

We are learning how to lifelong learn and teach

**HANDBOOK FOR TEACHERS
IN ADULT EDUCATION**

**EDITED BY:
Morana Koludrović i Mario Vučić**

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DEAR READERS,

in front of you is a handbook intended for experts who work or intend to work in adult education. Whether you are a student of pedagogy, andragogy or some teaching track student,

teacher or participant of some program aimed at adult education, beginner or expert in the field of andragogy, your access to reading this handbook is followed by already formed attitudes on education. If you already have didactic and methodical knowledge and competencies, your teaching is without a doubt based on them too. Teaching attitudes can be formed also as reflection of your previous experiences within formal system of education. Whether your experiences are good or bad, there is a great possibility that you are building yourself right on them – as a lifelong student and as a teacher. Also, you are going to read this handbook with certain expectations. It is very probable that you would like to adopt and upgrade all the good experiences, as well as you might want to avoid all the bad ones in your teaching.

Could you name all times when you've remembered some teacher who was your role model by telling his or her anecdotes, teaching or motivation methods? It is, however, true that more importance lies in remembering teachers' teaching and motivation methods rather than on remembering himself often. It is quite the same with a bad teacher, right? How much was your attitude toward some subject affected by teacher whose teaching was bad, one who didn't show any interest for the subject, a teacher that gave you no concrete example for subject content, one that treated you badly or simple didn't apply methods and teaching forms suitable for you?

It is also necessary to analyze or reassess yourself as a teacher or, if you are a student, to ask yourself how to become a good teacher and what are the elements of a teaching process that ensure the quality of teaching.

For a beginning, try to specify all factors that define teacher quality and teaching process in the table below.

	GOOD TEACHER	BAD TEACHER
STYLE OF COMMUNICATION WITH PARTICIPANTS OF PROGRAM		
METHODS OF MOTIVATION		
REALIZATION OF TEACHING PROCESS		
METHODS OF EVALUATION OF STUDENTS' ACHIEVEMENTS		

Using the table, try to see what kind of teacher you are or you would like to be and try to see what skills are you still missing in order to become a better teacher. And how are you going to do that? Try to illustrate each of your claims or adjectives with examples taken from practice. It is reasonable to ask yourself why is the andragogy handbook starting with questions about teachers' characteristics. Namely, many researches and practical experiences have shown that motivated teacher, ie one that values needs, interests and previous experiences of participants (students) and provides a positive environment, a teacher that allows questions, suggestions and disagreements, one who does not only holds lecture-based teaching but also applies forms of teamwork, collaborative, problem-based and project learning, has positive effect on participants' motivation, perseverance in learning, better achievements and greater satisfaction of participants (students) in teaching process.

Those of you who are working within or have previously attended programs for adult education are aware that this has great importance because mentioned programs are mostly not compulsory and they depend on their recognizability and quality. In other words, modern institutions for adult education are market-oriented and depend on a number of participants who enter them. Therefore, if one of them is perceived as low-quality institution, it will lose its participants. Practice shows that adults who intend to enter some of the programs for lifelong learning are regularly checking on the quality of the institution. Quality of institution implies a number of factors that can be grouped into two main categories: organizational (material) and teaching.

Organizational (material) factors are related to the price of the program, to the level of space equipment, availability of information given by the head of a program, secretary office and teachers and to time in which the class is being held (it is important for it not to overlap with working hours of participants), etc.

Teaching conditions are far more complex and they depend mostly on the competence of a teacher and andragogue. Differences between roles and tasks of andragogue and teacher in adult education are more thoroughly explained in the following chapters. However, to become a competent professional in field of adult education, it is necessary to possess a certain number of various competencies and take part in continuous education in your field of expertise. Nevertheless, during the planning and realization of the teaching process, it is highly important to well know and understand, value and/or implement:

1. current economic and social circumstances as well as educational policy
2. starting points and principles of modern andragogy
3. modern curriculum theory and principles of curricular planning and programming
4. modern determinants of planning, organization, realization and (self)evaluation of teaching process
5. characteristics of participants, ie. psychology of adults
6. role and ways of (self)evaluation and quality assurance in adult education
7. ways of good communication and making of positive environment as well as ways how to motivate participants.

The purpose of this handbook is to help you in organizing high-quality teaching process within adult education programs, given the fact that topics covered here are in relation to the aforementioned fields of study.

The first chapter, named **CONTEMPORARY DETERMINANTS OF ADULT EDUCATION** contains the analysis of adult education from social and economic perspective, both often “invisible” in direct teaching process, yet very influential on approaches to the organization of teaching process and its quality. Further on, starting points of the contemporary educational policy and approaches to curriculum creation and designing of contemporary teaching process in adult education which can help you in planning, organizing and realization of the teaching process by putting it in a wider context are presented here as well.

In the second chapter entitled **WHAT IS ANDRAGOGY?** you will meet the main principles of andragogy and the concept of lifelong learning. Particular emphasis is placed on the competencies of andragogues and teachers in adult education, given the fact that they are the most important factors of quality assurance in the field of adult education.

In order to facilitate understanding of the approach to adult education and organization of teaching process, the following chapters have been structured based on **andragogical cycle** as a starting point for making the curriculum in adult education. That’s why you are in the third chapter entitled **NEEDS ASSESSMENT AND PLANNING OF TEACHING PROCESS IN ADULT EDUCATION** going to receive

guidelines for how and why to conduct a needs assessment, the very first step of andragogical cycle, and how to plan and organize adult education based on contemporary principles and determinants of adult education.

Given that after needs assessment and planning of teaching process in andragogical cycle comes organization together with realization, the fourth chapter, entitled **TEACHING PROCESS IN ADULT EDUCATION**, brings guidelines, recommendations and ideas how to successfully organize teaching process based on previously presented principles and determinants of the adult education.

The fifth chapter, entitled **LEARNING AND TEACHING OF ADULTS** deals with this subject and it can help you with a better understanding of features of learning, teaching and motivating the participants in order for you to realize good teaching process, which is also directly contributed by subjects covered in the sixth chapter, entitled **COMMUNICATION AND GROUP DYNAMIC**. In that chapter, you can also find recommendations and exercises on how to successfully communicate with adult participants and how to ensure high-quality teaching environment.

Given that andragogical cycle ends with the process of (self)assessment, the last chapter, entitled **ASSESSMENT IN ADULT EDUCATION**, will allow you to get precisely acquainted with this issue. Aside from explaining terminological difficulties connected to that rather sensitive field of educational systems, you will understand how, when and why to choose certain evaluation methods and how to use the results obtained by (self)evaluation.

Chapters of this handbook are structured in a way for you to get acquainted with theoretical presumptions, determinants, and principles of each thematic framework first, whereupon you have been offered examples of exercises related to the specific subject together with questions that may help you during the organization of teaching process in adult education. At the end of every chapter you can find bibliographical references, and basic terms that can ease your understanding of the whole matter you will find at the very end of this handbook.

Enjoy your reading!

01

CONTEMPORARY DETERMINANTS OF ADULT EDUCATION

prof. Morana Koludrović, PhD

After reading this chapter you will be able to:

- ✚ analyze adult education in regard to the social and economic factors
- ✚ explain main determinants of the educational policy in the field of adult education
- ✚ analyze features of constructivist, competence, curricular approach to learning and teaching and to compare them with principles and determinants of adult education
- ✚ distinguish types and approaches to the curriculum design in adult education
- ✚ critically observe features of adult education and connect them with the educational policy as well as with social and economic needs and circumstances

Context is what matters in adult education!

*Teachers open the door but you must walk through it yourself.
Learning is a treasure that will follow its owner everywhere.*

Chinese proverbs

In the teaching process, we are mostly focused on students (participants), the content of teaching and on the best possible ways of learning and teaching. A good teacher is continuously improving his own skills right in the field of quality of teaching process, communication with participants, (self)evaluation, etc.

There is, however, no doubt that there are also other factors affecting the quality of the teaching process, often “invisible” in direct teaching process. Those are the elements mentioned mostly at the beginning of every university textbook, which includes the historical development of certain scientific discipline and its connection with other scientific disciplines; it is quite possible that those elements represent parts of references that seem too dry and irrelevant to you. Nevertheless, they are rather important for the understanding a certain scientific discipline because they are putting it in a particular context. Understanding of development, as well as of current research results of certain scientific discipline and its connection with other scientific disciplines and with the society we nowadays live in (in)directly affects the quality of teaching process as well.

Therefore, we suggest you name as many elements that define and/or affect adult education as you can, which are as well in relation to the wider scientific, social and economic contexts. If one of those factors to you seems related to more elements, mark all the elements connected to it.

Scientific, social and economic factors that affect adult education	E	S	SR	IN	PO
1. Demand for new professions on labour market	+	+	+/-	+	+
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					

E – economy

S – society

SR – scientific researches in andragogy, pedagogy, psychology etc

IN – individual needs

PO – program offer in adult education and organization of teaching process

We suggest that you unify all the statements and check out how many of them are in relation with economic and social factors, as well as how many of them are in relation with researches in fields of andragogy, pedagogy, psychology, and other scientific disciplines; please put together (separately) all statements that directly or indirectly tend to affect the teaching process and needs of an individual.

