders- dyslexia, dysgraphia
- Language disorders mutism, aphasia or their cumulative occurrence.

In developing children with speech and language impairment we should give priority to education and teaching integrated into the regular mainstream education environment.

The principles of educating and teaching children with speech impairment, and the general aspects of teaching to be considered:

- A conscious and systematic development is needed (assessing the state of speech, a plan of therapy, choosing the method consciously, and keeping track of the process).
- Teachers should talk slowly using simple, comprehensible sentences.
- Teachers should not make a child with dyslalia, dysarthia and elective mutism, or who stutters speak in front of the class; they themselves should treat speech impairment tactfully.
- A child with dyslexia or dysgraphia should be tested, evaluated orally and not in writing.
- Mistakes in spelling in test papers that were meant not to assess spelling should not be corrected.²²²

10.2.5 Mental retardation

The definition given by an American expert association (American Association on Mental Retardation) is the one which is generally accepted in the literature to determine what mental retardation is. Accordingly, mental retardation refers to substantial limitations in present functioning. It is characterized by significantly subaverage intellectual functioning, existing concurrently with related limitations in two or more of the following applicable adaptive skill areas: Communication, self-care, home living, social skills,

²²² JENEI Andrea: Inclusive education – Suggestions for the competence-based development of children, learners with speech impairment. SuliNova, Budapest

community use, self-direction, health and safety, functional academics, leisure and work."²²³

The group of individuals with mild retardation comprises the group of children in whom the tested intelligence quotient is the upper third of the subnormal range (IQ 50-69), and whose slow information processing skill makes it difficult to advance in acquiring the course material at the same speed as with the others.

Unless mild mental retardation is coupled with any other impairment, there is no obstacle to their joint education with others in school. However, joint education requires serious support by special professional teachers, and the environment must be prepared for receiving the learner with mental retardation.

A mentally retarded child in the lower grades of the primary school must be taught with the same method as his/her non-retarded peers, but the rate of acquiring knowledge must be slower with regards to the specific cognitive functioning of a mentally retarded child. The accompanying signs of mental retardation are deficient, periodical perception, fluctuating attention, weak short-term and mostly very weak retaining memory, specific way of thinking far from the average of his/her age-group's, a concrete level of understanding, interpretation, and difficulty with abstract level thinking. It is fundamentally important for teachers teaching mentally retarded children to use illustrations continuously, to provide a colourful learning environment, to enable them to have concrete experience in learning letters and spelling rules.

The rehabilitation sessions of mentally retarded children are conducted by special education teachers specialized in oligofren pedagogy, who also helps the job of other teachers dealing with the mentally retarded child to make his/her joint-education and teaching more successful. ²²⁴ ²²⁵

The group of individuals with moderate mental retardation comprises the group of children in whom the tested intelligence quotient is in the middle third of the subnormal range (IQ 25-49), and whose specific cognitive functioning and typically slow information processing skills makes it impossible for them to keep up with the others.

175

²²³ KÁLMÁN Zsófia, KÖNCZEI György: From Taigetos to equal opportunity. Osiris Kiadó, Budapest 2002. 317.

MESTERHÁZY Zsuzsa – PÁRICSKA Katalin (szerk.): Education of children with mild mental retardation in school. Tankönyvkiadó, Budapest, 1991.208.

²²⁵ MESTERHÁZY Zsuzsa: *The education of children who have learning problems in school.* BGGYTF, Budapest, 1998.

Children with moderate retardation can be educated together with their non-retarded peers unless their mental retardation is not coupled with other disabilities, and their social behaviour does not mean a problem in the class. Their provision does not require special devices, however, their acquiring knowledge is greatly hindered, they learn according to a different syllabus, and considerable differentiation is needed. Their successful joint education in school involves the patience and tolerant behaviour of teachers, the realisation of social tasks in school settings, using demonstrations, illustrations all the time, colourful environment, making tasks attractive, the recognition of even small results, and experiencing a sense of achievement.

The special educational rehabilitation sessions of joint-educated moderately retarded child are conducted by a special education teacher specialized in ologofren pedagogy, and who has a full time job at school or is a travelling teacher. He/she develops the child individually or in a micro-group, helps parents by counselling, and the work of other teachers as well so as to make the joint education of the mentally retarded child more successful.

The number of lessons for the rehabilitation of a child with moderate retardation is determined by an expert committee. Its location is the developmental room, where development of movement, and fine motor skills, development of articulation (correction with a speech therapist), development of vocabulary and language skills, and intellectual development take place. ²²⁶, ²²⁷

10.2.6 Autism

The Autism Foundation Autism Research Group applies the following definition for autism:

"Autism is impairment in social behaviour, communication, imagination function and flexible thinking." 228

Autism is the impairment of the nervous system, a life-long, pervasive developmental disorder in which there can be seen impairments in three

²²⁶ ILLYÉS Gyuláné, ILLYÉS Sándor, LÁNYINÉ ENGELMAYER Ágnes: Special education in psychology, Budapest, 1968.

²²⁷ CSÁNYI Yvonne, HORVÁTH Miklós, MESTERHÁZY Zsuzsa, HATOS Gyula: The integrated education and teaching of children with mental retardation and learning disabilities. Integration volumes for parents ann expert committees. 2001.

Autista: I live with autism. www.autista.hu

areas: impairments in social interaction; impairments in communication; and impairments in flexible thinking and behaviour organisation.²²⁹

It a developmental disorder of organic origin, which can neither be prevented nor cured, and it remains a life-long condition, but it can be easier to live it by proper treatment, and the learner with autism can be developed. It is important to know that autism is a spectrum disorder, and the symptoms within the three areas can be very varied, and of different severity. On the basis of the characteristic symptoms many autistic syndromes are given a special name (e.g. one of these is Aspergersyndrome).

The qualitative impairment in **social interactions** is manifested in the following:

- marked impairment in the use of multiple nonverbal behaviours,
 e.g. such as eye-to-eye gaze, facial expression, body posture,
 and gestures to regulate social interaction,
- failure to developing age-matched peer relationships,
- lack of spontaneous seeking to share enjoyment, interests and achievements,
- lack of social and emotional reciprocity.

Qualitative Impairment in **Communication**:

- delay in, or total lack of, the development of spoken language (not accompanied by an attempt to compensate through alternative modes of communication such as gesture or mime),
- in individuals with adequate speech, marked impairment in the ability to initiate or sustain a conversation with others,
- stereotyped and repetitive use of language, or idiosyncratic language,
- lack of varied, spontaneous make-believe, or social imitative play appropriate to developmental level.

The disorders of flexible behaviour organisation and thinking:

- encompassing preoccupation with one or more stereotyped and restricted patterns of interest that is abnormal in intensity or focus,
- apparently inflexible adherence to specific non-functional routines or rituals,

²²⁹ JANOCH Mónika: Suggestions for the competence based development of learners, children with autism. SuliNova, Budapest, 2006.

- stereotyped and repetitive motor mannerisms (e.g. repeated movements which do not match the situation, hand or finger flapping or twisting or spinning objects,
- persistent preoccupation with parts of objects.²³⁰

Delays or abnormal functioning in at least one of the following areas, with onset prior to age 3 years: (1) social interaction, (2) language as used in social communication, or (3) symbolic or imaginative play.²³¹

The main characteristics of individuals with autism:

a) Primary symptoms:

Lack of interest in the outer world The dwindling of interest

The dwindling of emotional life

b) Secondary symptoms: (compulsions)

Compulsion of speech

Compulsion of movement

Compulsive insistence on objects

Behavioural manifestations: aggression, inadequate crying or laughing, disorders of thinking, lack of an awareness of danger, vegetative disorders, lack of eye contact, self-determination, decreased pain sensation, echolalia, and parrot-like speech.

Due to their impairment children with autism are restrictedly able to learn to orient themselves in space and time in a reliable way. In their interactions it must be taken into account that their perception and organisation, self-organisation skills are impaired, and have problems with language comprehension and attention concentration, etc.²³²

Due to the impairment in their social and communication skills, and the difficulty of organising activities the world seems to be chaotic and indecipherable for them.

To make them feel in security, we must make the environment more comprehensible for them, which can be achieved by the organisation of space and time and visual illustrations. In their education and teaching

OSZI Tamásné: Suggestions for the competence based development of children learners with autism. – Social, life-style related and environmental competences. SuliNova, Budapest, 2006.

JANOCH Mónika: Suggestions for the competence based development of children, learners with autism. SuliNova, Budapest, 2006.

²³² GOSZTONYI Nóra, SZAFFNER Éva: Impairment specific resources for the joint education of children, learners with autism. SuliNova, Budapest, 2006.

due to weak central coherence we must try to highlight the main points from the flood of information directed at them.

The difficulty of frontal teaching is that the child with autism cannot refer the instructions formulated in a general way to himself/herself. Therefore, it is advisable for the teacher (or teaching assistant, or a peer helper) to repeat every request and task for him/her separately. Furthermore, it is also a problem that learners with autism learn more slowly than their pears. In learning in small groups it can also be a problem for chid with autism if they children sit in a different way than they usually do. It is good in such case if the child with autism gets a schedule in advance in which it is indicated when there will be such a change, and who he/she will be in one group with. Cooperative learning organisation seems to be the most effective for them, which develops both thinking and social skills. However, it must be organised well, and this situation must also be given notice of in advance. In the case of individual learner activity it can be an effective help if the learner is given a short and simple description of the task in advance. Individual, extracurricular development also plays an important role, because there are a lot of things that cannot be taught within an education lesson.²³³

Verbal utterances are difficult for autistic children to understand. This is why it is important to provide appropriate visual orientation points for them.

Their social relationships are very unique. In a lot of cases they are attached to one person. This person means security for them. They don't make friends with their peers or it is difficult for them, and therefore teachers must pay special attention to them in the breaks between lessons and in the free time in the afternoon, and in less organised periods of time.

In certain cases of learners with autism we can observe outstanding skills.

Please read the news about an autistic child with outstanding skills by clicking on the link below.

http://nol.hu/kultura/elkepeszto-kepeket-fest-az-oteves-autista-kislany-1489179

Such autistic learners with outstanding skills show a fairly good knowledge of the topic they are interested in, which is primarily based on encyclopaedic knowledge, but they don't see the connections between

²³³ CZIBERE Csilla, VÍGH Katalin: Suggestions for the competence based development of children, learners with autism. – career building. SuliNova, Budapest, 2006.

things. For example, some learners with autism have a good lexical knowledge in certain topics of history.

There is material on Sulinet which provides an excellent methodological help for the education of autistic children (you can have access to it at the link below). Look at the impairment specific resources, and consider which method would be the easiest for you to realize in your own work. Write at least three examples.

http://www.sulinet.hu/tanar/kompetenciateruletek/4 szocialis/sni-tanarisegedanyagok/sni-eszkozok/eszkoz_autista.pdf.

The cooperation of several different experts is required in teaching and educating children with autism. Teachers working in public education institutions are provided help by special education teachers specialised in different disabilities, doctors, psychologists and social experts. It is advisable to work in professional teams to make the education and teaching of learners with disabilities effective.

10.2. Summary, questions

10.2.6. **Summary**

The tenth lesson prepares teacher trainees for the integrated education and teaching of learners with disabilities in public education. It is important to know that this topic has so diverse and has so many ramifications that only the most fundamental knowledge can be condensed into one lesson. If practising teachers have to educate and teach learners with disabilities, it is advisable for them to cooperate with a qualified special education teacher.

As is defined in law, a child, a learner with special educational needs is a child, a learner requiring special treatment who on the basis of an expert committee' opinion has physical, sensory disabilities, mental retardation or speech impairment; is cumulatively disabled in the occurrence of several different disabilities, and has autism spectrum syndrome or other psychic developmental disorders, (severe learning, attention- or behavioural regulation disorder).²³⁴

A sensory disability is related to visual and hearing impairment of various degrees of severity. People with visual impairment can be classified into the blind, the near-total blind and the ones with low vision.

²³⁴ The CXC Act on national public education of 2011. Magyar Közlöny 162. szám, Budapest,

People with hearing impairment are grouped into the deaf and the groups of the ones with hearing loss of various severity degrees.

Learners with physical disability are called the ones who are permanently hindered in executing their age-matched activities due to the impairment/lack of the structure and function of the support system and locomotion, as a result of the change in their ability to do physical performance. Physical impairment appears in many different forms, involving loss of limbs, muscle diseases, paralysis, and the diseases of the motor systems (bone, muscle, joint and nervous system), which permanently hinder them in performing proper forms of movement.

Learners with speech impairment are considerably limited in speech and communication. As a result transitory or permanent disorders can emerge in their language, communication and learning skills and in the development of social relationships. The impairment can appear in the problem of pronouncing speech sounds properly, the disorders of speech perception and comprehension, and the problem of speech rhythm.

Mental retardation refers to substantial limitations in present functioning, which is characterized by significantly subaverage intellectual functioning. The intellectual deficiency can have various degrees of severity. In integrated education we can meet the group of learners with mild mental retardation most frequently. The group of individuals with mild mental retardation comprises the group of children in whom the tested intelligence quotient is in the upper third of the subnormal range (IQ 50-69), and whose slow information processing skill makes it difficult for them to advance in acquiring the course material at the same pace as the other learners.

Autism is a life-long, pervasive developmental disorder in which qualitative impairment manifest itself in three areas: in reciprocal social interaction, communication; and flexible thinking and behaviour organisation.

Following the examinations carried out by doctors, special education teachers and psychologists, committees of expert on the relevant type of disability can make the diagnosis of disability, and make suggestions on the integrated education of learners with disabilities. It advisable for the professionals concerned to work in teams in the education of learners with disabilities. Besides the teachers working in mainstream schools, the cooperation of special education teachers, psychologists and social experts is also needed.

10.2.7. Questions for self-assessment

– What do we mean by special education need?

- What types of disabilities can be distinguished?
- What are the various degrees of severity of visual impairment?
- Who is deaf?
- Where is the borderline of mental retardation?
- How can speech impairments be classified?
- What are the main characteristics of autism?
- What field of special education do you know?

10.2.8. Practice tests

Where can the transitory range be found between deafness and severe hearing loss?

- A. between 40–60 dB hearing loss
- B. between 60-90 dB hearing loss
- C. between 90–110 dB hearing loss

What is lisping?