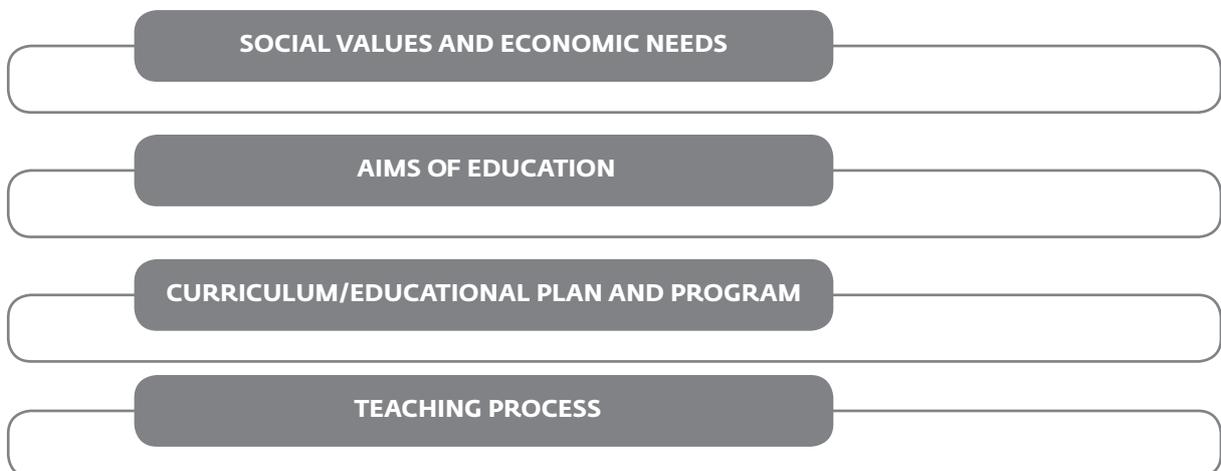
In further reading, you may try to occasionally check and/or update the factors you've named in the table given above.

How are economy, society, culture and educational policies connected with what happens in teaching process?

Learning is like rowing upstream: not to advance is to drop back.
Chinese proverb

In this chapter, you will notice that adult education is quite connected with the economy, ie. labor market. The role of lifelong learning, however, is not just about training for performing of certain tasks: it is also about the acquisition of numerous competences – active citizenship, acquisition of media, social and emotional competences, parenthood, learning how to lifelong learn, development of critical thinking and many others.

Educational systems have, however, always been connected with economic and social circumstances. Current socioeconomic circumstances also have a certain effect on defining the aims of education, later written down in the curriculum and, as such, meant for realization in teaching process (Picture 1).

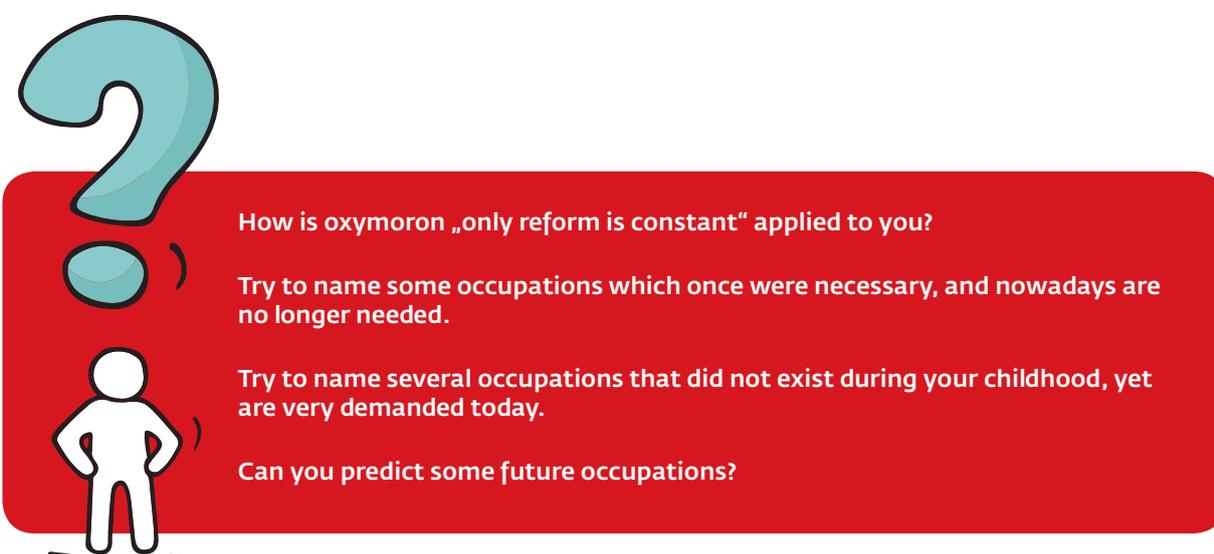


Picture 1. Relation between society, educational aims, curriculums, and teaching process

The relations between mentioned elements (picture 1) will be explained to you by giving the example of how to organize adult education in modern social and economic context; in other words, we will try to provide an answer to the following question: how is economy, society and educational policies connected with what happens in the teaching process?

Many authors are pointing out that in order to achieve greater efficiency of the school (regardless of observed kind and level of education), changes occurring within the school should be at least equally fast or even faster than changes occurring in society, adding that its function should be contributing to the continuous development of society and directing individuals and society to progressive thoughts that are ahead of the present time and society [1, 2]. However, we often encounter statements that today's school system is outdated, that what is taught in schools is not needed in everyday life, that there is no benefit from memorizing and reproducing infinite facts, etc. In the period when such attitudes start to emerge, a crisis of education is emerging too and there is a need for reform of education on a larger scale. Reform of education is always a reaction to the social, scientific, individual and economic needs and achievements of a particular society. The current practice shows that major reforms take place every eight to ten years and that new curricula are being made on the basis of the deficiencies of those made so far, and that their making is inspired by new scientific achievements, but also by changes occurring in the social and economic environment as well as on an individual basis.

Due to the accelerated development of technology, intensified at the end of the twentieth century, particularly under the great influence of globalization and computerization of society, the need for changing the education is even more frequent. That is why we can conclude that **in modern education only reform is constant**. To educational system is hard to keep up with all the changes that are taking place in modern society and the economy, and we can not yet assume which occupations, knowledge and skills will be needed for five, let alone for ten or more years. In regard to the previous epochs of school development, such variability and uncertainty are representing a challenge for educational systems that are often difficult to face, monitor and implement.



How is oxymoron „only reform is constant“ applied to you?

Try to name some occupations which once were necessary, and nowadays are no longer needed.

Try to name several occupations that did not exist during your childhood, yet are very demanded today.

Can you predict some future occupations?

Industrial society, society of knowledge and adult education

The system of education we are today complaining about was developed in accordance with the needs of society and economy in the period of industrialism that lasted for a relatively long time and which did not require dramatic and frequent changes in educational systems.

It was well known which occupations workers were needed for, how many of them were needed and what skills should they have possessed in order to do certain jobs. Furthermore, job changes and job types were not common, so for a worker it was normal, in such a social and economic environment, to spend their working life in the same workplace, or at the same factory, company or institution. Numerous critics of the education system in the era of industrialism have emphasized that the aim of the industrial society was to raise the obedient workforce, that schools were founded on the principles of authority (as well as factories), that pupils in schools were taught to accept jobs for which they would be rewarded by paying (what is equivalent to grades in education), and it is particularly interesting that the subjects are fragmented so that the students can not see the whole, that is, they emphasized that such an approach of education taught the future workers to perform fragmented jobs in further work, which consequently led to a reduction of class consciousness [3, 4, 5].

With the development of computerization, modern digitized technologies and the process of globalization, this concept of the economy has changed and has undoubtedly influenced educational systems at all levels.

The transition from the industrial or manufacturing society to the information and post-modern society has particularly led to the popularization of adult education, which becomes more and more attractive and an important part of the educational vertical. The first reason is that with the development of modern technology, former workers in production have become either redundant or they needed to improve the existing knowledge they once acquired in schools. At the same time, workers have found out that re-qualification can lead to better jobs, better wages, and thus better status in society.

The changes in the economy and the system of education in Western countries were also affected by penetration on the world's labor market made by countries from the Far East, primarily China, which caused a great transfer of production previously carried out by workers in Europe and the United States. Such an economic environment has also led to changes in educational systems and the promotion of new knowledge and competencies that students are expected to acquire in schools. The main resource of economic development was no longer material good of some country or developed industry, but the development of human capital [6]. Investing in human capital, ie lifelong learning, new knowledge, skills and competencies is recognized as a key factor in achieving economic prosperity [6]. Instead of having specific knowledge and, above all, cognitive abilities that were highly valued in the industrial age, human capital theory also promoted other (non-cognitive) skills and competencies, formally associated with informal education and informal learning, and emphasized the importance of experience, motivation, learning of learning, teamwork, leadership skills, and other interpersonal and intrapersonal skills that have become imperative for individual, social and material well-being [6]. In other words, the value of knowledge has changed in relation to the industrial age, as JF Lyotard best described, pointing out that in the postmodern age knowledge is no longer a goal in itself but that knowledge represents goods that can be bought and sold and for which it is worth fighting [4, 5]. Such economic changes have resulted in longer periods of formal education, intensified the need for lifelong learning programs and deleted clear boundaries between working life and the process of education that is no longer abolished but supplemented in adult age [7]. However, the concept of a knowledge society and lifelong learning is subject to criticisms of some authors who question the quality of this concept for the long-term welfare of individuals or problematize the subordination of knowledge to market and capital needs [8].

A direct relation between economy and education systems is shown in the fact that the World Bank, as part of the "Knowledge for Development" project [9], launched a program aimed at facilitating the transition process of the former industrial economy into a knowledge society. The society of knowledge has become a syntagm for a modern society and a business that goes beyond the production-oriented economy, which has influenced the changes in all educational systems and supported the theory of human capital. The program emphasized that the knowledge society is based on four pillars: the first involves investing in educational systems, the second pillar encompasses the innovation sector, the third information infrastructure, and the fourth is related to the legal and economic framework [9]. It is interesting that it has become commonly accepted that knowledge is the most important strategic economic resource and that investment in education and innovation can contribute to the development of the modern economy [6, 10, 11, 12].

Although from the social sciences aspect it is justifiable to question the subordination or at least the dependence of economic prosperity and education system [8], the theory of human capital and knowledge society emphasize the importance of investing in the well-being of the individual on a professional but also individual basis and undoubtedly affirm lifelong learning, whose part is adult education as well.

Data from 2016 [13] indicate that 10.8% of the population participates in lifelong learning programs at the level of the European Union at the level of the EU from 25 to 64, while this percentage in Croatia is only 3%. The European Union has set a goal that at least 15% of adults aged 25-64 should participate in lifelong learning programs by 2020 [14]. Unfortunately, some analyses show that in Croatia human capital still has a secondary role in relation to physical capital [15].

Educational policy and adult education

*Who wants to learn something, he will find a way.
One who doesn't, he'll find the excuse.*

Pablo Picasso

Adult education in the new social and economic environment is also intensified at the level of education policy. You can notice that this is in accordance with the theory of human capital, or the needs of the knowledge society. For example, the European Parliament's 2006 Recommendation on the Key Competencies for Lifelong Learning explicitly states that it is necessary to provide the appropriate infrastructure for continuing education and training for adults, to invest in the competences of teachers in adult education, to provide evaluation and evaluation procedures, to provide all citizens equal access to lifelong learning and the labor market and to take into account the different needs and competencies of adult students. It is also mentioned the importance of consistency in providing adult education and training and emphasizing the importance of linking individual needs of citizens with employment policy and social policy, cultural policy, political innovation and other policies.

In the *Memorandum on Lifelong Learning* [16; p. 3], one of the most popular documents promoting adult education, lifelong learning is no longer seen just as one form of education and training, being stated that it must become a guiding principle in supplying and participating in the overall context of learning. Moreover, it is stated that, without exception, all Europeans should have equal opportunities to adapt to the demands of social and economic change and to actively participate in the creation of the future of Europe.

Furthermore, in this document [16; p. 4] is stated that a coherent lifelong learning strategy should be aiming at:

- ensuring the full and continuous approach to learning in order to acquire and restore the skills required for systematic participation in knowledge-based societies

- a visible increase in investment in human resources with priority being given to the greatest wealth of Europe - its citizens
- development of effective learning and teaching methods and conditions necessary to achieve continuity in lifelong and lifewide learning
- essential improvement of the ways of understanding and evaluating participation in the education process and the results obtained, especially regarding the non-formal and informal acquisition of knowledge
- ensuring easy access to quality information and advice on education throughout Europe and throughout life
- ensuring lifelong learning opportunities as close as possible to citizens - in their places of residence and assisted with information-communication technologies or facilities wherever possible

Lifelong learning is part of Croatian education policy and as such is recognized in the Strategy of Science, Education and Technology [17; p. 5] where it is defined as a set of activities, knowledge, skills, attitudes and values, or a set of competencies that encompasses personal, social and professional development and action of an individual and encompasses all life spans and all programs in the field of formal and informal education as well as informal learning. As well as other documents presented here, this document states that lifelong learning is the foundation of personal development, pursuit and continuous adaptation of the individual to changing circumstances in personal life, workplace in the community, and that its goal, apart from the realization and development of individual's potentials, is to enable better employability, ie increase its competitiveness in the labor market. The most important principles are:

- the possibility to adopt, improve and/or extend knowledge, skills, attitudes, and values
- the potential and the need to develop personal potentials at different times of life
- the possibility to access different forms and learning contents to achieve personal desires and ability development
- the right to validate the knowledge and skills acquired in different environments and types of learning

In the Strategy of Science, Education Technology [17; p. 6] is stated that the foundation of lifelong learning is the acquisition of key competencies defined as a multifunctional set of knowledge, skills, and attitudes that each individual needs for his/her personal fulfillment and development, social inclusion and employment. It is also stated that it is necessary to cultivate critical thinking, aesthetic evaluation, self-reliance, others, and the environment, teamwork, problem-solving skills, basic ethical values, parenting skills, civic activism, media, financial and consumer literacy, etc. If you link the definition of human capital from the OECD document [6] with that definition, you can easily see that it is about the same recommendations, principles, and guidelines.

From the abovementioned documents of the European Union, you can notice that education policy links (and determines) social needs and values with the economy and the system of education. However,

things stated in educational policy documents are only a visible part of contemporary educational needs. It certainly gives affirmation to adult education which has been neglected and often subordinated to primary and secondary education in the era of industrial society and provides guidance and recommendations for further affirmation of this system. However, the quality of work of an institution for adult education, especially the quality of organizing the teaching process, is influenced by a number of other elements that need to be well-known, then applied and constantly improved (Picture 2).



Picture 2. Some of the elements affecting the teaching process in adult education

In the picture you can see that the formal goals are just the tip of the “iceberg” and that the system of adult education, apart from the contemporary scientific knowledge, the social and economic context, is also affected by historical and cultural heritage, media, habits, attitudes, interests, and needs of the participants in the teaching process and many other factors. It is quite important to remember that new knowledge and access to learning and teaching are being developed based on obsolete and existing ones.

For further development of andragogy and generally lifelong learning, it is important to bear in mind that this system should not only be based on economic or market needs. As stated in the presented documents, lifelong learning also encompasses the development of a series of personal, social and civic competences, ie values, attitudes, critical thinking, and (self)reflection. In that sense, individuals, as well as adult education institutions, the media, teachers, and members of the educational institutions are during the planning and realization of the teaching process obligated to motivate adults to gain mentioned competencies.

Competence (constructivist, curricular) approach to learning and teaching in adult education

By implementing the principles and needs of the knowledge society, a competency approach to education that promotes lifelong learning has been accepted, and competence is defined as a multidimensional set of knowledge, skills, values, attitudes, autonomy, and responsibilities that can be developed and improved during life [17, 18]. Competence is thus distinct from the intelligence that has long been perceived as an inborn, stable disposition that enables an individual to successfully deal with new situations [19, 20]. Linguistic-verbal, logical-mathematical, musical, visual-spatial and body-kinesthetic intelligence, or giftedness, have always been highly appreciated, but characteristic for those individuals who exhibit special results in one of these areas [21, 22]. You can read more about them in chapter *Learning and teaching of adults*.

Expectedly, the competency approach values acquisition of competencies rather than the innate dispositions and is particularly important for those individuals who did not have favorable family and socioeconomic conditions during childhood and who did not have the opportunity to disclose what potentials they possess or which skills they can develop [23, 24]. Such individuals have been given the chance by lifelong learning that, through adult education programs, enables them to demonstrate and/or improve their desired knowledge, skills and skills after formal education. Researches showing that (although there is a link between intelligence and academic achievement) neither in practice nor in scientific research has been proven that high intelligence predicts success in everyday professional and private life and work have also contributed to accepting a competent approach to education [23, 24]. It has also been discovered that the examination of competencies anticipates important behaviors and abilities in personal and professional life better than classical intelligence tests [23, 24].

Not denying the role of birth dispositions or intelligence, the competence approach places emphasis

on the development of competencies and has promoted other knowledge, besides the cognitive, artistic and kinesthetic knowledge, abilities and potentials that were highly appreciated in the industrial age, but also in earlier social arrangements and the skills that are needed and useful in all areas of personal and professional life. This knowledge and skills, as it has been already mentioned, are related to critical thinking, acquiring competencies to learn how to learn, teamwork, leadership skills, or intrapersonal and interpersonal competence.



Can you recall when and how you have been taught to acquire these competencies during formal education or some of the lifelong learning program?

How can you develop them during the teaching process you organize?

Intrapersonal competence implies a strong sensitivity to the perception of one's own goals, needs and feelings, the ability to differentiate feelings, seek the meaning and understanding of one's own behavior, and **interpersonal competence** implies ease when understanding other's intentions, feelings, moods and motives, communicating with others, resolving conflicts etc [21, 22, 44]. Almost all educational policy documents, as well as scientific and professional papers dealing with the competencies of students and teachers, will highlight the importance of acquiring these two competencies, as well as programs, guidelines and ways of developing them.

Furthermore, instead of the intelligence division, which represent a potential rather than fully developed abilities specific to particular individuals, the European Union has identified eight key competencies for lifelong learning as response to the challenges of developing the knowledge society and the world's labor market [25; p. 17]. Key competencies include communication in mother tongue and foreign languages, mathematical competence and basic competencies in science and technology, digital, social and civic competence, competencies to learn how to learn, initiative and entrepreneurship, and competence that encompasses cultural awareness and expression. In addition to the above-mentioned key competencies, it is also emphasized the importance of innovation development, creativity, problem-solving, critical thinking, entrepreneurship, information literacy, socio-emotional and other competencies [16; 25]. National Curriculum Framework [25; p. 16] emphasizes that it is not possible to realize them in a traditional educational system that acts just in means of transferring knowledge.

Interestingly, it has been recognized in andragogy several decades ago that:

- adults are motivated to learn if their previous experience is respected and their interests are met
- the organization of the adult learning process must be interdisciplinary and relevant to the concrete life situations, not divided by subjects
- the role of the teacher is to encourage self-directed and student-oriented learning instead of transferring knowledge

- the teaching process should respect the individual characteristics of learners who grow with age and different life experiences
- in adult education, it is necessary to take into account the differences in the student's styles and pace of learning and to ensure optimal time and place for learning
- adults do not respond to an authoritarian, but democratic, educational atmosphere in which the teacher is a facilitator rather than a knowledge provider
- adults will learn if they are intrinsically motivated [26, 27, 28, 29].

All of these are also starting points of a contemporary, constructivist, curricular, or competency approach to education that has been affirmed in the formal education and education system at the level of education policy several decades later than in the case of andragogy or adult education. This process ended a sort of paradigmatic conflict between andragogy and pedagogy which lasted for several decades. In this context, it is interesting to note that the differences between conventional education and adult education were pointed out by E. Lindeman in the twentieth years of the last century, and intensified in the 1970s by M. Knowles [26] when, motivated by the rigidity of the teaching process at the time, he pointed out the differences between learning and teaching of adults and formal education [26, 27].