- A. The disorder of intonation
- B. The disorder of articulation
- C. The disorder of speech fluency
- D. The disorder of reading and writing performance

Match the proper concepts

- A. pedagogy related to visual impairment
- B. pedagogy related to mental retardation
- C. pedagogy related to speech impairments
- D. pedagogy related to hearing impairments
- 1. surdopedagogy
- 2. speech therapy
- 3. tiflopedagogy
- 4. oligofren pedagogy

The correct answers are: C, B, 1-D, 2-C, 3-A, 4-B

11. BEHAVIOUR ABNORMALITIES OF PSYCHIC ORIGIN, SOCIALIZATION DIFFICULTIES, CONDUCT DISORDERS

11.1. Objectives and competences

The goal of the lesson is to explore the behavioural and conduct disorders of psychological origin; and socialization difficulties and conduct disorders of socialization origin. The lesson makes teacher trainees acquainted primarily with the types of educational problems, conduct problems that can be experienced in schools, by focussing on the symptoms and causes of disorders and the possibilities of pedagogical help.

Having studied the material of the lesson, teacher trainees will have to satisfy the following requirements:

- They will be able to name the most common factors playing a role in the development of conduct and socialization disorders, and see clearly the multi-factoral origin of disorders at the same time,
- they will be able to enumerate the characteristic symptoms of children with hyperkinetic syndrome.
- They will be able to name some psychic functions, which are highly important for ADHD (attention deficit hyperactivity disorder) children, and the related methods of development in the education lesson.
- They will know the concept of emotional disorder, and recognise the symptoms of emotional disorders,
- they will be able to enumerate some anxiety disorders and their symptoms,
- they will be able to make a distinction between school phobia and truancy.
- They will be able to interpret the concept of functional disorder, and give some examples for it.
- They will be able to recall the concept of conduct disorder and name its forms of manifestation.
- They will be able to describe briefly the social determination of conduct and socialization problems and the present changes of social processes.

Acquiring the lesson can provide the basis of the following teacher competencies:

- They will understand and accept the conduct disorders of psychic origin, emotional disorders, and try to help the children by the guidance of an appropriate expert and accepting attitude.
- They will understand the complex causes of educational problems and conduct disorders: they will recognise the inherited genetic factors that cannot be influenced in their background, and take the socialization deficiencies and family circumstances into consideration.
- They will recognise the psychological connections of belonging to a deviant sub culture.
- They will have an accepting attitude to children with conduct problems, and at the same time they will have the resources to treat them appropriately.
- They will understand the importance of teachers serving as a model for their students in transmitting desirable social attitudes and a prejudice-free social norm.

Hyperkinetic syndrome Stereotyped movements health Conduct disorders of psychic origin, Emotional socialization mood difficulties, conduct disorders disorders sorders, neurotic anxiety related) Anxiety **Functional** disorders of socialization origin, adaptation difficulties, Aggressive Antisocial disorders behaviour behaviour Conduct Deviant Eating Defecating disorders subcultures substances

11.2. Course material

Figure 21 A mind map about the structure of the lesson

11.2.1. The meaning and types of conduct and behaviour disorders of psychological origin, and conduct disorders of socialization origin

There has not always been unanimous agreement among scholars in this topic. The terminology and the aspects of classification are constantly changing, matching the most up-to-date laws. What problems belong to this topic then? You have already met the classification system of learners requiring special attention in lesson 8.

Look at the previous animation and revise the terms used for various learner groups.

Besides talented learners, the term SEN is used for learners that require special treatment and the third group of learners includes

children/learners with "adaptive, learning and behavioural problems" called ALB. Learning disorders have already been discussed in a previous lesson as well. Here we are concerned with the difficulties which do not primarily affect learning skills; nevertheless, they can have an impact on adaptation to a learner group, and learning together in an institutional way.

The attributes "having conduct disorder", "hyperactive", and "autistic" are often used to characterise problematic children. It is important for us not to use psychological terms in colloquial language that stigmatise, label children, often without any good reason, and without knowing the real meaning of the word.

Conduct and socialization disorders can be classified according to several different aspects. The psychodiagnostic, psychiatric classification (e.g. ICD International Classification of Diseases) is a medical approach; it approaches them from the symptoms, and tries to make the problems more objective.

Socialization was discussed in Lesson 2, where the phenomenon of socialization disorder was mentioned. Difficulty in being educated, social inadaptation, adaptation difficulty, adaptation disorder – they are the terms that are used to identify socialization disorder.

It's beyond the scope of the chapter to give a detailed description of all conduct disorders, and therefore we will give an overview of only the most common problems emerging in school, focussing on the problems that arise from the higher grades of the primary school.

In the lesson we tried to classify the conduct related problems in such a way as to make it clearer and more understandable for teacher than what is the psychiatric classification, however, we don't get too far from the traditional classification. We will explore the problems in the following classification:

- Conduct disorders
- Emotional, mood disorders, anxiety disorders
- Functional disorders
- Conduct disorders related to socialization, adaptation difficulties, deviations

Of course, teachers are not expected to be able to make a diagnosis. However, it is very important for them to have knowledge about the normal development of a given age-group, and their typical development characteristics, and to know in what the child with different development and conduct disorders differs from it. Besides this knowledge, teachers

must have the attitudes and pedagogical techniques which enable them to educate and teach these learners together with average children.

11.2.2. The typical causes of behavioural problems

The issue of health, diseases and normality

It is an important question what we regard to be a problem at all. It is often difficult even for experts (psychologists and psychiatrists) to decide, and in judging it an average person cannot rely on their diagnostic knowledge, either. According to Ranschburg²³⁵ it is usually determined by three aspects what separates the normal from abnormal. The first primary aspect is the current social-cultural norms; this is the expectation of the community about what can be regarded to be acceptable, and what is what does not suit the norms. The second aspect is how usual, common the given behaviour in the given community. The third aspect is the so called subjective well-being of the individual, i.e. his/her own judgement about whether the behaviour is normal or not. In addition to these, Ranschburg mentions one more aspect which give the possibility to judge it later: whether the individual's walk of life, or the particular stages of life were successful or not.

It can be seen that in judging what is normal and abnormal, we cannot draw a comparison to a generally valid standard. All things considered, it is an interesting question what is regarded to be problematic behaviour today. The value crisis of people's communities, societies and families that are difficult to interpret, the great variety of educational methods considered to be right can also contribute to the noticeable increase of the occurrence frequency of behaviour problems. At the same time judgement is not independent of the environment qualifying the behaveiour; the attitude and tolerance of the person making the judgement, either. In general, parents see much less that their child's behaviour and conduct would be problematic than teachers, or even neighbours. But it is also common that a child "behaves well", listens to the teacher, and can be handled easily in one lesson whereas in the lesson of another teacher he/she is "undisciplined", 'cannot be handled". Who is then the problem with? With the child? Who has the problem?

When judging children's conduct, we must take their age-specific development and psychological characteristics into consideration as well. What "fits" into the average category in one particular age, can be almost compulsory development norm at another age, while it can be regarded to be abnormal at a third one.

²³⁵ VAJDA Zsuzsanna, KÓSA Éva: *Educational psychology*. Osiris, Budapest, 2005.

Let us think, for example, of aggressive behaviour. At the age of two very many children hit each other if they don't give them their toys back whereas the same is not as common behaviour at the age of ten any more.

As it is especially typical of behaviour, conduct disorders that the problems disturb mainly the environment, other people, it is important to take the social embedding of problems into consideration, and it makes a difference what the reaction of the environment is from the aspect of the development of symptoms.

The most common factors disturbing healthy personality development

It is important to point out that the causes that will be mentioned next are never responsible for triggering some kind of abnormal conduct alone, but their development is influenced by various factors together.

Biological factors

The biological factors can be of genetic origin or acquired. The genetic factors have a significant role in the development of the personality. The strongest genetic effect lies in the relation of temperament and intelligence. In twin and adoption studies it was observed, for example, that aggressive behaviour, criminality and the disposition for committing suicide or hyperactivity also show family accumulation of genetic basis. It is important to point out that it, however, does not mean predestination: the prevalence of genetic effects is also regulated by environmental conditions. The highly significant result is epigenetic research is, for example, that certain characteristics can be inherited without a genetic modification, they just "simply" facilitate or hinder the prevalence of certain DNA stages responsible for certain characteristics.

The impairments, inflammations and infections of the central nervous system can mostly cause learning problems, attention disorder and adaptation disorders.

Social and environmental factors

No doubt that the relationship with parents, attachment, emotional security, and family background play an important role in the healthy development of children. Divorce, violence within the family, abuse, and cold family atmosphere can cause severe conduct disorders in children. Besides the deficiencies of family socialization, an important social factor

of personality development is the position occupied in peer groups. School refusal, exclusion can have long-term consequences on self-esteem, the development of social relationships, and it can have a role in joining deviant groups. ²³⁶

Watch the Estonian film titled "The class", which deals with the effects and possible consequences of refusal, mocking, exclusion experienced in a peer group. Write down briefly how you think the story could have had a different ending.

11.2.3. Conduct disorders

Hyperkinetic syndrome (attention deficit hyperactivity disorder)

This is the most common and most widely researched childhood- and adolescent psychiatric disease. This conduct disorder, which is known by most people, is mostly called "hyperactivity" in colloquial language. However, this word is very often used by both parents and teachers (according to some calculations more than half of children are regarded to be hyperactive by their environment). However, it is important to know that liveliness, need for movement and immoderation alone shouldn't be labelled by it. The group of symptoms is designated by the English acronym AHDH (attention deficit hyperactivity disorder) used most commonly today in the literature, as well as by the former term of the syndrome, MCD (minimal change disease) or psycho-organic syndrome (POS), which terms refer to the supposed organic origin. It is a fact that these symptoms often emerge as a consequence of impairments within the uterus, birth injury, and encephalitis. However, there are a lot of other factors that have a role in the development of the syndrome. The cause of hyperactivity disorder is still unknown although the role of genetics has been justified by examination, and from time to time heartening "a secret component" arises, such as food additives. You can find an article about the topic at the link below:

http://www.eufic.org/article/hu/artid/Hiperaktivitas-mesterseges-etelszinezekek/

It is worth knowing about the symptoms of ADHD that the existence of several symptoms is necessary even from the areas of inattention, over activity and impulsiveness for making a diagnosis. Almost all the

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VAJDA Zsuzsanna: The development of social relationships and behaviour from lower primary school age to adolescence. In Mészáros Aranka: Az iskola szociálpszichológiai jelenségvilága. ELTE Eötvös Kiadó, Budapest, 2004. 145-161.

symptoms that will be mentioned below can be observed in most average children at certain ages. What hyperactivity disorder differs from these is that the symptoms are severe, they appear in every area and almost in every situation, and remain for a long time. Children with ADHD may have the following symptoms:

Inattention:

- often do not pay attention to the details properly
- retaining attention often means difficulties
- often not seem to be listening when they are talked to
- often don't follow the instructions, or stop finishing a task
- often have difficulties organising tasks and activities
- often avoid or resist doing long-lasting tasks
- often lose their things
- it often happens that external stimuli direct their attention
- be absent-minded in their every-day activities.

Hyperactivity:

- often fidget and squirm in their seats,
- often leave their place
- often run about or jump
- often have difficulties in independent, quiet games
- be constantly in motion
- talk nonstop.

Impulsiveness:

- often say the answer before the question was finished
- have difficulty in waiting often interrupt others."²³⁷
- Think of your own primary and secondary school years. You can probably remember a mate of yours in the class or year for whom the diagnosis of hyperactivity syndrome suits on the basis of the symptoms mentioned above. What did his/her teachers and classmates think of him/her? What was your relation to him/her?

The medications that are used today in the treatment of hyperkinetic disorder are primarily psychostimulants, as an effect of which the motor restlessness is reduced; both attention concentration and temper control

²³⁷ HERCZEG Ilona, FÜLÖP Zsuzsanna: Conduct disorders and emotional and mood disorders usually beginning in childhood- and adolescence. In Vetró Ágnes (szerk.): Gyermek- és ifjúságpszichiátria. Medicina Könyvkiadó Rt., Budapest, 2008. 226.o.

are improved. However, it seems to be that the effect lasts only while the treatment with medication is used; the examinations didn't show a long-term effect.²³⁸ The danger is that as the structure of stimulants is actually similar to that of drugs (the medication used for hyperactivity is similar to Ecstasy), drug addiction is more likely to be developed in young people later.²³⁹

Psychotherapy is also an important part of the treatment; it can increase the result of the treatment with medication (if not more effective). In this case the psychotherapy used is mostly behavioural therapy, i.e. reinforcement of the desired conduct by conditioning, improving self-control, and it also helps in resolving emotional and social conflicts. Besides, it is also important to deal with the family as well, as the parent-child relationship and educational problems are supposed to play a significant role in the development of ADHD, and definitely in its treatment.²⁴⁰. The number of hyperactive children is much higher today as it was twenty years ago, which cannot only put down to more accurate diagnostic procedures, but it can also be the consequence of cultural-social causes.²⁴¹

- Watch the short film about the work of the foundation "ADHD Hungary" dealing with children with attention disorder, available at the link below. Consider the following aspects while you are watching the film and answer the following questions:
 - What can be the consequences if an ADHD child does not get a proper treatment?
 - What principles must be kept in mind in the education of ADHD children?

https://www.youtube.com/watch?v=UKDeoRygZt4

The treatment of, and proper attitude to ADHD children is a challenge not only for parents, but also for teachers and the school class.

²³⁸ HERCZEG Ilona, FÜLÖP Zsuzsanna: Conduct disorders and emotional and mood disorders usually beginning in childhood- and adolescence. In Vetró Ágnes (szerk.): Gyermek- és ifjúságpszichiátria. Medicina Könyvkiadó Rt., Budapest, 2008.

²³⁹ VAJDA Zsuzsanna, KÓSA Éva: *Educational psychology*. Osiris, Budapest, 2005.

²⁴⁰ HERCZEG Ilona, FÜLÖP Zsuzsanna: Hyperkinetic syndrome. In Vetró Ágnes (szerk.): Gyermek- és ifjúságpszichiátria. Medicina Könyvkiadó Rt., Budapest, 2008. 225-231.

²⁴¹ VAJDA Zsuzsanna, KÓSA Éva: *Educational psychology*. Osiris, Budapest, 2005.

? What can a teacher do if there is a real "hyperactive" child in his/her class? Do you think that these children should be treated in a different way than average children?

The first, and perhaps most important thing is that the teacher should recognise that the child with ADHD does not provokes and annoys him/her consciously, but he/she cannot simply behave in a different way. It is possible that the child has not been diagnosed yet. In such a case it is important to call the attention of the school's special education teacher or the parents to the unusual behaviour. The school, the teacher can play a significant role in teaching him/her self-control. Clear, consequent expectations and open rules of behaviour are very important. It is important to know that children won't grow out of hyperactivity, and the symptoms remain even in adulthood, it is only the self-control functions and coping-adaptation strategies improve. Teachers can do a lot in facilitating their development.

Collect some ideas how the need of a child/young person with ADHD for being constantly in motion could be satisfied, and how his/her attention could be kept all through the lesson.

Stereotyped motor movements

Stereotyped motor movements are not motor disorders but repetitive, non-functional activities, such as hair twisting, nail biting, head banging. It also includes tic, which is most commonly the involuntary jerk-like movements of certain muscles (strong and frequent blinking, throat clearing, or head nodding to the side, etc.). These movements usually signal inner tension and anxiety, and it is inappropriate for teachers to make remarks about them, or ask them not to do it. Namely, if we call the attention to it, this anxiety will increase even more; the movement cannot be influenced voluntarily, and cannot be stopped. Stereotyped motor movements can be corrected by doing exercises; in more severe cases psychotherapy is needed.

11.2.4. Emotional disorders, mood disorders, neurotic (anxiety related) disorders

Emotional disorder, mood disorder

Children are fundamentally cheerful, bright and happy. It cannot be avoided that they feel sometimes sad, sorrowful or are anxious about something occasionally, these episodes are, however, transitory in

normal cases, and it disappear by proper support of parents or new environmental effects. However, a severe emotional disorder can occur in the case of bad family relationships, or in lack of getting proper emotional support.

Emotional disorders manifest themselves in the increase or decrease of the individual' mood. The two poles of the spectrum are mania and depression.²⁴³

Depressive disorder

If a child is durably gloomy and sad, he/she has depressive disorder, which can have very severe consequences in lack of proper treatment. It occur very rarely until prepuberty, but in adolescence the prevalence of depression increases significantly (according to some authors the probability of it appearance is 4,7% between the ages of 14-16), and the symptoms are similar to that of adults: low mood, sadness, lack of interest and feeling joy, reduced activity, feeling fatigue, being pessimistic about the future, having low self-esteem, disturbed sleep, and decreased appetite are the most typical signs.²⁴⁴ Emotion-free, cold parental attitude, neglect and abuse are in the background of depression in childhood, and it is also a risk factor if the mother herself also suffers from depression.

The relevance of depression in adolescence can be due to the fact that this is the time when the individual begins to understand the things of the adult world, has to face more and more challenges, self-image and self-esteem become unstable while family relationships become loose-knit, and can fulfil their protective role less. At the same time, the mood disorder can "simply" be the consequence of durable lack of sleep as well. 245

Dysthymia is called the condition in which the low mood, irritability appear in less severe form of symptoms but it is continuously present for at least a year.

It is important for a teacher to be able to make a distinction between bad mood and depression. It requires that the teacher should have a good relationship with the learners, and they should be able to share everything that happened at home or other events with him/her. If such a

²⁴² VAJDA Zsuzsanna, KÓSA Éva: *Educational psychology*. Osiris, Budapest, 2005.

OLÁH Róza: Mood disorders in childhood- and adolescence. In Vetró Ágnes (szerk.): Gyermek- és ifjúságpszichiátria. Medicina Könyvkiadó Rt., Budapest, 2008. 128-139.

OLÁH Róza: Mood disorders in childhood- and adolescence. In Vetró Ágnes (szerk.): Gyermek- és ifjúságpszichiátria. Medicina Könyvkiadó Rt., Budapest, 2008. 128-139.

²⁴⁵ VAJDA Zsuzsanna, KÓSA Éva: *Educational psychology*. Osiris, Budapest, 2005.

negative event can be discovered in the background, and the low mood does not last for long weeks, low mood is justified; moreover it is healthy to experience negative emotions. By all means the depression suspected child should be sent to an expert (psychologist or psychiatrist). Psychotherapy (cognitive therapy and revealing therapy) has a significant role in the treatment. With regards to the vulnerability of the developing nervous system in prepuberty and puberty and the environmental, family determination of depression in childhood and puberty, treatment by medications promising spectacular improvement should be avoided.

Bipolar disorders

In the case of bipolar disorders the periods of elevated mood and phases of mania and periods of depression change each other. Mania the other extreme of mood disorders: the individual shows over-activity, the need for sleep is reduced, feels extremely well, talks a lot, is energetic and social inhibitions are reduced. Hypomania is called the mildly elevated mood. Psychiatrics holds the view that mania does not occur by itself, at the most the depressive episodes are shorter and remain unnoticed. It can be noticed that a child, adolescent or young person has this disease that the elevated and depressed periods change each other in a spectacular way. They have energy for everything for a while, take on every task, are always cheerful, wear conspicuous, bright-coloured, clothes while at another time they are completely enervated for days, weeks, moody, weak, and the mood swings seem to occur completely randomly. In this case it is also highly important to send the learner to an expert.

Anxiety disorders

The term anxiety is used to describe an unpleasant emotional state accompanied by physical symptoms when the individual is afraid that some event will happen, or of the consequences of an event that has happened."²⁴⁶

Anxiety about certain things at definite age can be regarded to be quite normal. As, for example, separation from the mother at 8 months old causes fear, excitement related to performance is a normal part of school life. However, if anxiety is so great that is causes severe stress, and disturbs adaptation (as it determines general behaviour as well), we

²⁴⁶ GÁDOROS Júlia: Emotional disorders starting characteristically in childhood. In Vetró Ágnes (szerk.): Gyermek- és ifjúságpszichiátria. Medicina Könyvkiadó Rt., Budapest, 2008. 236-244.

can talk about anxiety disorder. In the case of anxiety disorders in childhood- and adolescence we can meet fears belonging to normal development, only in an intensified, distorted form, and not at the adequate time. Anxiety is the most common psychiatric disorder characteristic of childhood and adolescence. Anxiety is a quite conspicuous group of symptoms, which can be identified mostly by the fear expressed on the face, but a sign of anxiety can also be nail biting, gasping for breath, or shaking. Next we will describe some of the most common types of anxiety.

Separation anxiety disorder

Anxiety appears due to the separation from the beloved person (mostly from the mother), the fear that the beloved person will disappear and won't come back. Why we found it important to describe this type of anxiety is that it most frequently appears at the age of 10-11, and it can make staying at school very difficult, and can make school attendance impossible. 247 Its signs are that the learner often stays at home saying that he/she is ill, cries at school, it is difficult for him/her to say goodbye to his/her parents at the school gate, or saying goodbye is a long ceremony, and it becomes longer and longer. In such a case the help of an expert, a psychologist or psychiatrist, and psychotherapy is needed to find an effective solution. It is important to point out that there is such a period in the life of every child when he/she is more attached to his/her mother, or he/she would like to play truant because of a test paper that so he/she has to stay at home due to a mysterious stomach ache. We should suspect separation anxiety if it happens too frequently, and the learner's saying goodbye to his/her parents is too spectacular (as it can be explained only in the first class by educational psychological causes.)

Phobias, school phobia

Phobia means that fear related to one definite thing becomes so strong and durable that it makes the adaptation of the child/adolescent difficult, and his/her personal horizon becomes narrow. An object or event can trigger such excessive anxiety that it can hardly be reduced and the person wants to avoid it by all means. A phobia can be caused by almost anything (spiders, darkness, pigeons, etc.). Phobia can be developed in connection with school and going to school, which most often appears in adolescence. The child seems to be highly distressed

²⁴⁷ GÁDOROS Júlia: Emotional disorders starting characteristically in childhood. In Vetró Ágnes (szerk.): Gyermek- és ifjúságpszichiátria. Medicina Könyvkiadó Rt., Budapest, 2008. 236-244.

even while getting ready for school, can also produce somatic symptoms, he/she is tense and distressed at school.²⁴⁸

Do you think that excessive fear towards school can have real causes? Write three examples in what cases.

It is important for us not to mix up this problem with the so called truancy, when the child stays away from school without any good reason. We must help such children to get help from a psychologist or psychiatrist, as well as from teachers.

Generalized anxiety disorder

It is characterized by constant, general, excessive, uncontrollable and often irrational worry that cannot be related to any specific place or situation, and it can appear all the time. It is combined with restlessness, bad omen, concentration inability, distress, worry, perhaps a headache, and trembling. In children and adolescents bodily complains (head-ache, stomach-ache) can be more intensive than the emotional difficulties they formulate.²⁴⁹ Turning to a psychologist or psychiatrist is suggested in this case, too.

Panic disorder

It is not characteristic that panic attacks occur before puberty; they, however, can also appear at this age. A panic attack is such a severe, extreme anxiety which is not related to any definite situation, it cannot be predicted, and it comes unexpectedly. Its common signs are some sense of altered reality, a sensation of choking, dizziness, trembling, chest pain, rapid heart-beat, and the fear of dying. The symptoms are similar to those of heart attack, and mostly an ambulance is called for; doctors, however, don't find any organ problems or biological causes in the background. If the individual has already had such an attack, he/she may become stressed, anxious or worried wondering when the next panic attack will occur. In the case of an attack, the teacher's duty is to calm down the learner and the symptoms fade by time in in quiet. Such learners should be sent to an expert, a psychologist or psychiatrist and psychotherapy is suggested as the disorder may be cured by learning

²⁴⁸ GÁDOROS Júlia: Emotional disorders starting characteristically in childhood. In Vetró Ágnes (szerk.): Gyermek- és ifjúságpszichiátria. Medicina Könyvkiadó Rt., Budapest, 2008. 236-244.

²⁴⁹ GÁDOROS Júlia: Anxiety disease forms in childhood- and in adolescence. In Vetró Ágnes (szerk.): Gyermek- és ifjúságpszichiátria. Medicina Könyvkiadó Rt., Budapest, 2008. 140-150.

relaxation techniques and by revealing the psychic causes in the background.

11.2.5. Functional disorders

Function disorders are the disorders of the primary bodily functions with a psychic basis (e.g. sleeping, eating and defecating). This is what we will discuss below.

Eating disorders

Obesity

As in all societies of developed countries, overweight is also a problem becoming more and more common among children. In the USA 30-40%- of children are overweight before the age of 10.²⁵⁰ Their rate is no so high in Hungary, yet; however, it shows an increasing tendency, and the rate of overweight children is 20-25%²⁵¹, which is not low.

Naturally, it is rather unhealthy eating caused by family habits, the emotional security of family life, and social processes than the canteens of educational institutions that can be put the blame on for it.

Besides genetic susceptibility the causes of obesity include overcautious parenting, excessive worry, as well as emotional refusal and the lack of emotional attachment.

It is also the task of schools to educate children to live a healthy life, make them acquainted with healthy foods and develop attitudes related to these. It is not enough to take part in health educational programmes out of necessity (making, carving sculptures out of vegetable, drawing posters, etc.); it is also important that the attitudes of the children should also change, and that they should be committed to healthy eating.

The consequences of obesity are severe not only in the long run (diabetes, circulatory disorders) but they appear directly in school performance, and how children feel at school. Not to mention the secondary consequences that overweight children are often mocked and excluded.²⁵²

²⁵⁰ VAJDA Zsuzsanna, KÓSA Éva: *Educational psychology*. Osiris, Budapest, 2005.

²⁵¹ FEDOR István, VETRÓ Ágnes: Conduct disorders accompanied by physiological disorders and bodily factors. In Vetró Ágnes (szerk.): Gyermek- és ifjúságpszichiátria. Medicina Könyvkiadó Rt., Budapest, 2008. 157-171.

²⁵² VAJDA Zsuzsanna, KÓSA Éva: *Educational psychology*. Osiris, Budapest, 2005.

Anorexia nervosa

Pathological, abnormal thinness occurs mainly in adolescent girls (15-24 years old). Its symptoms include:

- Weight is by at least 10% below what can be expected at a given age. Patients lose so much weight that they are skin and bones.
- Being on a slimming diet, intentional weight loss by avoiding eating fattening foods (moreover food at all) sometimes together with self-induced vomiting, purging and excessive exercises.
- Body-image disorder (seeing themselves fatter than they are having unreal expectations related to their weight and size).
- Hormonal disorders, the loss of menstrual periods, losing interest in sex
- It seems to occur earlier and earlier today; it is not uncommon that the disease starts before puberty, in this case growing stops and puberty is not completed.²⁵³

Of the background factors we mustn't forget the cultural norms, either, i.e. the overemphasis of the thin ideal body of a woman in the media. It much more commonly occurs in professions where weight and figure are highly important (models and actors/actresses). The disease most frequently starts by a slimming diet, after which the person is not able to go back to normal eating. Besides social expectations examinations revealed a typical family constellation in many cases. The family of individuals with anorexia are perfectionists; parents get excessively involved in the life of every member of the family, they overcontrol their children, and it is not possibly to discuss conflicts openly with them. According to some experts, this can be the reason why the adolescent himself/herself keeps eating under his/her own control against the will of his/her parents. In these cases medical and psychotherapy treatment is needed; the duty of teachers is to give notice about it primarily to parents and the school doctor besides their supportive attitude.

Bulimia nervosa

It is more difficult to recognise bulimia because the individuals usually have a normal physique. It is characterised by binge eating (eating a

²⁵³ FEDOR István, VETRÓ Ágnes: Conduct disorders accompanied by physiological disorders and bodily factors. In Vetró Ágnes (szerk.): Gyermek- és ifjúságpszichiátria. Medicina Könyvkiadó Rt., Budapest, 2008. 157-171.

FEDOR István, VETRÓ Ágnes: Conduct disorders accompanied by physiological disorders and bodily factors. In Vetró Ágnes (szerk.): Gyermek- és ifjúságpszichiátria. Medicina Könyvkiadó Rt., Budapest, 2008. 157-171.

large amount of food in a short period of time), followed by self-induced vomiting, purging and starving. Constant vomiting also has severe medical complications (ruptured stomach or oesophagus, tooth decay and mouth sores, and electrolyte disorders, etc.)²⁵⁵ If there is suspicion of it, must be suggested that the individual be send to a specialist and get psychotropic treatment.

Psychogenic stomach ache, back ache, vomiting

Anyhow it is an important signal; it refers to performance anxiety if it appears regularly when learners are tested orally or in writing. It is important to understand that the child does not simulate pain, but he/she really has pain. That is why is it very important to show an accepting, supporting attitude and avoid humiliating the child, and playing the importance of the pain down. On the other hand, we mustn't reinforce the symptom as a way of avoiding being tested, i.e. we should not teach to child that he/she can "get away with" writing a test or answering teacher's questions orally if he/she "produces" headache/stomach-ache.