Compared to the conventional system of education, in the modern teaching process is expected [25, 26, 30, 31, 32, 33, 34]:

- acquisition of competencies useful in everyday life rather than mere memorizing and reproduction of facts
- acquisition of socio-emotional competencies and skills, critical thinking, innovation, creativity and divergent thinking
- more frequent implementation of active learning strategies instead of lecture-based teaching style
- emphasis on intrinsic instead of extrinsic motivation
- valuing students' overall achievements (including self-assessment) instead of classically evaluating only educational achievements
- democratic atmosphere instead of authoritarian obedience in the classroom
- interdisciplinarity and transdisciplinarity in the teaching process instead of the traditional classroom-lesson-oriented system as it was accepted in conventional education in the industrial age, but also in previous social periods
- making of flexible curricula that consider the interests, knowledge, and needs of the participants and where the contents are not fragmented by subjects

Starting point for making the curriculum in adult education: the andragogical cycle

Changing the access to education from so-called traditional to contemporary, curricular, competence and constructivist approach to education has also influenced new approaches to curriculum development. Although there are many approaches to the making of curriculum, it seems that they can all fit in two large groups (Picture 3):

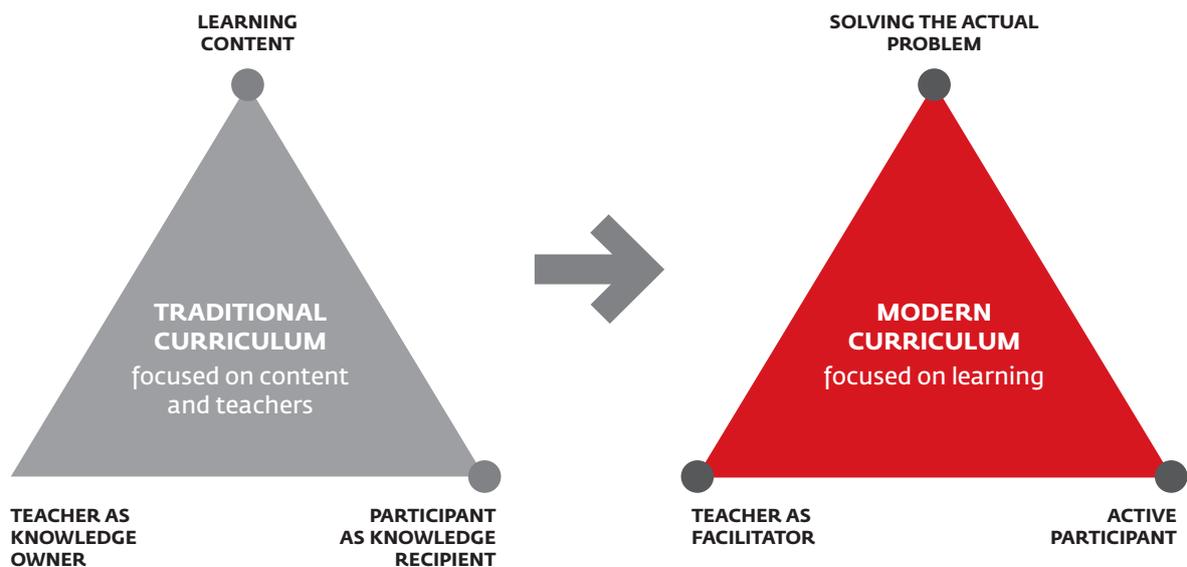
- 1. Curricula focused on content and teachers** (linked to the so-called traditional school, ie the system of education in the industrial society).
- 2. Curriculums focused on students** (linked to modern, competent, curricular, constructivist approach and knowledge society).

Curricula focused on knowledge transfer, that is, on content and teachers are nowadays called traditional or directive, and they are based on teacher's teaching and/or transferring information and explaining theories and content where the goal is to make a change within long-lasting memory [29, 35, 36]. Such an approach to the structuring of a curriculum implies fragmented learning and teaching of content from a particular subject without systematic linking of similar or same contents within other disciplines. Furthermore, in such a process the participant is mainly responsible as a passive recipient of knowledge who is expected to learn the contents prescribed by the program and reproduces them when the teacher asks for it [35, 36]. In teaching based on such an approach or curriculum, the emphasis is placed on extrinsic motivation, neglecting interpersonal and intrapersonal competencies, self-evaluation of the teaching process and it is characterized by an authoritarian teaching environment [35, 36, 37, 38, 39, 40]. The main criticism of such curricula and the planned and realized teaching process is that many authors have concluded that by their application, individuals end up with schools or studies with many

theoretical knowledge that can not be used optimally in everyday life situations and that such forms of teaching do not prepare individuals for the labor market as well as for facing with ever faster and more important changes in the personal, social and economic plan.

Furthermore, individual-oriented approaches are characteristic of the competency approach to structuring curricula and adult education. They are based on the outcomes of learning and acquiring competencies, ie on a constructivist approach to curriculum development and they support:

- the applying of didactic strategies of active learning (problematic, project, research, multimedia teaching, and collaborative learning, as it allows them to connect the learning outcomes with the experiences, interests, needs and prior knowledge of the learners)
- an interdisciplinary and transdisciplinary approach to structuring the curriculum
- adaptation of teaching steps, forms, and methods to individual needs, interests, prior knowledge and abilities of participants together with the appreciation of different styles and learning paths of learners
- the organization of a teaching process that enables self-directed learning and the practical application of the learned things
- creating of a positive, motivating and cooperative learning environment
- linking the formal and informal education with informal learning
- the development of competence, innovation, critical thinking, creativity, socio-emotional competencies.



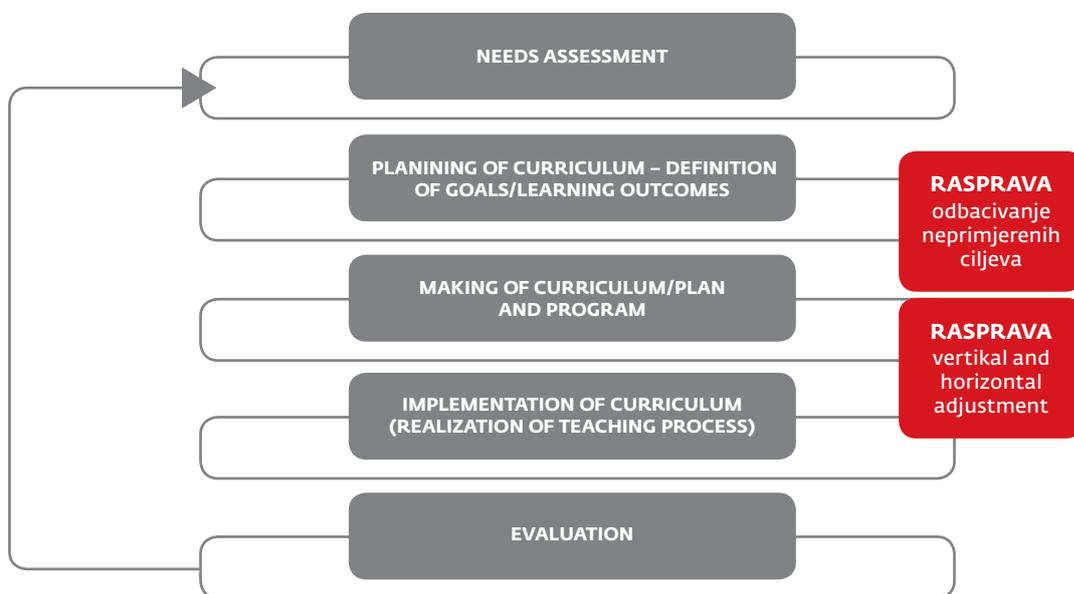
Picture 3

Structuring the curriculum and participating roles in the traditional and contemporary teaching process (adapted to 39, p. 12)

While in a traditional curriculum, focused on content and knowledge transfer, the teacher is perceived as a communicator of the learning contents foreseen by the curriculum, and the learner as a recipient of this knowledge, in a contemporary, individual-oriented curriculum, teacher is seen as a learning facilitator that provides enough complex and intriguing problems that are related to and useful in real life situations, where the learner (regardless of age) solves these problems. [Picture 3; 39, 41, 42].

It is easy to notice that adult education is already for decades, at least in a theoretical sense, focused on curriculum development aimed at pupils or learners! It is interesting that the principles of so-called contemporary curriculum planning in formal education and in andragogy have been elaborated and implemented several decades earlier as a so-called **andragogical cycle** [43].

The andragogical cycle includes five levels of curricular planning (Picture 4):



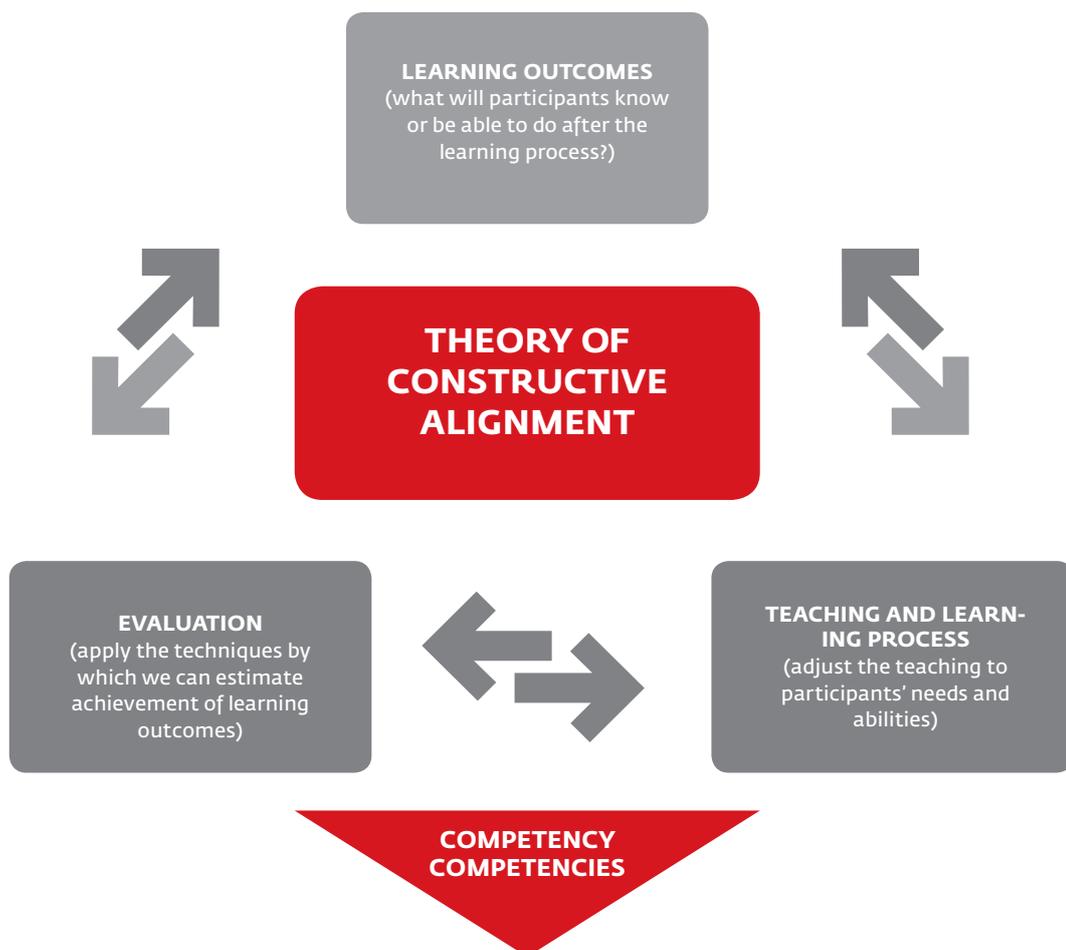
Picture 4. Andragogical cycle – methodology of making the curriculum in adult education