One of your students keeps on vomiting when he/she is asked to perform in front of the class. How would you test him/her?

Sleep disorders

Several studies have revealed that the rate of sleep disorders is increasing more and more, therefore we find it important to deal with it in this lesson. The rate of children with sleep disorder is 10-14% among children of 3-8 years old, which decreases at later ages, and then in puberty it appears again in such a high number. ²⁵⁶ It's beyond the scope of this lesson to give a detailed description of sleep disorders, and that is why we will mention only their most common forms, and their school relations.

? "By brushing up Maslow' motivation system that you have learnt in the subject "The psychological bases of teacher activity", answer the following question: How do teachers, the school can contribute to a learner's sleep disorders?

²⁵⁶ BÁNK Zsuzsanna: Non-organic sleep disorders in childhood- and adolescence. In Vetró Ágnes (szerk.): Gyermek- és ifjúságpszichiátria. Medicina Könyvkiadó Rt., Budapest, 2008. 172-176.

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FEDOR István, VETRÓ Ágnes: Conduct disorders accompanied by physiological disorders and bodily factors. In Vetró Ágnes (szerk.): Gyermek- és ifjúságpszichiátria. Medicina Könyvkiadó Rt., Budapest, 2008. 157-171.

Sleep disorders have two major groups: dissomnias and parasomnias. Dissomnias are disorders in the quantity, quality or timing of sleep. In the background of sleep loss there are mostly psychosocial causes (the disorder of parent-child relationship, psychic stress), too much sleep and sleepiness start rather in adolescence, and it can probably be traced back to emotional-psychological disorders in addition to the fact that it is a sign of depression. The so called parasomnias include abnormal events that happen during sleep, for example pavor nocturnes (panicattack like screaming, anxiety, the child seems to be awake, but he/she cannot be woken up, and doesn't remember the events), sleep walking and nightmares.

Sleep disorders influence learning and attention abilities. If we suspect this, it is advisable to talk to the parents, and suggest that the child should be examined by a psychiatrist and psychologist.

Defecation disorders

After the age of 10 defecation disorders (enuresis, fecal soiling and fecal retention) occur relatively rarely, and it turns out at school very rarely. If there is no organic disorder in the background, it has a psychic, psychosocial origin.

11.2.6. Conduct disorders of socialization origin, adaptation difficulties, deviations

Conduct disorders

"According to the definition of BNO-10, conduct disorders are characterized by a repetitive and persistent pattern of dissocial, aggressive, or defiant conduct. Such behaviour leads to major violations of age-appropriate social expectations, and is therefore more severe than ordinary childish mischief or adolescent rebelliousness." 257

Conduct disorder has a multifactorial etiology that includes biologic, psychosocial and familial factors; the person probably has an innate vulnerability, associated by different bio-psycho-social triggering effects. According to statistics, it is more commonly noted in boys. This diagnostic category used in psychiatry can be related to the phenomena to be discussed next that those are the forms of how of conduct disorders appear.

²⁵⁷ CSÍK Vera: Conduct disorders. In Vetró Ágnes (szerk.): Childhood- and youth psychiatrics. Medicina Könyvkiadó Rt., Budapest, 2008. 232.o.

Antisocial behaviour

From the educational developmental characteristics of adolescence, adolescents' search for identity and values, and their active trials it follows that deviant conduct (delinquencies, violations of norms) is much more common at this age than at any other time.²⁵⁸.

You could get acquinted with the educational developmental characteristics of adolescence in the subject "The psychological bases of education". It is advisable to revise and brush them up before you go on reading the material.

This group includes stealing, truancy and juvenile delinquency. Childhood cases, which happen not for the value of the stolen goods but as a protest against parental refusal, often become the starting points of antisocial, criminal life style. Similarly, vagrancy and truancy indicate family socialization problems, but they can be the first station of delinguency.

The use of psychoactive substances (drugs)

The number of young people who have tried drugs at least once in their lifetime is alarmingly high today. The spread of synthetic drugs causes severe problems, not only for the individual but for his/her environment as well. Prevention programmes in schools are of great importance in reducing drug use, but it can sometimes have a paradox effect: they even increase drug use.²⁵⁹

Aggressive behaviour

Conduct disorders often are embodied in aggressive behaviour. It does matter how the environment reacts to aggressive manifestations. The typical forms of childhood aggression are as follows.

- defying behaviour: it means disobedience, and it appears in the case of not every adult. It most frequently presents itself parents, or one of the parents.
- general aggressive behaviour: it means attacking behaviour primarily against peers.

 $^{^{258}\ \}mathsf{VAJDA}\ \mathsf{Zsuzsanna}.$ The development of social relationships from the lower primary school age to adolescence. In Mészáros Aranka: Az iskola szociálpszichológiai jelenségvilága. ELTE Eötvös Kiadó, Budapest, 2004. 145-161. ²⁵⁹ VAJDA Zsuzsanna, KÓSA Éva: *Educational psychology*. Osiris, Budapest, 2005.

However, during upbringing aggressiveness decreases, if it remains for a long time, and it becomes a constant part of the conduct repertoire, it always has deeper, complex causes.²⁶⁰

In relation to aggressive behaviour, the research of bullying has been given special attention to in educational psychology. It means harassment in school, which can appear both in physical and psychic form.

Bullying: "is a long lasting, fundamentally violent process which is guided by either an individual a group against somebody who is not able to defend himself/herself in a given situation. It means that the individual either transmits insult, threat or hostility towards him/her, or exposes him/her to stress." 261

It is difficult to stand up against it, collaboration and cooperation of the school, teachers and parents can be a solution for it. The victim of bullying needs professional help from a therapist.

Deviant subcultures

One typical youth deviance is when young people get into bad company. All classes of society are affected by this problem for different reasons.

? As a teacher what do you think of a student who seems to be a member of a deviant youth subculture? Would it influence your judgement of this learner?

Some general social factors also play in role in of why deviant groups are formed: such are the weakening of traditional authorities (state, church), the lack of perspectives, and general value crises. But why do certain individuals joins them? One explanation for why somebody belongs to a youth subculture, or joins a deviant group is the feeling of being excluded, and they expect from to group to satisfy the desire of belonging somewhere and being accepted.

- ? Do you think that teachers should be acquainted with the most common deviant youth groups?
- Mention some. Do you exactly know what is means, what it is associated with if somebody belongs to one of these groups?

-

²⁶⁰ VAJDA Zsuzsanna, KÓSA Éva: *Educational psychology*. Osiris, Budapest, 2005.

²⁶¹ MIHÁLY Ildikó: The natural history of school terror. http://www.ofi.hu/tudastar/iskolaiterror

11.3. Summary, questions

11.3.1. **Summary**

Such is the complexity of the topic that there is no agreement among scholars about it, either. The terminology and the aspects of classification are constantly changing. In the lesson we made an attempt to give a classification of the problems which is easier to grasp for teachers than the psychiatric classification without getting to far from the traditional classification. This is the reason why we discussed the problems according to the following grouping: conduct disorders, emotional, mood disorders, anxiety disorders, functional disorders, and conduct disorders of socialization origin.

The various biological, psychic and social causes can be blamed together in the development of particular problems. Furthermore, it is also important for us to take the educational psychological characteristics of age in consideration when we judge children's behaviour.

One of the most common and most widely researched diseases in childhood- and adolescence is hyperkinetic syndrome (ADHD). Its typical symptoms include intention, overactivity and impulsiveness. This is the best-known conduct disorder which is mostly referred to as "hyperactivity" in colloquial language. We mentioned stereotyped movements among the conduct orders of psychic origin (e.g. tic) as well.

Of the emotional disorders depression, bipolar disorders and anxiety disorders are the ones that occur in adolescence make it hard for learners to be at school and adapt to school.

Functional disorders are abnormalities of primary bodily functions of psychic origin (e.g. sleeping, eating and defecating). They include obesity, anorexia nervosa, bulimia nervosa, and sleep disorders.

From the educational psychological characteristics of adolescence, adolescents' search for identity and values and active trials follows that deviant behaviour is more common at this age than any other time. One typical deviance of youth is belonging to a deviant subculture or group, when young people get into bad company. Drug addiction and the spread of using synthetic drugs cause severe problems among young people today. Conduct disorders often appear in aggressive behaviour, one type of which is bullying, the harassment of children at school who cannot defend themselves.

11.3.2. Questions for self-assessment

What factors must be taken into consideration in the development of conduct and socialization disorders?

- What are the symptoms of hyperkinetic syndrome?
- What do emotional disorders show themselves in?
- What consequences can depression have in secondary school students?
- Enumerate some functional disorders of psychic origin.
- What forms of manifestation can conduct disorders have?

11.3.3. Practice tests

Which statement is <u>not</u> true for the hyperactivity disorder?

- A. Genetic factors also play a role in its development.
- B. The child is very likely to grow out of it by adulthood.
- C. It is characterised by considerable lack of concentration and inattention.
- D. It is accompanied by irritability and impatience.

What consequence can separation anxiety have?

- A. Anorexia.
- B. Panic attacks.
- C. School phobia.
- D. Truancy.

What could be the Hungarian equivalent of bullying?

- A. mobbing
- B. gyermekbántalmazás
- C. agresszív viselkedés
- D. iskolai zaklatás

The correct answers are: B, C, D

12. RECOGNISING AND DEVELOPING GIFTED AND TALENTED LEARNERS IN SCHOOL

12.1. Objectives and competences

The primary goal of the lesson is to provide primary knowledge about the characteristics of gifted and talented learners, the possibilities of how to recognise giftedness and talent, and to nurture gifted and talented learners. A further goal is to prepare teacher trainees to plan their own pedagogical work meeting the needs of gifted and talented learners.

Having studied the course material, teacher trainees will satisfy the following requirements:

- They will be able to recall the concept of giftedness and talent, and the most important models of giftedness and talent,
- they will be able to name the components of giftedness and talent,
- they will be able to recognise the most important characteristics of giftedness and talent,
- they will be able to apply the list of aspects of monitoring for screening gifted and talented learners,
- they will be able to integrate the methods of developing and providing for gifted and talented learners in their own pedagogical work.
- they will be able to get around in the system of talent points, and do information search on the internet about the organisations dealing with the education of gifted and talented students,
- they will find it important to nurture the gifted and talented,
- they will enjoy working with gifted and talented learners while teaching their own subject.

Its concept Its models Gagné Gagné Comparison Provision for the gifted and talented

12.2. Course material

Figure 22 A mind map about the structure of the lesson

12.2.1. The concept of giftedness and talent

The term giftedness and talent can have a lot of different shades of meaning for different persons. When hearing this word, some people think of only outstanding, remarkable geniuses, great artists, inventors or famous people, and others interpret it in a broader sense, and they use it for almost everybody who excels in something. What does giftedness mean? There are several approaches to defining giftedness; there is no general definition of giftedness accepted by everybody. However, most of the definitions are very close to each other, and the different conceptions of giftedness and talent throw light on the complexity and nuances of the interpretation of giftedness and talent.

According to the act on public education, "an exceptionally gifted/talented child, learner: is a child, learner requiring special treatment, who in the possession of general or specific abilities above the

average, has a high degree of creativity, and a strong motivation for and commitment to a task can be aroused in him/her." The various components of giftedness are highlighted in this definition.

Éva Gyarmathy²⁶³ makes an attempt to give a complex interpretation of the phenomenon:

Giftedness is a possibility in the individual which is developed by the interaction of external and internal factors. Giftedness is behaviour and attitude; a value system and self-perception. A gifted and talented individual differs from the average in his/her way of thinking and relationship with the world. The most commonly described characteristics of the gifted and talented include superior abilities, curiosity, flexible thinking, creativity, an inner drive and belief in being able to do something excellent. It is, however, often difficult to identify these factors because they appear only in a proper environmental background."

We ourselves find the definition of giftedness and talent by Endre Czeizel²⁶⁴ the best to be used in practice. Accordingly,

giftedness provides a possibility, potential and promise to achieve an outstanding performance in the domain of some kind of a human activity, which is useful for society, and which means satisfaction and a sense of achievement for the person who has achieved it.

This conception emphasises the possibilities that exist in children, and it also indicates that the concept of giftedness does not necessarily mean that they have also been able to develop talent. In addition to the definition above, Czeizel made a distinction between three concepts of giftedness: giftedness (potential), talent (realised) and genius (exceptional, unparalleled).

In childhood we look for potential giftedness, the activities of identifying giftedness are aimed at trying to find them. The activities of

²⁶² The CXC Act on Public education of 2011., Magyar Közlöny, Bp. 2011/162.sz. (Értelmező rendelkezések, 4. §13.)

²⁶³ GYARMATHY Éva: *Giftedness:* Its concept, components, types and identification. ELTE Eötvös Kiadó, Budapest, 2006.

²⁶⁴ CZEIZEL Endre: *Fate and giftedness*, Fitt Image és Minerva Kiadó, Budapest, 1997.

nurturing giftedness are aimed at making it possible for giftedness to be developed, i.e. to become talent.

The question rightfully arises how and on the basis of what criteria we can decide whether somebody can be considered to be potentially gifted or not. Éva Gyarmathy²⁶⁵ quotes the five criteria suggested by Sternberg, which are as follows:

Sternberg's criteria of giftedness:

- Excellence: this criterion means that the individual is superior in some dimensions relative to peers.
- Rarity: this criterion means that the individual possesses a skill or attribute that is rare among peers.
- Productivity: this criterion means that the individual must produce something in the area of giftedness.
- Demonstrability: it means that the skill or aptitude must be demonstrable through one or more valid assessments.
- Value: it means that the individual shows superior performance in a dimension that is valued by that person's society.

The task of providing for the giftedness and talented is to help individuals who are able to produce outstanding performances in such a way that they can achieve results matching their abilities, and become a creative individual by using their inner possibilities.²⁶⁶

12.2.2. Models of giftedness

Several different models of giftedness and conception of giftedness have been developed in relation to the components of giftedness.

The theories by Marland and Gardner reveal in what areas giftedness appears. ²⁶⁷ Of the many manifestations of giftedness Marland (1972) mentions six areas: general intellectual ability, specific academic aptitude, creative thinking, leadership ability, ability in visual and performing arts, and psychomotor ability. Gardner's (1983) theory of multiple intelligences proposed seven unique intelligences which can contribute to the manifestation of giftedness as well: linguistic: verbal/linguistic, logical/mathematical, spatial, musical, interpersonal, intrapersonal, and kinaesthetic.