The first step is the identification and analysis of educational needs thus connecting the individual needs of adult students with adult education programs so that the learning process and teaching can be more useful to the adult learner. The needs assessment can be carried out on a broader curricular plan, but also at the level of institutions, groups and individual needs, of which you can read more in the chapter *Needs assessment and making of the curriculum in adult education*.

The second step concerns curriculum planning, which must be flexible so that teachers can achieve the learning outcomes, envisaged by the curriculum, to correlate with the previous experiences, prior knowledge, and attitudes of the learners. In other words, when planning a curriculum, there must be enough time and space left to connect the knowledge and skills acquired through informal learning with learning outcomes envisaged in the prescribed curriculum [29; 43].

The third and fourth steps are related to the programming and implementation of the curriculum, ie the curriculum that is directly related to the dominant curriculum planning theory (ie, those addressed to the participants), while the fifth or final level in the andragogical cycle relates to the evaluation of student achievement, program satisfaction and the quality of the entire program.

In order to successfully plan, organize and realize the teaching process and approach the evaluation, it is important to recall the **constructive alignment** theory [41, 42] which is in accordance with the andragogical cycle. Certainly, to you, the word constructively is already linked to a constructivist approach to education and the curriculum and teaching process where attendees are active participants and a teacher is facilitator, a collaborative environment, and the problematic situation that needs to be solved is the centerpiece. The word alignment implies that the learning outcomes are related to or aligned with the learning activities which are then aligned with the evaluation that takes place at the end of the teaching process (Picture 5). Do not forget that, apart from the teaching process, learning activities include learning outside the institution! In other words, the curriculum-defined learning outcomes must be acquired in the learning process (both in the institution and beyond) by an appropriate evaluation technique of (self)assessment, where the ultimate goal is acquired competency.



Picture 5. Theory of constructive alignment (adapted to 42)

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02

WHAT IS ANDRAGOGY?

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After reading this chapter you will be able to:

- ✚ explain what is andragogy
- ✚ explain the concept of lifelong learning
- ✚ distinguish formal from non-formal and informal learning
- ✚ distinguish the programs for training, retraining and prequalification in adult education
- ✚ explain the role and tasks of an andragogue and teacher in adult education
- ✚ critically evaluate ethical dilemmas in adult education

Basic terms and development of andragogy

If you give a fish to a man, you'll feed him for a day.

If you teach him how to catch the fish, you will feed him for a lifetime.

Chinese proverbs

At the beginning of your career path in adult education, you probably (as we are) at least once wondered what andragogy is. Although it has been a subject of scientific research since the middle of the 19th century, andragogy is (Ancient Greek: *andr-* = genitive case of *aner* – man + *agein* = to lead) [1] still unknown to many today. When we speak about upbringing, education, learning, and teaching, the most common term in the use is a comprehensive term pedagogy. Andragogy is different from pedagogy, primarily because of the specificity of the population you are studying with a specific method. The development of andragogy as an independent science and its popularization was contributed in the last decades of the 20th century by numerous UNESCO initiatives promoting the concept of lifelong learning and knowledge societies [2].

If you deal with the literature on adult learning and education, you will also notice that apart from the concept of andragogy, concepts of adult pedagogy or adult education theory are also used. In our part of the world, undoubtedly the most common concepts are andragogy and adult education, where the term andragogy refers to the science of education and education of adult persons, while the term adult education is used in the sense of practical social activity [3].



The term andragogy refers to the science of education and education of adult persons, and the term adult education means a practical educational activity.

The term andragogy was first introduced by Alexander Kapp in 1833 since he wanted to emphasize the importance of lifelong learning in an individual's life [5]. Still, perhaps the most deserving for the foundation of andragogy as science is considered American psychologist E. Thorndike who has been involved in adult learning research [6].

Different notions of andragogy can be divided into three groups:

1. andragogy is pedagogical discipline
2. andragogy is a relatively autonomous science
3. andragogy is the skill, method, theory or model of adult education (7; p. 54).

Among the authors who claim that the andragogy is skill, the method, or the model of adult education, is the most prominent American scientist Malcolm Knowles (1913 - 1997) who built his understanding of andragogy in defining the differences between learning of children and adults, which today is considered too simplified understanding of a highly complex phenomena of adult learning and education.

It is also important to highlight the correlation of andragogy with many other sciences. Andragogy is also defined as a science of adult education and education of adults that integrates those notions of pedagogy, the psychology of education and sociology, and education economics that are relevant to understanding, explaining and are acting on adult education [3].

Unlike relatively young andragogy as a scientific discipline, adult education as a social phenomenon and need is deeply rooted in the development of old civilizations and cultures (for example, ancient Greece and Rome), and in more intense and organized way occurs at the turn of the 18th and 19th centuries when under the influence of socio-political developments (industrial revolution, population migration, workers' and civic movements, etc.) in Europe and North America begin to form different movements that promote and organize adult education, traveling schools, literacy courses, Sunday schools and finally high folk schools, workers' universities etc [7].

There has long been a belief that adults do not need education and are incapable of learning [9]. The intense and organized practice of adult education and andragogical thought emerged under the influence of industrial progress and from the beginnings themselves they've had a pragmatic character. Compared to the pedagogy and regular education of that age, andragogues grew a revolutionary approach to education and learning. This is also borne out by the observations of Lindemann and Knowles on adult learning and education [10], which you could have read more about in the previous chapters and still can be applied today.

Changed political circumstances, rapid development of modern societies and technology, globalization, demographic changes and other social trends characteristic for the second half of the 20th century have led to the development of lifelong learning [11], which is a prerequisite not only for the comprehensive development of the knowledge society but also for mere survival of an individual.

Since adult education from the beginning was inextricably linked to socio-political, economic and cultural events, its development is nationally determined and locally colored and is therefore different from country to country. This has resulted in pronounced differences between the adult education system in European countries, which greatly hampers the definition of standards of the andragogic profession.

Andragogical theory and andragogic praxis in the Republic of Croatia

Although in the Republic of Croatia for a number of decades doesn't exist the study of andragogy, Croatia has a long and extremely rich tradition of adult education. The first major andragogical institutes are opened in the early 20th century. Thus, at the suggestion of Albert Bazala, the public university was established in 1907 in Zagreb, and then in Karlovac, Varaždin, and Split.

Between the two world wars there are numerous national and peasant universities, adult schools, folk libraries, and other andragogic associations which become the center of scientific-popular and enlightenment activities, and the Law on Folk Schools has been enacted too. At the same time, numerous public lectures, seminars, winter and summer courses are organized, and various activities of the Croatian literary and pedagogical assembly, social organizations, public libraries and reading rooms are organized. [13]. Immediately after World War II, adult education becomes propaganda instrument and is linked to the predominance of the idea of socialism, but since the 1950s, this concept has ceased and the system of adult education in Croatia is growing, so this period is still called a "golden age of andragogic thought". Numerous new educational institutions, adult education centers in companies are being established, books and studies from andragogy were published, people are working on the internationalization and interdisciplinarity of andragogic researches, the Andragogical center in Zagreb is being established and the training of staff for adult work becomes a priority [11]. In 1954, the Alliance of folk and workers' universities was founded in Croatia, and it launched a review entitled National folk university, later renamed in Andragogy, and the Alliance has also established a School for andragogic personnel, which during the 25 years of work has organized and implemented more than 500 informal education and training programs for 13 000 andragogic workers [8]. Nothing less important is the fact that at the end of the '50s of the 20th century, a college of andragogy was introduced to study programs of

higher education institutions in Croatia [28]. Since the mid-60s the trend of folk and workers' universities and mass forms of education has been replaced by smaller educational groups [11], which has remained unchanged until today.

At the Faculty of Philosophy at the University of Zagreb at the same time, there was a study program of andragogy which, as already mentioned, has not been implemented for decades so far. Nowadays the only andragogy department in Croatia exists at the Department of Pedagogy of the Faculty of philosophy in Rijeka, and according to the current *Regulations on scientific and artistic areas, fields and branches* [15] andragogy is a scientific branch of pedagogy in the field of social sciences.

The adult education is nowadays regulated by the Adult Education Act [16] according to which "adult education is based on the principles of professional and moral responsibility of andragogical staff and guarantees the quality of educational offer and is implemented by teachers, professors, professional associates, lecturers, trainers and others who must meet the requirements stipulated by the program and have the right and obligation of professional and andragogical training". The training programs for the andragogic workers are continuously developed and implemented by the Agency for Vocational Education and Training and Adult Education and it is expected that in the future higher education institutions will implement initial education programs (acquiring partial or full qualifications for adult education), and the Agency will continue to develop training programs – similar to how it is regulated for teaching and co-operative vocations in the regular education system.

Adult education in context of lifelong learning and education

Be ashamed if you don't learn, not if you don't know something.

Chinese proverb

You must note that this handbook often mentions the phrases lifelong education and lifelong learning and that they are linked to the concept of knowledge society mentioned in the previous chapter. The need for education after completing the schooling required the development of this concept which has become one of the fundamental principles and goals of a modern system of education and a key part of the knowledge society.

Perhaps you did not know that the term lifelong learning (LLL), which is often used in the present time, goes back all the way to Plato's time and his work *The Republic*. The idea and the expression of lifelong learning were first articulated in the late twenties of the last century [22]. European Commission [17; p. 9] defines lifelong learning as all kinds of lifelong learning, whose purpose is to improve knowledge, skills, and competencies within the personal, civic, social and/or professional activities of individuals.

Although lifelong education and lifelong learning are similar terms, their meaning is different and they should not be used as synonyms. Lifelong learning seeks to integrate and articulate all the structures and phases of education along vertical (the possibility of further education and acquisition of higher levels of education) and the horizontal dimension (participants are enabled to change the type of school) [20]. Nevertheless, learning is a wider concept of education. Lifelong education is linked to institutional learning and teaching, and lifelong learning includes all forms of knowledge acquisition: formal, non-formal and informal. It can be implemented throughout life without any formal obstacles, and its aim is to acquire and enhance competencies for personal, social and professional needs [19]. In the 70s of the last century, a shift from the concept of lifelong education to the concept of lifelong learning has taken place and in the mid-90s of the twentieth century the term lifelong learning finally became dominant in relation to the term lifelong education [12; 17; 18].

The concept of lifelong learning is linked to the flexibility of time, space, content, learning mode, self-regulated learning, and respect for different styles and learning strategies that suit each individual [21, 22]. His dissemination has contributed to numerous conferences, reports and agendas over the last few decades, but a particularly influential place belongs to another UNESCO study [12] which, emphasizing the crisis of traditional education and the need to develop a new educational concept, lists four pillars of lifelong learning:

- learn to know (knowledge whose foundation is the enjoyment of understanding, comprehension and discovery)
- learning to do (dealing with various life situations, creative influences on your own environment)
- learn to live together (understanding and respecting interdependence and cooperation)
- learning to be (the development of the full person, the development of the spirit, the body, the sensitivity, the sense of beauty, personal responsibility, and spiritual values).

In the context of adult education lifelong learning and education are particularly important as they move away from the traditional conviction that education is intended only for children and young people and expands them to non-formal education and informal adult learning.

Lifelong learning and lifelong education are imposed as the imperatives of today's time and at the same time, they should develop spontaneously and be guided by intrinsic motivation, especially in adults. However, it is concerning that less than 3% of the adult population in the Republic of Croatia participate in some of the adult education programs, in other words, 73% of the adult population has no desire to be included in them [23]. Developed countries of the world are oriented towards the society of knowledge or the learning society.



Are we truly a learning society?

Were not the previous societies also a learning societies?

His unusual thoughts on this issue are brought by K. P. Liessmann in the book "Theory of the Uneducated - Disappearance of Knowledge Society".



Although the benefits of the concept of lifelong learning need not be specifically addressed, there is a large number of skeptics that question its humanistic, holistic and human-legal orientation, stating that it is a Western concept that is exclusively related to economics, skills, and employability, that the focus on learning is causing the loss of teaching and teaching and that lifelong learning is a justification for shifting the responsibility (and thus the cost) of education from the state to an individual [24]. It remains to be seen how this concept will evolve in the future as it can still be said about it as a vision and a challenge, primarily because of the fact that education is still not available to everyone.



Most commonly, the terms “lifelong education” and “lifelong learning” are used as synonyms, but there is a difference between them. Lifelong education vertically links the learning of children, young people and adults (ie, learning from birth to death), and lifelong learning links horizontally all forms of adult learning (formal, non-formal, informal).

Even 75% of learning takes place outside institutional frameworks!



Formal, non-formal and informal learning

The concept of lifelong learning encompasses terms of formal, non-formal and informal learning. The division of learning into formal, non-formal and informal learning comes from Phillippe H. Coombs [25].

Formal learning (education) is an activity organized within the educational system (from elementary school to college) that is conducted according to approved programs for the acquisition of competencies for personal, social and professional needs and results in a public document (certificate or diploma) about the completed degree and type of education [16, 19].

Non-formal learning (education) is an activity of learning outside of the regular school system that may or may not result in a certificate of a successfully completed form of education, and it is important to point out that this certificate does not have the status of a public document [16, 19].

Non-formal learning can be organized in the workplace, organized by different societies or associations (youth organizations, trade unions, political parties, etc.) and can be organized in institutions that serve as a supplement to the formal education system (music schools, sports clubs, private lessons and similar.). It is an integral part of the concept of lifelong learning and one of the key directions of education for the 21st century because it is believed that informal learning is the answer to the many challenges that are the result of the complex and accelerated changes of the modern world. Non-formal adult education is also directed at the area of social activities aimed at personal development [16, 19].



Can you list some adult education programs in the area of social activities and personal development?

Can you think and offer some of these programs at your institution?

How would you encourage potential students to enter such programs?



It is considered that **informal learning** is learning that is neither formal nor non-formal; it is a natural phenomenon in everyday life (natural learning) and does not have to happen consciously. In other words, informal learning encompasses unorganized activities of acquiring competencies in everyday life, and its acquisition is influenced by the personal interests of the individual, the social and professional circumstances [16, 19] and the media.

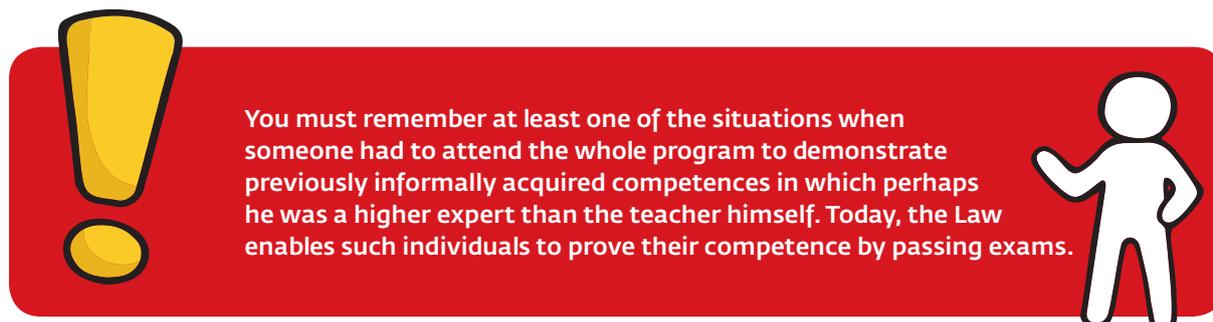


Try to recall some of the knowledge and skills you have acquired through informal learning. How much new knowledge have you gained from the media, and how much because you needed new knowledge in your everyday life?



Through watching of documentary shows, it is possible that you have learned, perfected, and/or deepened some knowledge that you did not care about during schooling because they were explained in an arid way, because you were interested in something else or because these contents were not suitable for your age or needs. It is possible that afterward you, due to the interesting approach, have become interested in the subject and have been genuinely perfected your knowledge through the media or some other learning channel. It is the same with participants of your programs. Therefore, you must always not only keep in mind but respect the previous knowledge of the participants, which is also one of the key andragogical principles.

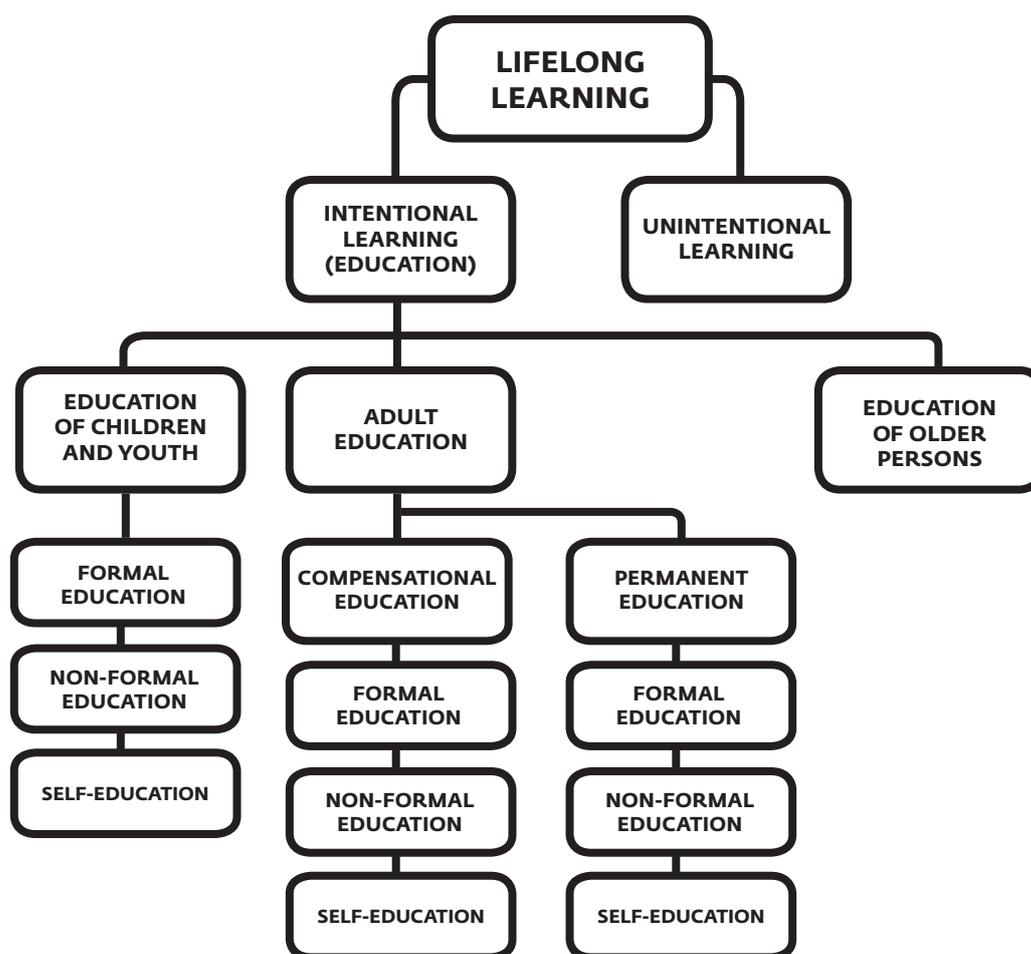
Contrary to the traditional system of education, modern educational systems consider competencies acquired by informal learning, ie, experiential learning quite important. Therefore, it is not surprising that numerous authors and documents emphasize the importance of respecting the knowledge and skills acquired by informal learning in the teaching process [16, 19, 26]. In adult education, it has been one of the most important premises of the teaching process ever since its beginnings [10, 27]. An important achievement is also the possibility to recognize the knowledge and skills acquired by informal learning [16]. In our case, for example, the legislator prescribes that adults can prove knowledge, skills, and abilities by passing exams in those institutions that otherwise run programs for acquiring such knowledge, skills and competencies regardless of the way they have acquired that knowledge [16; par. 11. i 12.]. This is a fine regulation that allows greater flexibility and cost-effectiveness of the system and encourages individuals to continue learning and improving.