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²⁶⁵ GYARMATHY Éva: *Giftedness*. Its concept, components, types and identification. ELTE Eötvös kiadó, Budapest, 2006.

²⁶⁶ GYARMATHY Éva: Talented teachers for the gifted. *Pedagógusképzés*, 2003. 3-4, 105-112.

²⁶⁷ GYARMATHY Éva: *Giftedness*. Its concept, components, types and identification. ELTE Eötvös kiadó, Budapest, 2006.

Another group of giftedness models focus on what components the phenomenon of giftedness is made up of.

Endre Czeizel's 2x4+1-factor model of talent provides an easily understandable framework for it. (Figure 23):

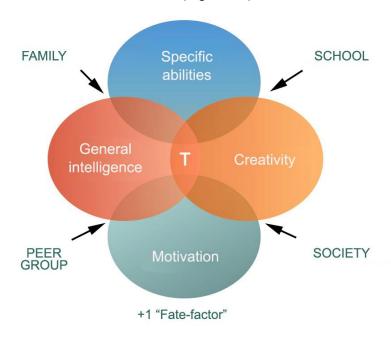


Figure 23 Endre Czeizel's 2X4+1- factor model of talent

In this model the circles show the intrapersonal characteristics of talented persons, and the factors in the square refer to the external environmental factors. **General intelligence** above average includes high level abstract thinking, advanced abilities of the mother tongue, good memory, and effective information processing strategies, etc. Their role is of course different in particular talent-areas.²⁶⁸

The **special abilities** give the characteristic feature of talent. There are many of them; the classification by Gardner is the generally accepted one.

www.tehetsegpont.hu.

BALOGH László: Theoretical starting points for giftedness and talent provision programs. 2007. (A Nemzeti Tehetségsegítő Tanács 2007. január 5-6-i tanácskozásához).

Creativity is the personality characteristic which makes it possible to produce new things.

Motivation functions as a drive force of talent, and makes the person energetic. People who are able to achieve high-level performances due to their excellent capacities – as the combination of the four above mentioned components – can be regarded to be talented.

Gagné's differentiated model of giftedness and talent ²⁶⁹ (Figure 3) can be pointed out from the aspect that he differentiates between the natural abilities present as an inner possibility (gift) and competences developed systematically during development, learning and practice, the developed talent, talent that is manifested in various domains of abilities.

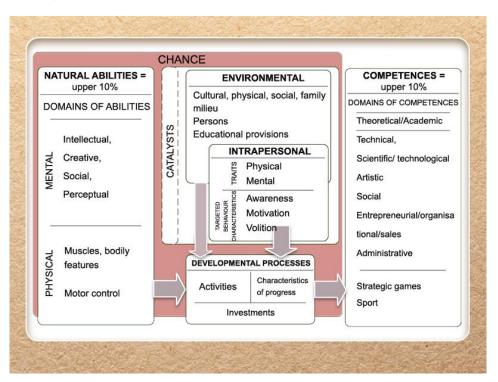


Figure 24 Gagné's model of giftedness and talent

This model points out that all talents are developed from natural abilities through learning and practice influenced by both outer,

²⁶⁹ PÉTER-SZARKA SZilvia: "The unknown acquintance": A refined version of Gafné's model of giftedness and talent. *Tehetség*, *18*, *3*, *5-7*. 2011.

environmental, and intrapersonal factors. Intrapersonal and environmental catalysts can facilitate the development of talent together.

12.2.3. The components of giftedness

In gifted students we can observe characteristics which indicate that the above mentioned components of giftedness are present. However, it must be noted that talent is unique, and thus we cannot expect it to appear always in the same way in its forms of manifestation. The characteristics of gifted and talented students appear both in the domain of cognitive functions and that of emotions and volitions. Gifted children often have better characteristics than the average even in their early phase of development. They often exhibit rapid development, or exceptional interest or performance in certain domains.

Superior abilities, which make outstanding performances possible later, appear in nearly every model.

"The concept of ability generally means all the psychological conditions which are needed to perform a given activity. In this sense, abilities must be regarded to be prerequisites for the development of skills or obtaining knowledge."

It is not uncommon that there is a different development level of various abilities within a person. Probably we all have strengths and weaknesses. We must take it into consideration when nurturing giftedness as well.

Two of the circles in Czeizel's model refer to the domain of ability. First, **general intelligence** could be pointed out, which means the individual's intellectual capacity that is manifested in all of his/her activities. However, high intelligence (above 130) does not guarantee giftedness and talent in itself. It is possible that various domains of giftedness require a different intellectual capacity, but a proper intelligence background is needed for outstanding performance. Intelligence can be regarded to be one of the most important determinants of learning performance. The value of correlation coefficients measured between different general learning abilities and general intelligence abilities fluctuates between 0,4-0,8. Of the

SZILÁGYI Klára: Individual counselling. A methodological manual for employment – career advisors. Gödöllői Agrártudományi Egyetem. Gazdaság és Társadalomtudományi Kar Tanárképző Intézetének Kiadványa. Gödöllő, 1997.

intelligence factors of intelligence verbal ability plays a major role in the correlation.²⁷¹

Secondly, **special abilities** appear in Czeizel's model.²⁷² The various domains of giftedness and talent require an outstanding level of special abilities in a different degree. Talented people produce something exceptional in a lot of different domains, which require different investments of ability. For example, a circus trapeze artist or a boxer needs the outstanding functioning of many special abilities, and these abilities are completely different from the ones a painter, a pianist, a mathematician, a scientist or a charismatic leader needs.

Some examples for special abilities:

- Talented people can be good at using symbols and symbol systems. They have got a head for numbers and letters.
- Their concentration capacity can be outstanding; they can deal with a problem for a long time, especially in their fields of interest.
- They have an unexceptionally good memory. An exceptional good memory is one of the conditions of obtaining information.
- They have larger vocabularies than their peers; they know a great number of more complicated words, and they also use them in speech.

Creativity means the ability to produce new ideas and make things, in which the organisation of various abilities makes it possible to combine isolated experience, interpret it in a novel way, and give it a new form of appearance.

"Creativity means that the individual possesses the ability to conceive an original new way of solving a certain problem. Creativity is expressed not only in solving problems, but it is more than that, it is also involved in searching for problems."²⁷³

A creative person is characterised by diverging thinking, which can find many solutions to one single problem, and it generally tries to find a solution based on mutual agreement. Parts of divergent thinking are **fluency**, abundance of ideas, **flexibility**, the ability of changing perspectives quickly, and **originality**, which is manifested in the choice of unusual, rare ideas and associations. Among creative abilities we can

²⁷¹ BÁTHORY Zoltán: *Learners, schools, differences*. OKKER Kiadó. Budapest, 1997.

CZEIZEL Endre: Fate and giftedness. Fitt Image és Minerva Kiadó, Budapest, 1997
 MÖNKS, Franz J. – YPENBURG, Irene H.: Very gifted children. Akkord Kiadó, Budapest,1998.

also mention associative thinking, combination and synthesizing, searching for alternatives, expanding borders and transgressing them if needed, using imagination, changing points of view, visualisation and metaphorical thinking. Creativity also has a crucial role in the functioning of talent, as one of the characteristics of gifted people - among others is that they find new solutions for a problematic situation, and it cannot be imagined without creative abilities. 274

Gifted children differ from their peers in their emotional characteristics as well.

- They are characterised by curiosity and desire to learn. They desire ardently to understand the world. Gifted people have a very strong sense of justice. This sense shows itself very early.
- A sense of humour. Due to an abundance of knowledge gifted students are more aware of the absurdity of everyday life than their peers.
- Emotional intensity. Gifted people more often experience emotions more intensively.
- Perfectionism. They expend a lot of energy to be able to do everything perfectly.
- Gifted children have a lot of energy, which enables them to perform more tasks in shorter time than their peers.
- Attachment. Gifted people are attached not only to people, but also to professional activities.²⁷⁵
- Their motivation is characterised by having internal control; are independent and development-oriented.
- They possess great potentials in the domain of creation and selffulfilment.
- They need little external guidance.

A high level of intrinsic motivation is manifested by a great sense of vocation, in great creators the feeling of being selected, which gives them special strength to make efforts, and facilitates their enduring work.²⁷⁶

²⁷⁴ BALOGH László: Theoretical starting points to giftedness and talent provision programs. 2007. (A Nemzeti Tehetségsegítő Tanács 2007. január 5-6-i tanácskozásához).

www.tehetsegpont.hu

²⁷⁵ THURMEZEYNÉ HELLER Erika, BALOGH László: *Musical provision for the gifted* and talented and ability development. Kocka Kör és Faculty of Central European Studies, Constantine the Philosopher University in Nitra, Debrecen, 2009.

²⁷⁶ GYARMATHY Éva: Giftedness: Its concepts, components, types and identification. ELTE Eötvös kiadó, Budapest, 2006.

12.2.4. The methods of identifying giftedness

Teachers have always been concerned with how gifted learners can be recognised, and it could be regarded to be one of the most crucial points of their practical work related to providing for gifted and talented learners.

Nowadays we can witness a change of approach to nurturing gifted and talented learners which is also manifested in recognizing gifted and talented children. Instead of the conception giftedness = ability, giftedness is considered to be a complex group of behaviours, and thus it is not the dominance of outstanding abilities that appears in their identification. Nowadays, in addition to objective data (test results), subjective data are also taken into consideration in identifying the gifted and talented. Last but not least, the view has also changed in another direction as well, i.e. instead of taking test results as the most crucial aspect into consideration, identification embedded in the provision for the gifted and talented is regarded to be the most appropriate.

The provision for the gifted and talented has pedagogical and psychological methods.

- The most commonly used pedagogical methods include teacher monitoring, and indicating it on the list of aspects of monitoring; the results of school performance tests, and learners' previous performances (marks, competition, etc.)
- Of the psychological methods we could mention the usage of various tests, which are primarily aimed at exploring learners' personality characteristics. These examinations seek to recognise the characteristics of giftedness by using intelligence tests, creativity tests and methods of examining personality.

The joint use of the following methods in recognising giftedness can make it possible for teachers to get to know students well from various aspects:

- characterisation of learners by teachers,
- tests.
- questionnaires general and in various subjects,
- opinion of school psychologists,
- characterisation by parents,
- characterisation by peers,
- complex and target-oriented use of pedagogical and psychological methods

Identifying gifted and talented children is not easy. What makes it often difficult for a psychologist to make a diagnosis of giftedness children in that he/she is expected to form an opinion after a relatively short examination (two or three meetings); it could be done with certainty only after monitoring the child's career continuously, week after week, month after month.

In our course material we present a list of monitoring aspects for screening giftedness, which was developed for primary and secondary school teachers within TÁMOP 3.4.4/B/08/1-2009-0014 competition.²⁷⁷ It facilitates the systematic identification of the characteristics of gifted paying students special attention also to children disadvantageous social background. These resources make primary screening in an examined population possible, on the results of which (by considering other data as well, e.g. marks and competition results) the children who seem to be gifted can be selected into the local giftedness provision program of the institution. The measurement tool that was developed is a list of activities which refer to the personality characteristics of the gifted, and teachers can judge the frequency of occurrence of these activities in the case of their students on a 5 degreescale.

Please fill in the list of aspects of monitoring for screening giftedness attached, and interpret your result according to the instructions.

12.2.5. The methods of providing for the gifted and talented

"Provision for the gifted and talented means the process in which the promises of talent revealed systematically are developed by the tool system of enrichment, acceleration and differentiation within complex programs."²⁷⁸

The goal of personality development in nurturing giftedness and talent: developing self-knowledge, developing effective communication

DÁVID Mária: A list of aspects of monitoring for screening gifted and talented learners – A possible pedagogical method of identifying giftedness, Heves Megyei Önkormányzat Pedagógiai Szakmai és Közművelődési Szolgáltató Intézménye, Eger, 2010.

http://tehetsegsegites.heves-pki.hu/sites/tehetsegsegites.heves-pki.hu/files/tehetségdiagnosztikai%20szempontsor_3.jpg

BALOGH László, MEZŐ Ferenc, KORMOS Dénes: *A list of concepts for giftedness points*. (Második, módosított összeállítás) Magyar Tehetségsegítő Szervezetek Szövetsége, Budapest, 2011.

and conflict management techniques, developing coping strategies, more effective stress management, and strengthening the psychological immune system. ²⁷⁹

Complex programs for developing giftedness are often used in nurturing giftedness and talent, in which the development of personality factors also play a crucial role in addition to abilities.

When panning these programs, we must take the following into consideration:

- developing the strong side of the gifted child
- developing the weak side of the gifted child, (Almost every gifted child has it, and it can prevent the development of the strong side, for example, low self-esteem, lack of a sense of security, etc.),
- creating a proper atmosphere (harmonious social relationships with teachers, development experts and peers),
- leisure time and relaxation activities, which facilitate relaxation and resting.

Three major groups of methods of providing for the gifted and talented are discussed in the literature: teaching in a differentiated organisational frameworks, enrichment-expansion and acceleration. Next we will give a brief description of these methods of nurturing the gifted and talented.

Please visit the website <u>www.tehetseg.hu</u>. Search for the giftedness map, and write down what giftedness points that deal with particular domains of giftedness can be found in your neighbourhood.

Teaching in differentiated organisational frameworks

The development of talent can take place in different organisational forms in school and outside school. The place for recognising and developing giftedness and talent is primarily an education lesson. However, in practice the gifted and talented must be provided for both in a lesson and outside school, because these organisational frames make differentiation more feasible.

The main components of effective provision for the gifted and talented are:

the various forms of differentiation in a lesson.

OROSZ Róbert: Te role of personality development in nurturing the gifted and talented. In INÁNTSY-PAP Judit, OROSZ Róbert, PÉK Győző, NAGY Tamás: Tehetség és személyiségfejlesztés. Magyar Tehetségsegítő Szervezetek Szövetsége, Budapest, 2010.

- separate classes (e.g. classes specialized in a particular subject),
- specialization,
- engagement in extracurricular activities in the afternoon (study circles, compacting, school literary and debating societies, trainings),
- weekend programmes,
- summer courses,
- mentor programs, etc.

The form of nurturing giftedness chosen must match learners' characteristics, and the forms of giftedness provision in a lesson and outside a lesson or school must be combined for its effectiveness, because talent development can be successful only in a unified system.²⁸⁰

Enrichment

Content based the most important principle of talent development in school is enrichment. Its goal is to expand knowledge and the process of acquisition, which surpasses the compulsory material. Passow's guidelines²⁸¹ serve as a basis for putting developmental work in practice, and prove that emphasis must be placed on quality enrichment.

In depth enrichment we provide more possibilities for gifted children to use their knowledge and abilities than for average ones.

Enrichment at self-pacing: gifted children are able to learn more than their peers in the same amount of time, and thus their enrichment can be realised involving novel contents as well.

Content-based enrichment: means that the course material must be designed with regards to learners' characteristics: the unique nature, needs and interests of learners must be made use of, and these must be developed.

Enrichment of processing abilities means primarily the development of creative and critical thinking during discovering and interdisciplinary activities.

²⁸⁰ BALOGH László, MEZŐ Ferenc, KORMOS Dénes: A glossary of concepts for giftedness points. (Második, módosított összeállítás) Magyar Tehetségsegítő Szervezetek Szövetsége, Budapest, 2011.

BALOGH László: Theoretical starting points to giftedness development programs. 2007. (A Nemzeti Tehetségsegítő Tanács 2007. január 5-6-i tanácskozásához). www.tehetsegpont.hu.

Renzulli's Enrichment Triad Model (1977) makes a distinction between three types of enrichment programs for gifted and talented students.²⁸²

- The first type on enrichment involves general experiences of exploration, which makes students familiar with new and exciting topics, ideas and fields of knowledge not found in traditional curriculums.
- The second type of enrichment comprises training activities in groups, which were designed to develop cognitive and affective processes. These activities can be provided for all children, not only for the gifted ones.
- The third type of enrichment means participating in the investigation of real problems individually or in small groups. Special identification methods are used to choose children for the third type of enrichment. It is the open behaviour of a child that is especially observed, which reflects his/her current interest, motivation and attitude to a particular topic or project.

Acceleration

This method of talent development means that gifted and talented learners usually develop more quickly than their peers, and therefore we must provide a framework for them which enables them to progress at their own pace (more quickly).

Acceleration has several different forms. The glossary of concepts related to giftedness provision contains the following ones:

- Earlier entry to school.
- Being advanced to a higher class, when a gifted student gets into a higher class than what would be expected according to his/her age. The principles of successful advancement, however, must be obeyed. These are as follows:
 - IQ above 125, performance is higher than the average of target year.
 - Balanced ability structure, good health and physical condition, appropriate social-emotional level.
 - Proper timing, the positive attitude of receiving teacher.
 - Mock trial teaching.
 - Disregarding extreme expectations.
 - Advancing possibly in groups.
 - Providing support in the case of stepping back.

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²⁸² BALOGH László: Complex giftedness development programs. Didakt Kiadó, Debrecen, 2012.

- Classes of type D, in which selected gifted children can satisfy the requirements of the senior section of the primary school in a shorter time.
- Shortening study time. They complete the whole school time (8 years, 12 years) in a shorter time.
- Starting university studies earlier

Choosing a method of nurturing gifted and talented learners should match the personality of learners and is unique. There is no general recipe for one that could be used for dealing with every gifted and talented learner. Teachers' professional training and creativity are needed to find the most suitable and adequate method of providing for gifted and talented learners.

12.3. Summary, questions

12.3.1. Summary

The twelfth lesson provides primary knowledge about the characteristics of gifted and talented learners, the possibilities of recognising giftedness, and the methods of developing and providing for the gifted and talented. Furthermore, it prepares teacher trainees to plan their pedagogical work matching the needs of gifted and talented learners.

The theoretical part of the lesson makes the concept of giftedness and talent clear. It gives a detailed description of the components of giftedness, focussing on the personality characteristics of gifted and talented young people. It presents some models of giftedness and talent, and knowledge related to the identification and development of giftedness and talent.

The practical exercises make students acquainted with how to use the list of aspects of monitoring for screening gifted and talented learners, which was developed by the teachers of the Department of Psychology at Eszterházy Károly College. In addition, it provides teacher trainees with practical exercises to search for information related to talent development.

12.3.2. Questions for self-assessment

- What personality characteristics do gifted and talented learners have according to Czeizel's model?
- What is the border of average intelligence?

- Enumerate some creative abilities.
- What methods can be used to identify gifted and talented learners?
- What are the guidelines of advancing gifted learners into higher classes?

12.3.3. Practice exercises

Match the components of giftedness with the characteristics related to them

special abilities
 creativity
 divergent thinking
 e.g. manual skill

3. motivation C. the driving force providing energy

for performance

Indicate the most commonly used method of providing for the gifted and talented (There are several different good answers here.)

- a. remediation
- b. acceleration
- c. closing achievement gaps
- d. enrichment expansion

Which method of nurturing giftedness would you match the example below with?

A teacher of mathematics brings extra exercises for his/her gifted learners into class.

- a. acceleration
- b. enrichment expansion
- differentiated organisational frameworks in school or outside school

The correct answers are: 1-B, 2-A, 3-C, B-D, B

13. SUMMARY

13.1. Contextual summary

Course material is made up of 11 lessons. These lessons can be divided into 3 modules. The first education-psychological module is concerned with socialization, social phenomena and the fields related to the social world of schools.

Socialization is the process of integration into society, the acquisition of the behaviour forms, attitudes and norms regarded to be desirable by society. In the second lesson we present the latest ideas, models, according to which the environmental and cultural factors are important determinants of socialization and the individual participates actively in the social development. These are comprised by the ecological, cultural and reciprocal models.

We deal with the scenes of socialization, the family, which has an important role in socialization functions such as providing the emotional basis for personality development, teaching speech, the first interpersonal interactions, the offering the first model for social behaviour, transmitting general values and norms as well as the formation of self-consciousness and identity.

The third lesson gives an overview of the phenomena which influence social relationships. During person perception we form an image about another person while we often make only inferences about the characteristics that cannot be directly observed. Therefore this process can be influenced and distorted by many factors. There have been created several theories about the process of imagery and making impressions. The major models are the summation model, the theory of central trait, the principle of addition and the theories of hidden personality.

Attitudes mean our evaluative reaction to the things of the world. They have three components: the cognitive, affective and conative (behavioural) ones. The functions of attitudes can be ego-defensive, instrumental or knowledge related. The major theories related to the dynamics of attitudes are Heider's balance theory, Osgood's congruity theory and Festiger's cognitive dissonance theory.

A stereotype is an attitude formed about a given social group. Stereotypes help us to systemize the information related to other people, and at the same time even because of this simplification they can also distort reality.

Prejudice is a hostile or negative attitude which is based on generalizations coming from wrong or not complete information.

Research supposes several different reasons in the background of their development. The lesson also presents some methods of how to reduce prejudices.

The fourth lesson deals with the social world of schools. Man is a social being. Adapting to the social environment is an indispensable part of our development. The ability of social behaviour is called social competence. The appropriate development level needed for this in terms of intelligence, emotion and ego development by lower elementary age facilitate the closer, more effective forms of social relationships. Peer relationships become more and more important. Besides the parents the behaviour of peers serves more and more as a model and their performance provides a basis of social comparison.

In school we become members of a class community. It can be observed that a school class is both a formal and informal group in one. It is formal as the members did not join voluntarily; it is formed by regulation, tries to satisfy formal goals and rules brought from the outside prevail in it. This is what gives the formal frame of the function of the class. At the same time, it is also an informal group because sympathy relationships and friendships are made and a group structure different from formal roles will be formed with informal roles.

The school class mostly serves as a reference group as well, and as such it has a normative and comparative function. The norms of the class its behaviour rules accepted for everybody are formed gradually, and the teacher plays a considerable role in it. The social position in the class has an impact on students' general wellbeing and learning motivations. Friendship relationships are very important for students, the friendship relationships and informal groups of boys and girls can have features. The system of informal relationships can be measured by Moreno's sociometric method.

The presence of peers can have an impact on our behaviour. Whether children's performance increases or decreases in the presence of peers, depends on several factors: such as the nature of the exercise, the formal structure and atmosphere of the class, and personal characteristics such as the level of anxiety, self-estimation, failure avoidance or success orientation, etc.

It is very important how we form the contact and relationships between students as teachers. One place where we can influence interactions is the organisation of the learning situation, which can be co-operative, competitive or individualistic. The organisation of the exercises, the learning situation should, on the one hand, match the education goal. On the other hand, their impact on social relationships and the school atmosphere must be taken into consideration as well. Both competition

and cooperation have advantages and disadvantages; these forms must be applied consciously. At the same time the present view is that competition and cooperation are not mutually exclusive, opposing behaviours but rather they exist parallel, even within a situation as well.

Conflicts are unavoidable parts of human life; we encounter conflicts day by day in schools as well. Conflict solution can be a positive phenomenon that facilitates development, and therefore is it fundamentally important that a teacher should have proper conflict management skills.

In schools we can often experience positive behaviour towards each other. Besides collaboration another positive manifestation is altruism, which means giving unselfish help to others. An explanation for it can be the hope of future return, maintaining a positive self-image or that is behaviour according norms.

Communication is sharing and exchanging emotions and ideas via the common codes and symbols used by the communicating parties. On the basis of the channel transmitting message we can make a distinction between verbal and non-verbal communication (which cannot be confused with unconscious metacommunication), according to the level of communication we can talk about intrapersonal, interpersonal and group communication. Classroom communication plays a significant role in student performance as well as in the formation of interpersonal relationships between the teacher and students. The skills determining teacher trustworthiness and effectiveness are, for example, exquisite, polished speech, a rich vocabulary, the ability to present the material in an interesting way, maintaining motivation and attention and empathy are further important factors of successful learning.

The second learning-methodological module discusses the general questions of learning in schools, the improvement of learning and their most important tasks taking the characteristics of the age group into consideration, outlining the external environmental and internal personality-dependent factors influencing learning.

The fifth lesson outlines how learning as information processing can be modelled, in which we must go through the four phases of information processing as well as it presents the various levels of the relation between information the input and output of information. It touches upon the importance of complex learning and its role in the continuous reorganisation of knowledge. In the next parts it describes the levels of learning motivation and explores why metacognition, self-reflexion and awareness related to our own learning activity are important in the background of more efficient learning results.

The lesson also deals with the most important international monitoring examinations and their major results, which called the attention to the necessity of developing the competences related to independent learning and preparing students for lifelong learning in different educational settings due to the information explosion experienced in our days, and the changes in the learning environment.

The theoretical part of the sixth lesson gives an insight into the main theoretical questions of improving learning, the major tasks of the direct and indirect improvement of learning, and highlights the importance of taking age-related characteristics into consideration in planning improvement.

It explores the various approaches to school motivation from different perspectives, and presents Kozeki's integrative model, which describes the components of school motivation by eliminating the deficiencies of the particular approaches.

The practical exercises of the lesson make it possible for teacher trainees to think over the psychic, social and environmental factors of learning consciously in their own learning activities, as well as they show examples for developing exercises in particular fields of competence.

The theoretical part of the seventh lesson outlines the theoretical approaches of learning style, presenting the psychological and environmental factors which play a significant role in developing the unique characteristics in the individual which basically determine people's learning activities, determine the ways of their handling information, perceiving, thinking, and their efficiency in solving tasks and making decisions.

It points out that a crucial condition for independent learning is to use the methods necessary for learning at competency-level, for which it is necessary to get to know the learning style of learners so that they can acquire learning techniques and strategies which match their learning style, and contribute to enhancing learning efficiency.

The practical exercises of the lesson make teacher trainees acquainted with the examination possibilities of learning style. Furthermore, it provides them with exercises to think over how familiarity with learning styles, learning techniques and methods, and the ways of acquiring them can be integrated into the pedagogical activities.

Module three is concerned with the question of individual treatment. The eighth lesson discusses the external and internal conditions influencing learning performance and efficiency, touching upon the determining role of the teacher and the pedagogical situation, as well as the effect of the narrower and broader medium. It presents the background of the biological, psychological and environmental causes of

the deviation from the course of normal development, and within the environmental ones the background of the causes coming from the school and family environment. The last bigger unit of the lesson explores the characteristics and the classification of children requiring special treatment, and the ones with disadvantaged social situation, and its relevant legal background.

The ninth lesson discusses the phenomenon causing one of the problems that perhaps occur most frequently in schools – the types of learning problems. It describes the concepts of learning difficulties, hindrances in learning and learning disorders, and characterises briefly their symptoms and teacher tasks, and furthermore, it explores the characteristic features of integrated education. In addition, it prepares teacher trainees for recognising learners with learning disabilities, and planning the pedagogical work matching their needs.

The tenth lesson prepares teachers trainees for the integrated education and teaching of learners with disabilities in public education. It is important to know that this topic has so diverse and has so many ramifications that only the most fundamental knowledge can be condensed into one lesson. If practising teachers have to educate and teach learners with disabilities, it is advisable for them to cooperate with a qualified special education teacher.

As is defined in law, a child, a learner with special educational needs is a child, a learner requiring special treatment who on the basis of an expert committee' opinion has physical, sensory disabilities, mental retardation or speech impairment; is cumulatively disabled in the occurrence of several different disabilities, and has autism spectrum syndrome or other psychic developmental disorders, (severe learning, attention- or behavioural regulation disorder). ²⁸³

A sensory disability is related to visual and hearing impairment of various degrees of severity. People with visual impairment can be classified into the blind, the near-total blind and the ones with low vision. People with hearing impairment are grouped into the deaf and the groups of the ones with hearing loss of various severity degrees.

Learners with physical disability are called the ones who are permanently hindered in executing their age-matched activities due to the impairment/lack of the structure and function of the support system and locomotion, as a result of the change in their ability to do physical performance. Physical impairment appears in many different forms, involving loss of limbs, muscle diseases, paralysis, and the diseases of

²⁸³ The CXC Act on national public education of 2011. Magyar Közlöny 162. szám, Budapest,

the motor systems (bone, muscle, joint and nervous system), which permanently hinder them in performing proper forms of movement.

Learners with speech impairment are considerably limited in speech and communication. As a result transitory or permanent disorders can emerge in their language, communication and learning skills and in the development of social relationships. The impairment can appear in the problem of pronouncing speech sounds properly, the disorders of speech perception and comprehension, and the problem of speech rhythm.