You must remember at least one of the situations when someone had to attend the whole program to demonstrate previously informally acquired competences in which perhaps he was a higher expert than the teacher himself. Today, the Law enables such individuals to prove their competence by passing exams.

It is also considered that formal and non-formal education of employees can be achieved by work (simultaneously with working activity) or from work (successive change of work and education activities). The concept of adult education should in no way be partial, but it should include all the pathways of education: from institutional education to non-intentional (self)education.

Lifelong learning can be shown as hierarchically (Picture 6). Starting from lifelong learning as a superior, it is further divided into organized and unorganized education, ie intentional and unintentional learning. Furthermore, education is divided into the education of children and youth (pedagogy), adult education (andragogy) and education of older persons (gerontology) [4].



Picture 6. Hierarchical presentation of lifelong learning process [4]

Training, further training and requalification

The most precious knowledge is acquired as the latest.

Friedrich Wilhelm Nietzsche

Adult education can be implemented as a formal degree education or as non-formal forms of training and further training. Legal education in the Republic of Croatia by formal education is considered primary education of adults, secondary education of adults, acquisition of secondary or vocational qualifications, lower vocational qualifications, requalification, training, and further training.



You can find more about levels and types of education in the Croatian Qualifications Framework Act.

Professional retraining and training [25] is any retraining and training after completion of formal education specifically directed towards performing a certain regulated profession and covering one or more education programs. These programs, where appropriate, may be supplemented by appropriate vocational training or practice or professional practice. According to the *Regulations on Standards and normative and the manner and procedure for determining the fulfillment of conditions in adult education and training institutions*, adult education institutions are making programs [29, article 26, § 3]. It is further emphasized in the Regulations [29, Article 26 §§ 1 and 2] that through professional training are acquired

theoretical and practical knowledge required to perform jobs of first degree complexity according to the National Classification of Occupations, while participants, completing the training program with completed secondary school, supplement and expand the acquired professional knowledge to meet the demands of the labor market and to acquire knowledge about new techniques and technologies and their application.

Training is one of the forms of formal adult education whose goal is to acquire the theoretical and practical knowledge required to carry out simpler tasks within some profession. It is achieved through short specialized programs in some professions (eg auxiliary chef, assistant waiter, auxiliary pastry maker, forklift operator, mason, etc.). Training programs last for up to six months, depending on the pre-completed degree of education.

The duration of the **retraining** program is defined by the mentioned *Regulations* [29] depending on the type of program. Thus, the program for restoring and supplementing acquired knowledge and skills and acquiring new professional knowledge of the same complexity level should not last less than 150 teaching hours. In the case of jobs of a higher degree of complexity, the program can not last for less than 500 hours, except for computer education programs. Examples of training programs are occupational safety specialist, driving instructor (all categories) and others.

Requalification is a qualification for work in another profession. According to the *Regulations* [29], the re-qualification program is implemented on the basis of programs prescribed for regular education for participants with acquired vocational qualifications for one occupation to acquire a vocational qualification for the same level of education for new occupation and for those with secondary school qualifications for the purpose of obtaining secondary vocational qualifications. Examples of requalification programs are a gas installer, auto electric etc.



DO IT YOURSELF



A task that can help you explain the concepts of training, retraining and requalification and their connection with the terms of formal, non-formal and informal learning

What is it? Why?

Although we use terms formal, non-formal and informal learning on a daily basis and we know that there are adult education programs that are intended for training, retraining, and requalification, the distinction between these terms can be quite demanding, especially when it comes to beginners. Therefore, we offer a suggestion to link and differentiate the above concepts in an interesting way. For that, we will use verses of familiar songs that can make it easier to understand and remember these terms.

When yes? When no?

If you are a beginner in adult education, it would be a good idea to try to find solutions to the set of tasks yourself. You will probably notice that sometimes there are several different solutions. In such cases, we refer you to current legal regulations.

If you are an adult or adult education manager who wants to explain differences in terms and programs to other educators or andragogues, you can use these or similar tasks. We strongly advise you to divide the participants into at least three groups (depending on the size of the group) and assign each of the groups one or more of these tasks. In the final phase of the activity, each group can present their solutions and the others can make their comments.

Also, it is possible to switch the groups and ask them to read their colleagues' tasks and solutions and offer suggestions. When solving the task, it is desirable and useful to prepare materials for participants (current legal acts and regulations) to achieve the most accurate and precise solution.

Be careful!

Answers to the lyrics below are not unambiguous. How "firm" you will structure the task depends on the attendees of the workshop. If they are beginners, it is advisable to give as precise guidance as possible (as in the first example). If it is a group where, along with beginners, are also those with a broad background on the subject, the task may remain unstructured and the participants of the training will independently ask for possible combinations and provide answers to them.

If I were to be a baker who works at night...**Some of the possible questions and/or solutions:**

1. N. N. has completed elementary school and has no adequate bakery training. However, he has many years of experience in bakery jobs. Which adult education program should be enrolled and why? What are the legal possibilities of checking and recognizing his qualifications?
2. T. T. has worked for many years as a chef at a local restaurant and has completed a chef school. He wanted to become a baker and open his bakery. What kind of adult education program should be enrolled and why? What are the legal possibilities of checking and acknowledging his qualifications?

... 'cause a chimney-maker, young or old, can repair every broken furnace.

In the labor market in the city of X there is no need for chimneys, so chimney sweeper T. N. has fewer and fewer jobs. He comes to you at an adult education institution that offers a variety of adult programs. What opportunities does that chimney have?

I sat in front o' the machine, sewing was my daily routine...

M. K. gained knowledge and skills in designing clothes and sewing informal learning. She first taught sewing from her grandmother, and then she perfected her skills. She used to read magazines about sewing and designing the clothes, and today she is following websites that tackle sewing and design and in leisure time she likes to design, tailor and sew clothes. Although she was working for a number of years as a lawyer in a state-owned company, she is now professionally interested in designing and sewing clothes and opening up her craft. Look on the pages of the Agency for Vocational Education and Training and Adult Education programs that M.K. can enroll? What would you recommend to her?

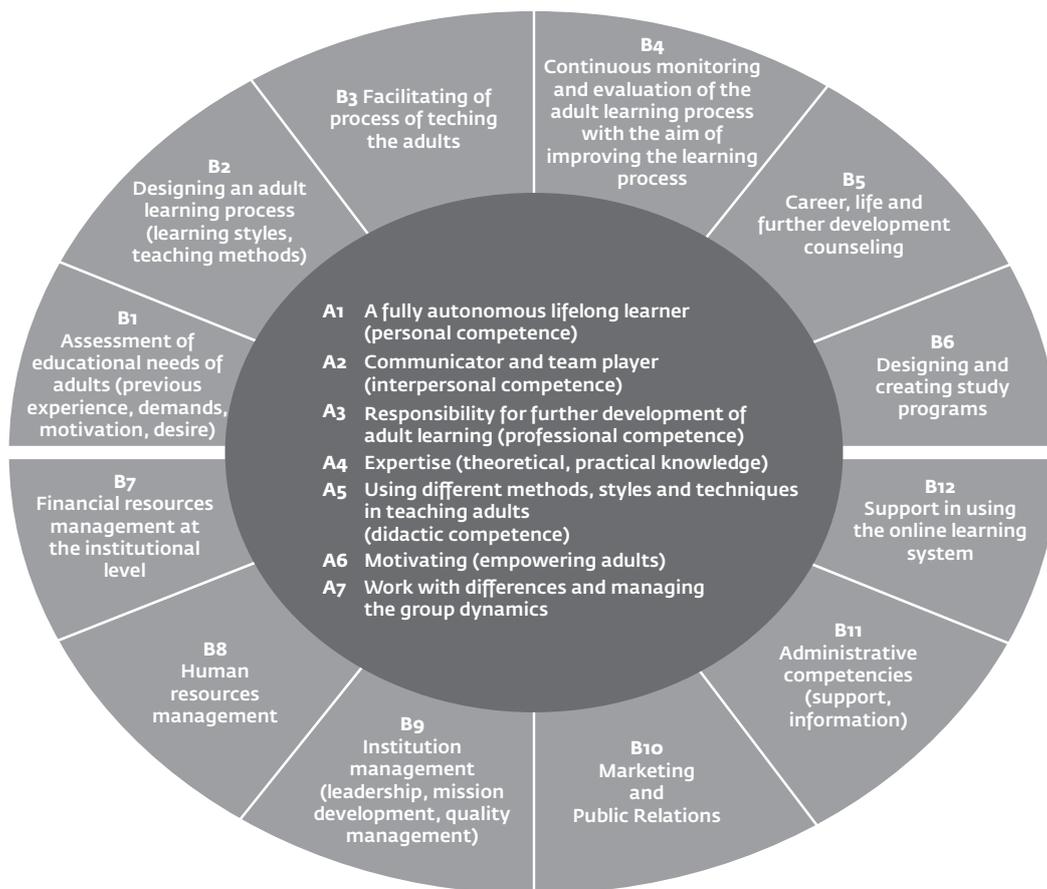
Competencies of andragogic workers

Knowledge is not about to know the knowledge, but how to transfer it.

a proverb

The issue of andragogic worker's competencies is one of the key issues at the present time, and above all in the discussions on the education of the andragogy staff. Given that there is still no study program of andragogy in the Republic of Croatia in the processes of adult education are included the most diverse personnel profiles. At the moment, we can divide them in experts with completed teacher training (teachers working in adult education alone or with regular work), professionals of different profiles with completed non-pedagogic studies and those working on research and development of andragogical theory and practice (researchers and professors at the university). According to the Adult Education Act [16], teachers employed in formal education must have the subject-professional and pedagogic-teacher competencies for working with children in primary and secondary school (but not andragogic), while for those who work in non-formal adult education are still there are no prescribed conditions, qualifications and competencies [14, 32]. The Education, science and technology strategy [20] foresees that adult education teachers need to acquire andragogical-psychological-didactic-methodical competencies, and it is also foreseen the standardization of occupation of andragogic worker (andragogues at first place).