Mental retardation refers to substantial limitations in present functioning, which is characterized by significantly subaverage intellectual functioning. The intellectual deficiency can have various degrees of severity. In integrated education we can meet the group of learners with mild mental retardation most frequently. The group of individuals with mild mental retardation comprises the group of children in whom the tested intelligence quotient is in the upper third of the subnormal range (IQ 50-69), and whose slow information processing skill makes it difficult for them to advance in acquiring the course material at the same pace as the other learners.

Autism is a life-long, pervasive developmental disorder in which qualitative impairment manifest itself in three areas: in reciprocal social interaction, communication; and flexible thinking and behaviour organisation

Following the examinations carried out by doctors, special education teachers and psychologists, committees of expert on the relevant type of disability can make the diagnosis of disability, and make suggestions on the integrated education of learners with disabilities. It advisable for the professionals concerned to work in teams in the education of learners with disabilities. Besides the teachers working in mainstream schools, the cooperation of special education teachers, psychologists and social experts is also needed.

The eleventh lesson makes an attempt to reveal conduct and socialization disorders. Such is the complexity of the topic that there is no agreement among scholars about it, either. The terminology and the aspects of classification are constantly changing. In the lesson we made an attempt to give a classification of the problems which is easier to grasp for teachers than the psychiatric classification without getting to far from the traditional classification. This is the reason why we discussed the problems according to the following grouping: conduct disorders, emotional, mood disorders, anxiety disorders, functional disorders, and conduct disorders of socialization origin.

The various biological, psychic and social causes can be blamed together in the development of particular problems. Furthermore, it is

also important for us to take the educational psychological characteristics of age in consideration when we judge children's behaviour.

One of the most common and most widely researched diseases in childhood- and adolescence is hyperkinetic syndrome (ADHD). Its typical symptoms include intention, overactivity and impulsiveness. This is the best-known conduct disorder which is mostly referred to as "hyperactivity" in colloquial language. We mentioned stereotyped movements among the conduct orders of psychic origin (e.g. tic) as well.

Of the emotional disorders depression, bipolar disorders and anxiety disorders are the ones that occur in adolescence make it hard for learners to be at school and adapt to school.

Functional disorders are abnormalities of primary bodily functions of psychic origin (e.g. sleeping, eating and defecating). They include obesity, anorexia nervosa, bulimia nervosa, and sleep disorders.

From the educational psychological characteristics of adolescence, adolescents' search for identity and values and active trials follows that deviant behaviour is more common at this age than any other time. One typical deviance of youth is belonging to a deviant subculture or group, when young people get into bad company. Drug addiction and the spread of using synthetic drugs cause severe problems among young people today. Conduct disorders often appear in aggressive behaviour, one type of which is bullying, the harassment of children at school who cannot defend themselves.

The last, twelfth lesson provides primary knowledge about the characteristics of gifted and talented learners, the possibilities of recognising giftedness, and the methods of developing and providing for the gifted and talented. Furthermore, it prepares teacher trainees to plan their pedagogical work matching the needs of gifted and talented learners.

The theoretical part of the lesson makes the concept of giftedness and talent clear. It gives a detailed description of the components of giftedness, focussing on the personality characteristics of gifted and talented young people. It presents some models of giftedness and talent, and knowledge related to the identification and development of giftedness and talent.

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14. APPENDICES

14.1. Literature

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14.2. Questionnaires

1. Questionnaire: Attitude to learning

<u>Instruction</u>: Read the sentences below very carefully. Decide which of the five options is typical of you, and write the proper number after the sentences.

The method of scoring:

- -2: It is not all typical of me, I don't agree with it at all.
- -1: It is generally typical of me, I generally don't agree with it.
- 0: I can't decide it.
- +1: It is often typical of me, I mostly agree with it.
- +2: It is almost always typical of me. I completely agree with it.
- 1. When I learn, it is always before my eyes how I can get to a higher school:.....
- 2. When I start working on an exercise, nothing can take me off my work:.....
- 3. I usually learn only what I am interested in:....
- 4. My goal is to continue my studies, and that is why I learn thoroughly:....
- 5. I'm ashamed off my peers when I do badly in an oral performance:....
- 6. If acquired knowledge wasn't rewarded by good marks, I wouldn't learn:....
- 7. I also look up things by myself to find an answer to my problems:....
- 8. It is worth learning well, because I'm awarded for it at home:....
- 9. Sometimes I become immersed in learning so much that I forget my other duties:....
- 10. If I find something interesting in the material, I often read other related materials that are not compulsory:....
- 11. A mark is a measure of our knowledge, and that is why I try to get the best possible mark:....
- 12. I spend more time learning if I feel that I lag behind my peers:....
- 13. It like it when a teacher praises me in front of the class:....

- 14. If I think of the fact that I can ensure my further study by more intensive learning, I work even harder:...
- 15. I learn more boring subjects as well, because it is important what mark I get:....
- 16. If I get a good school report, I get a present for it at home:...
- 17. It often bothers me that I might not be able to meet my parents' expectations:....
- 18. I can concentrate on learning so much that nothing can disturb me:....
- 19. I like going into the depth of things:....
- 20. It bothers me what my peers think about me if I perform badly:....
- 21. Greater knowledge ensures my success:....
- 22. If my oral performance wasn't qualified by a mark, learning wouldn't be so exciting for me:....
- 23. I enjoy solving a complicated exercise by doing independent research:....
- 24. If I want to solve a problem, nothing can distract me from it:....
- 25. I will be scolded at home if I get a bad mark:....
- 26. What encourages me to learn is that my peers should acknowledge me:....
- 27. Greater knowledge ensures that I can get a higher level of education:...
- 28. My parents appreciate good study results by giving money, presents, or other benefits:....
- 29. A good mark is the most important for me:....
- 30. I work and learn with great endurance:...
- 31. My parents give me rewards for good learning results:...

Evaluation

This method with a questionnaire gives a good orientation about what motives influence learners' attitude to learning.

These motives are the following:

- a) further study, success, higher school (1,4,14,21,27)
- b) interest, research (3,7,10,19,23)
- c) immersion, enduring work (2,9,18,24,30)
- d) a good mark in school (6,11,15,22,29)
- e) occupying the proper position in class (5,12,13,20,26)
- f) reward in family (8,16,17,25,28,31)

We add up the scores by motive groups, and calculate the average of them.

2. Questionnaire: Kozéki's questionnaire of school motivation

<u>Instruction:</u> Read the sentences below very carefully. Decide which of the five options is typical of you, and write the proper letter after the sentences.

The possible answers are as follows: a: I completely agree with it. b: I partly agree with it. c: I more or less agree with it. d: I mostly agree with it e: I don't agree with it at all.
1. I like talking with my parents about what has happened at schoo
 Most teachers are always fair to all students
4. If I become immersed in an activity, my parents don't disturb me
5. Sometimes I am so fascinated by what we are learning at school that want to deal with it later, too6. School is boring(-)
7. I'm also ashamed in front of myself if I don't perform well in school.
8. It is very important for me that my teachers should know that they can trust me
9. Punishment in school is always unjust (-)10. Adults expect way too much from young people, and give them very little help in return
11. It makes me feel very good that my parents are happy that I perform well at school
12. It would be a bad feeling if I disappointed my teachers.13. I'm happy if I can help my peers in school work.14. I don't like it when I have to do my exercises alone.(-)

15. I put off doing my homework until the last minute (-)	
16. Most lessons are boring (-)	
17. I admit doing something wrong rather than try to conceal it	
18. If teachers let everybody do at school what they want, I'd like s	chool
better (-)	
19. It is better if I'm made to correct my mistakes than if they are	taken
no notice of	
20. My teachers are not satisfied with what I do even if I try hard	
21. It does not interest my parents at all what happens to me at so	chool.
(-)	
22. There are very few teachers that I could be enthusiastic a	ıbout.
(-)	
23. It's a good feeling if my peers can see that I work well	
24. It cannot be expected from children to have good idea	s by
themselves (-)	
 We learn so many good things in school that we can make use our day-to-day life 	of in
26. In most of my free time I try to find things by myself which in	terest
me	.01030
27. If I get a task, I always try to perform it as I'm expected	to do
it	
28. School rules are generally right and sensible; I always try to	obey
them	
29. If I have done something wrong, I'm always ready to bea	r the
consequences	
30. It is difficult for me to put up with the pressure that teachers exe	ert on
me	
31. I can always rely on my parents' help and support with regards t	to my
school work	
32. Unfortunately, most teachers don't really bother to explain things	well.
(-)	
33. I don't bother about what others think of me (-)	
34. My parents always find it important what my opinion is	
35. I cannot really make use of what we learn at school (-))
36. It cheers me up when we start learning new things	
37. I always find an excuse for why I haven't done my home	work.
(-)	

38. If I find school work difficult, I usually give up making efforts (-)
39. I must always try to find some excuses (-)
40. My parents expect too much from me, and put too much pressure on me
41. Adults don't really try to understand young people's feelings
42. It is often teachers who are to be blamed when students get into trouble in school (-)
43. I feel that it is quite difficult for the others to get on with me (-)
44. I'd prefer to find out myself how something must be done
45. If an exercise is difficult, I lose my interest in it too quickly (-
46. I find a lot of lesson tremendously exciting and very interesting.
47. If somebody can rely on me in something, I always do it
48. I'm always ready to take the responsibility for what I have done no matter what the consequences are
49. My parents have unrealistic expectations of my school performance.
50. I feel I meet my parents' expectation in my school performance.
51. If I perform well at school, my parents always show that they are satisfied with me
52. Most teachers try to help every student as much as they can
53. In this school the relationship between children is good
54. They expect me to find a solution in too many things by myself.
(-)
55. I don't mind having to work hard if I can learn important things in the meantime
56. I find school work extremely interesting
57. I always try to grain my parents' trust
58. Only weak people like rules and order (-)
59. Remorse is even worse than severe punishment
60. Adults always expect too much from young people

Evaluation

This method of questionnaire is aimed at approaching school learning from the aspect of motivation in learners of 1-18 years old, in three dimensions (Followers, Curious students, Achievers), and in 3 group of motives for each dimension, which are completed by a 10. category aimed at grasping the feeling of pressure. The nature and strength of motives can be explored by it.

The questionnaire can be filled in a group or individually. In the case of filling it in a group, it is advisable to write the options on the board, and leave them on it until students finish filling it in.

The choice of answer "a" usually means 5 scores; the choice of "b" means 4 scores, and so on. However, some items must be interpreted the other way round, the choice of answer "e" means 5 scores; that of "d" 4 scores, and so on there. The signal (-) in brackets indicates that the relevant item must be scored in the opposite direction.

Scoring having been finished, we add up the scores motive by motive, and dimension by dimension. We can use the results of Kozéki's (1986) examination of a Hungarian pattern in interpreting the results.

The structure of the questionnaire

Every item ending in the same number (e.g. 1, 11, 21) belongs to one given scale.

- a, FOLLOWERS (affective/social) dimension
- warmth (M1): the need of thinking, emotional warmth
- identification (M2): the need of being accepted, especially on the part of teachers
- affiliation (M3): the need of belonging, especially to peers
- b, CURIOUS LEARNERS (cognitive, activity) dimension
- independence (M4): the need of following their own way
- competence (M5): the need of acquiring knowledge
- interest (M6): the need of pleasant shared activity

- c, ACHIEVERS (moral/self-integrative) dimension
- conscience (M7): the need of trust, evaluation, self-worth
- the need of order (M8): the need of following values
- responsibility (M9): self-integration, the need of moral personality and behaviour

3. Questionnaire: A questionnaire of learning styles

<u>Instruction:</u> Read the sentences below very carefully. Decide which of the five options is typical of you, and circle that number.

- 1 = means that it is not typical of you
- 2 = means that it is rather not typical of you than it is
- 3 = you cannot decide it, perhaps both yes, and no
- 4 = it is rather typical of you than it isn't
- 5 = yes, it is typical of you

If possible, use the choice of three answers rarely, only when you cannot make a decision at all. We wish you the best of luck in your work.

- 1. If I can both see and hear the text to be learnt, it is easy for me to remember it.
 - 5 4 3 2 1
- 2. When I learn, I usually read the text of the course material aloud.
 - 5 4 3 2 1
- 3. I prefer learning with my classmates or friend to learning alone.
 - 5 4 3 2 1
- 4. It is very useful for me if the teacher shows me figures on the board or projector when he/she explains something.
 - 5 4 3 2 1
- 5. If I prepare figures, I understand the lesson better than if I only read it.
 - 5 4 3 2 1
- 6. I can learn well if I just learn by reading the lesson silently.
 - 5 4 3 2 1
- 7. I prefer spending my time by drawing and painting to games requiring sport and exercises.

5 4 3 2 1

8.	. It often happens that I recite the lesson orally by myself. 5 4 3 2 1
9.	. If I write down the text that I must learn, it is easier for me to memorise it than if I only see or hear it. 5 4 3 2 1
10	0. I don't like exercises which I have to rack my brain on. 5 4 3 2 1
1	 It bothers me if it is really quiet while I am learning. 4 3 2 1
1:	2. I prefer exercises when I have to deal with tangible things and objects to seeing only drawing, figures and texts. 5 4 3 2 1
1;	 It is easier for me to do an exercise in which I have to learn some movements than to understand texts. 4 3 2 1
14	4. It is better for me if I hear teachers' explanations than learn the material from the book.5 4 3 2 1
15	5. I learn rules word by word. 5 4 3 2 1
10	6. If I make a figure for myself, I can understand the lesson better than as if I just looked at a drawing made by somebody else. 5 4 3 2 1
1	7. When the teacher asks me to answer his/her questions, I often answer earlier than I could think over what I say. 5 4 3 2 1
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me.	5	4	3	2	1
	5	4	3	2	1
20. If I ha			usse	ed t	he course material with somebody, I learn
	-	4	3	2	1
21. I can	learı	n on	ıly ir	ı co	mplete quiet.
	5	4	3	2	1
22. When	ı I le	arn	nev	w th	ings, I prefer being shown what to do being
	rally	wha	at I a	am :	supposed to do.
	5	4	3	2	1
23. If son	nebo	ody	tell	s m	ne the lesson orally, it is easier for me
	stan	d it	thaı	า by	simply just reading it.
	stan	•	thaı	า by	
	stan 5	id it	thai 3	n by 2	simply just reading it.
under	stan 5	id it 4 ning	thai 3	n by 2 ne.	simply just reading it. 1
under 24. I like I	stan 5 earr 5	nd it 4 ning 4	thai 3 aloi 3	n by 2 ne. 2	simply just reading it. 1
under 24. I like I	earr 5 urbs	nd it 4 ning 4 meng.	thai 3 aloi 3	n by 2 ne. 2 ry n	r simply just reading it. 1 1 nuch if people are talking around me while
under 24. I like I 25. It dist	earr 5 urbs	id it 4 ning 4 me	thai 3 aloi 3	n by 2 ne. 2 ry n	r simply just reading it. 1 1 nuch if people are talking around me while
under 24. I like I 25. It dist am le	earr 5 urbs arnir 5	nd it 4 ning 4 s meang. 4	thai 3 alor 3 • ve	n by 2 ne. 2 ry n	r simply just reading it. 1 1 nuch if people are talking around me while
under 24. I like I 25. It dist am le	earr 5 urbs arnir 5	nd it 4 ning 4 s meang. 4	thai 3 aloi 3 • ve 3	n by 2 ne. 2 ry n 2	r simply just reading it. 1 nuch if people are talking around me while 1 ne radio or CD player is on.
24. I like I 25. It dist am lea	stan 5 learr 5 urbs arnii 5 learr 5	nd it 4 hing 4 hing. 4 hing. 4 hing. 4	than 3 alon 3 ve ve 3 sily 3	n by 2 ne. 2 ry n 2 if th 2	r simply just reading it. 1 nuch if people are talking around me while 1 ne radio or CD player is on.

18. I ask being asked to talk about what I have learnt.

5 4 3 2 1

5 4 3 2 1

5 4 3 2 1

understand.

28. It often happens that I find the solution to a math exercise, but I

30. It often happens that I also learn things that I don't really

cannot explain and prove how I have got to the solution.

29. I prefer showing how to do something to explaining it.

31. When I do a maths exercise, I can justify nearly every step of why I did that in that way.5 4 3 2 1
32. A teacher's explanation doesn't mean much for me, I can learn everything from the book. 5 4 3 2 1
33. I can do several various things that would be difficult to explain by words (e.g. repairing toys and structures, macramé, etc.).5 4 3 2 1
34. It is easier for me to memorise movements than pictures or figures. 5 4 3 2 1

Evaluation

The scales of the questionnaire: Auditory: 2, 6n, 8, 14, 23, 32n

Visual: 4, 5, 19, 22, 29 Motor: 7n, 9, 12, 16, 33, 34

Social: 3, 18, 20, 24n Quiet: 11n, 21, 25, 26n

Impulsive: 1n, 13, 17, 28, 31n Mechanical: 10, 15, 27, 30

We get the value (score) of the item marked by "n" if we subtract the marked scale value of the item (score) from 6. Thus, in the case of question 11, if somebody circles the number 5, we must take the value 6-5=1 in the calculation of scale value into consideration.

We can compare particular scale values properly, if we calculate with **averages**. In the case of the auditory scale it means that we multiple the obtained sum by six; in the case of the mechanical one by 4, etc.

4. Questionnaire: Kolb's questionnaire of learning styles

<u>Instruction:</u> You can find four statements in each group marked by a letter. Rank them in each group: write the score 4 to the statement which you think is most suitable for you, and the score 1 for the least suitable one. You must write all four numbers in each group.

A
1) I think over very carefully what I would like to learn about score 2) When I learn, I take care about not to get immersed in the course material too much score
3) I like learning only if I can devote myself completely to learning
I can make good progress in learning only if it has some kind of a practical goal score
B
 I feel I can very easily take in what I hear score When learning I continuously compare knew knowledge with reality score
 I like learning only by being immersed in learning and analysing things carefully score
4) When I meet contradictory statements when learn, I don't want to find it out immediately whether they are true or not score
C 1) When I learn, a quiet, harmonious environment is important for me score
 When I learn, I also watch the others. It interests me what they do. score
 Before I start finding a solution, first I like thinking about the problem. score
4) I find learning by acting the most effective score
D1) When I learn, I like taking the advice of more experienced people. score

2) Learning is enterprise. You cannot always know in advance whether the energy put into learning will be compensated for score 3) Before starting to learn, you must consider the possibilities and the consequences score 4) It's a good feeling that I am interested in and know the world around me score
E 1) I am primarily intuitive. I often come across a solution without knowing that I have done it score 2) I find the result of learning very important. I can learn only if I know in advance what I do and why I do it score 3) I like building up things logically. The most interesting part of solving a problem is when I determine the steps score 4) When I learn, I don't accept statements; I ask questions to understand things score
F 1) I prefer the more abstract, intellectual stages of learning to concrete tasks score 2) While I learn, I observe both myself and the others carefully score 3) I like learning situations in which I have concrete tasks clearly determined and taken from reality score 4) I like it when learning activates all my abilities and features score
G 1) I find learning really successful when I can use what I have learnt immediately score 2) I find learning really successful when I can view things from a proper distance score 3) I find learning really successful when I know that I will be able to use in the future what I learn score 4) Learning must satisfy my inner needs score
H 1) I think that we can learn most from experience score

2) The most important condition of successful learning is accurate and
careful observation score
3) Learning primarily made up of intellectual components is the most
successful one score
4) Most successful learning is the one that tries to find new solutions
instead of the tangible ones score
1) Learning is most successful for me when I deal with a thing very
intensively, and I become completely immersed in it score
2) Learning is most successful for me when I can view things from a
proper distance score
3) I can learn things that can be approached rationally most successful.
score
4) In the process of learning it is important for me to know that I am
responsible for my learning, and nobody else can do it instead of me
score

Evaluation

After you have filled in the questionnaire, i.e. you have ranked all the statements in each group by numbers (from group "A" to group "I"), add up your scores according to the following:

The dimension of the characteristics related to information intake, or in other words, the dimension of perception:

You must add up the scores of the first statement of the following groups related to the characteristics of "CE" (concrete experience): B, C, D, E, G, H

You must add up the scores of the third statement of the following groups related to the characteristics of "AC" (abstract, conceptualisation): B, C, D, E, H, I.

The characteristics related to information processing, i.e. the dimension of processing:

You must add up the scores of the second statement of the following groups related to the characteristics of "RO" (reflective observation): A, C, F, G, H, I

You must add up the scores of the fourth statement of the following groups related to the characteristics of "AE" (active, experimentation): A, C, F, G, H, I

The higher the score of one of the endpoints of the dimension is (CE-AC or AE-RO), the more the characteristics related to that dimension characterise our learning. The endpoints of the dimension seem to be opposites. We could think that: the opposite of concrete is abstract, the opposite of active is observational. However, these are not pairs of opposites. This is about the two endpoints of the same dimension. We are situated, and our learning style can be placed between these endpoints. It can happen that within one dimension only one of the characteristics marked on the two endpoints refers to us, or one of them refers to us more than the other (this is what happens most often), or both characteristics refer to us strongly, or both of them hardly refer to us.

What are these characteristics?

The characteristics of the learning style based on concrete, experience: Such learners pay attention to the realities of the present, and relate the contents they got newly acquainted with to this. They like paying attention to others, and like learning with others. They appreciate human relations, the more real situations, and are open to solve problems.

The characteristics of abstract, concentualisation learning style: Logical connections, conceptions and thinking play an important role in learning. The world of science which is manifested in the learning material is important for them; they like creating general theories. It is characterised by scientific cognition, they like interpreting the world in symbols. They appreciate organised work and systematic order. They like pure conceptual systems revealed in the course material.

The characteristics of active, experimentational learning style: The need for changing things plays an important role in learning. Such learners try to use the acquired material in practice. They are interested in what is

that functions. They always place emphasis on activity. They like simplifying things, and appreciate effectiveness.

The characteristics of reflective, observation learning style: Trying to understand something plays an important role in learning. Such learners seek to observe things carefully, and describe them objectively. They are interested in what truth is, how things function. They place emphasis on expressing their own ideas and opinions, appreciate quiet, impartiality, and well-founded decisions.

5. Questionnaire: Felder's questionnaire of learning styles

Underline the option "a" or "b" in each statement. Mark only one answer in each case. If both suit you, choose the one which most often occurs.

- 1. I understand something better if
 - a) I try it.
 - b) I think it over.
- 2. I think I prefer to
 - a) insist on present, tried and tested things.
 - b) create new things.
- 3. If I think of what I did the previous day, most often
 - a) I see pictures in front of me.
 - b) words come to my mind.
- 4. I tend to
 - a) understand details, but to find the whole of the thing confused.
 - b) understand the main ideas even if I don't understand every detail.
- 5. If I learn something new, I like
 - a) talking about it.
 - b) thinking of it.
- 6. As a teacher I would like to teach subjects which
 - a) deal with facts and tangible things.
 - b) deal with theories and ideals.
- 7. I like it when the course material
 - a) is illustrated by pictures, figures, diagrams or maps.
 - b) is described or performed in detail.
- 8. If I understand
 - a) the details, I understand the whole as well.
 - b) the whole. I also understand what details it consists of.

- 9. If I work with together with several other people,
 - a) I enjoy taking part in work, and I also give them ideas.
 - b) I am guiet, and listen to and watch what the others are doing.
- 10. I prefer to learn
 - a) facts.
 - b) theories.
- 11. If there are pictures, maps and tables in a book, I prefer to
 - a) look at the pictures, maps and tables.
 - b) pay attention to the written text.
- 12. If I have to solve a problem,
 - a) I usually get step by step to the solution.
 - b) I often see the solution already at the beginning, but it makes a problem for me to find out the steps leading to the solution.
- 13. If I read a course material, I like it when
 - a) I get to know new things, or I learn how to do something.
 - b) I have new ideas and thoughts which I develop later.
- 14. In order to enjoy working together with other people,
 - a) I must know some of them in advance.
 - b) I don't have to know them.
- 15. I like teachers who
 - a) often use illustrations in their lesson.
 - b) explain things in a clear, understandable way.
- 16. When I read a story or a novel,
 - a) I pay attention to the plot, and try to find out what its message was after reading it.
 - b) I usually find out the message of the story while I'm reading it, and them I'm not interested in the details.
- 17. When I do my homework,
 - a) I start solving the problem immediately.

b) first I think the problem over, and only then do I try to find the solution.

18. I prefer

- a) proven things, because then I know for sure what is true.
- b) if there are several theories for the same questions.

19. I can remember best what

- a) I see.
- b) I hear.

20. It is more important for me if the teacher

- a) explains the material step by step, meticulously.
- b) gives a comprehensive picture of the whole material.

21. I prefer to

- a) learn in a group.
- b) learn alone.

22. People usually think of me that

- a) I take care of every detail.
- b) I am resourceful.

23. If I have to go to a new place, I prefer to

- a) find it on the map by myself.
- b) be told in detail where I am supposed to go.

24. In general,

- a) if I learn thoroughly and enduringly, I understand the main points after a while.
- b) I start learning again and again, and sometimes I'm confused, and then suddenly I understand everything.

25. First I prefer to

- a) try out new things.
- b) think it over, and only than do I get down to it.

26. I like writers who

- a) formulate their message clearly.
- b) write in an interesting and novel way.

27. I remember more

- a) a picture or an outline on the board I saw in the lesson.
- b) what the teacher said.

28. When I learn, I

- a) concentrate on details, data and facts more than on the relationships in the material.
- b) try to understand the relationships first, and I pay attention to the details only after that.

29. It is easier for me to remember

- a) what I have done.
- b) what I have thought about a lot.

30. When I have to do an exercise, I try to

- a) do it in the tried and tested way.
- b) find new solutions.

31. When analysing data, I prefer

- a) tables and diagrams.
- b) texts summarising the results.

32. When I write an essay, I prefer to

- a) elaborate the particular parts first, and arrange the whole text of the essay later.
- b) collect my thought first, and I start writing only after that.

33. When I learn with several other people together, I like it better

- a) if we brainstorm ideas to our joint work first, and we work together.
- b) if everybody thinks the topic over individually first, and we meet and compare our ideas only later.
- 34. In my opinion, it is more effective if we

- a) rely on our experience.
- b) rely on our imagination.
- 35. When I meet somebody at a party, I remember later
 - a) what he/she looked like.
 - b) what he/she said.
- 36. When I start learning a subject, I prefer to
 - a) concentrate on the exercise, and learn from it everything I can.
 - b) find connections, to link the exercise with what I have learnt in other subjects.
- 37. Other people regard me to be more like
 - a) a social person.
 - b) a shy and withdrawn person.
- 38. I like subjects in which
 - a) there are concrete things (facts and data).
 - b) there are theories, ideas and principles.
- 39. If I want to relax, I prefer
 - a) to watch TV.
 - b) read or chat.
- 40. If the teacher told us the main points of the lesson before we started to learn it.
 - a) it might help me.
 - b) it is guite sure that it would be very useful for me.
- 41. If we do an exercise in a group together, and all the members of the group get the same mark,
 - a) I find it good.
 - b) I don't agree with it.
- 42. If I do a lot of long calculations, and I get the result,
 - a) I usually check my calculations carefully.
 - b) I find checking tiring; I must force myself to do it.

- 43. As for places I have already been to,
 - a) I can recognise them easily, and recall them quite accurately.
 - b) I must concentrate very hard to see them in details in my eyes.
- 44. When we work on solving a problem in a group, I prefer to
 - a) think about the course of the solution.
 - b) think about the consequences and the possibilities of applying the solution.

Evaluation

The questionnaire consists of 44 questions. Thus, 11 questions refer to each of the examined four dimensions in the following structure:

Active-reflective dimension: Questions 1, 5, 9, and so on, the "a" statement of every fourth question is the active answer, and its "b" statement is the reflective answer.

Concrete-abstract dimension: Questions 2, 6, 10, and so on, the "a" statement of every fourth question is the concrete answer, and its "b" statement is the abstract answer.

Visual-verbal dimension: Questions 3, 7, 11, and so on, the "a" statement of every fourth question is the visual answer, and its "b" statement is the verbal answer.

Analytic-global dimension: Questions 4, 8, 12, and so on, the "a" statement of every fourth question is the analytic answer, and its "b" statement is the global answer.

Count how many times you have chosen the option "a", and how many times the option "b" in each dimension. Subtract the number of the answers "b" from the number of the answers "a".

If the result is a positive number, you the active, concrete, visual and analytic characteristics suit you more. The higher this positive

number is, the more determining the relevant characteristic in your learning is.

If you get a negative number as a result, then of course you find reflectivity, abstractness, verbality and globality important in your learning.

Should both the concrete and analytic characteristic be determining in your learning style, you probably find your way in the world of inductive inferences.

If in contrast to this your learning style has a more abstract or global character, you can acquire the deductions in your course material more easily.

14.3. The list of media elements

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