Numerous studies confirm that adult education professionals need to possess and develop a whole range of competencies. In understanding the complexity of andragogical competences can help you following view (Picture 7) where the competencies of andragogic workers are divided into generic and specific [31].



Picture 7. Competencies of adult education workers [31]

You must have noticed that generic competencies (marked A1 to A7) include personal competency, interpersonal, professional, theoretical (practical) knowledge, didactic and competence to work with differences and group dynamics management. Specific competencies are divided into competencies related to the preparation and implementation of the teaching process (marked B1 to B6) and to the competencies related to the organization of the learning process (marked B7 to B12). Due to the scope and the structure of competencies needed for working with adults in the 21st century, it is unlikely that andragogic workers as individuals will master all the expected competencies, so each of them has developed all generic and, in addition, those specific competencies which are specifically related to its activities, roles, and scope of work [32].

Who is andragogue and who is teacher in adult education?

Almost every serious discussion on the quality of adult education speaks, among other things (and above all), about the education of andragogic workers as one of the fundamental prerequisites for professional adult education.

For the purposes of this paper, we provide a simplified representation of a fairly detailed classification of andragogic workers [33]:

1. The first group of andragogic workers is made up of researchers, scientists and educators who either conduct adult education programs or deal with the professional development of andragogical staff.
2. The second group of andragogic workers consists of the teaching staff of different occupations and qualification levels who are teaching at adult education institutions.
3. The third group of andragogic workers consists of extracurricular staff of various occupations and qualification levels who carry out administrative tasks, adult education managers, head of adult education, teaching organizers, makers of adult education plans and programs in a company, chamber and other adult education providers, as well as counselors for professional information and guidance of adults.

Does this division seem complicated? We think the same. Why is that so? Because the system of adult education by its nature is extremely complex. It includes a wide range of educational offerings, staff, types of institutions, participants, falls under the jurisdiction of different sectors, and so on. Furthermore, there is still no study program of andragogy in the Republic of Croatia nor independent training programs for the acquisition of andragogic-psychological-didactic-methodical competencies,

so we can not speak of a uniquely educated andragogical staff. Without all this, it is difficult to talk about the professionalization of the andragogy profession. In the context of this, it is important to mention the standards of occupation and qualification standards for the career of andragogues and teachers in adult education [14, 34, 35, 36].

Andragogue is an expert who is involved in running a program, ie an institution for adult education. The occupation of andragogue implies planning, organizing, researching and improving the work of an institution for adult education. From andragogue is expected a contribution to the quality assurance system of adult education, cooperation with relevant stakeholders in adult education, the performance of related administrative affairs and the development and evaluation of curricula in adult education. Andragogue also participates in the professional orientation of teachers and students in adult education and in the improvement of personal and professional competencies. Particularly important is the fact that this standard of andragogic occupation does not confine a person solely to work at an adult education institution but opens its place in a number of other institutions intended for the adult population (employment offices, centers for social work, institutions and programs intended for the third age population and migrants, prisons, public companies and others) [34, 35].

A teacher in adult education is an expert with acquired andragogic-didactical-psychologic-methodical competencies and is predominantly engaged in planning, organization, realization and (self)evaluation of the teaching process [34, 36].

You certainly notice that there is a significant difference between andragogue and adult education teacher. The tables below show the key jobs and competencies that an andragogue and adult education teachers should have [35, 36]. By reading these lists, you can check which competencies you have, and which you still need to develop (depending on whether you are doing an andragogue's or a teacher's job). Also, these lists can help you check with your colleagues in which areas at the institution level you need to improve, ie what kind of professional training you can plan in your own and further work of your institution.

Do not forget that these competencies and jobs will change over time and that they reflect the current state of adult education in the Republic of Croatia.



DO IT YOURSELF



Your self-assessment:

- + I have this competency
- I'm not competent in this area
- +/- I consider myself somewhat competent in this area



Key job	Andragogue's competencies	Assessment +; -; +/-
PLANNING AND ORGANIZING THE EDUCATIONAL PROCESS IN EDUCATION OF ADULTS	analyzes the needs of adult education in the local environment and in the labour market	
	implements the principles of the educational policy of the European Union and of the Republic of Croatia in the development of an adult education program	
	instructs and prepares teachers for immediate theoretical and practical teaching	
	implements knowledge about the development, system and organization of adult education at the institutional level	
	implements modern andragogic and educational theories in adult education curricula	
	implements contemporary knowledge in the field of psychology, didactics and methodology in adult education curricula	
	elaborates criteria for selecting teachers when hiring in an adult education institution	
	creates procedures for improving the quality of work of teachers in adult education	
	develops mechanisms for monitoring and controlling the teaching process promotes the value of lifelong learning at the institutional level	
	devises ways of creating a positive environment and atmosphere during planning of the educational process	
adjusts educational processes to the needs of students with psychophysical difficulties		
RESEARCH AND IMPROVING THE LEARNING PROCESS IN EDUCATION OF ADULTS	analyzes the student's achievements and the performance of teachers	
	encourages the application of modern and diverse teaching strategies, methods, forms of work and teaching technologies in the teaching process	
	creates new curricula by consulting the relevant theory and documents, taking into account the needs of the labor market and the local community	
	critically evaluates existing curricula and programs in adult education encourages teachers to connect teaching subjects	
	evaluates the quality of teaching preparation and their implementation in teaching	
	analyzes ways of evaluating learning outcomes	
	trains teachers to organize and realize the teaching process, taking into account the characteristics of the learner (motivation, learning styles, previous personal and professional experiences trains teachers to organize and realize the teaching process	
	researches and collects examples of good practice for their implementation in adult education curricula	

Key job	Andragogue's competencies	Assessment +; -; +/-
QUALITY ASSURANCE SYSTEM IN EDUCATION OF ADULTS	implements legislation and other regulations relating to the quality assurance system in the adult education institution	
	analyzes the features of existing adult education programs and implements the necessary changes	
	coordinates and encourages cooperation between mentors and attendees	
	creates instruments for tracking the quality system	
	analyzes the quality system monitoring data and proposes corrective and preventive measures to improve the quality system	
	encourages teachers to lifelong learning and training	
	develops plans and organizes professional trainings for teachers to conduct professional training activities	
PERSONAL AND PROFESSIONAL DEVELOPMENT OF ANDRAGOGUE	he is trained in andragogic, didactic-methodical, communication and interpersonal and organizational and management skills	
	he is improving in the field of curriculum development and evaluation	
	acquires and integrates knowledge based on the results of scientific research	
	develops and conducts research projects in adult education explores and evaluates its own role in the institution	
	applies self-reflection processes and explores opportunities for continuous improvement of their own professional practice	
COORDINATION WITH INTERNAL AND EXTERNAL SHAREHOLDERS IN EDUCATION OF ADULTS	follows the labor market situation with regard to the needs of developing new programs	
	redevelops reflexive practice through dialogue with experts at the institutional level	
	operates with entrepreneurs, the academic community, other institutions and competent institutions and ministries in developing new programs in adult education	
	informs the public about the work of the institution and the possibilities of adult education	
	motivates external participants for cooperation with the institution	
	applies the principles of supporting and quality communication in the institution and interaction with external stakeholders	
	promotes a supportive environment and atmosphere on an institutional level	

Key job	Andragogue's competencies	Assessment +; -; +/-
PROFESSIONAL DEVELOPMENT OF TEACHERS AND ATTENDEES IN EDUCATION OF ADULTS	professionally directs teachers in adult education (career counseling) and encourages them to lifelong learning and training	
	professionally directs the attendees of adult education programs implements ethical	
	principles in working with teachers	
	communicates with teachers and associates, and gives them information on professional training programs	
	professionally directs teachers in adult education (career counseling) and encourages them to lifelong learning and training	
PERFORMING OF ADMINISTRATIVE DUTIES IN ADULT EDUCATION INSTITUTION	applies the legal regulations pertaining to all aspects of adult education	
	maintains andragogic and other records	
	keeps and archives documents in accordance with applicable regulations	
	prepares instructions for organizing and conducting classes in some programs	
	uses simple statistical analysis to process data collected through analytical and research methods	
CREATING AND EVALUATION OF THE CURRICULUM IN ADULT EDUCATION	creates new curricula in adult education, taking into account the institution's social, economic and contemporary context, and contemporary andragogic and didactic-methodical insights and research results	
	evaluates and revises existing curricula of adult education programs	
	assesses the usefulness of implementing new programs with regard to labour market needs, personal needs of learners and enabling further education	
	conducts qualitative and quantitative research on the needs and interest of the labour market for new education programs	
	conducts qualitative and quantitative research on the effectiveness and improvement of the teaching process in adult education	
	analyzes data collected through research using statistical analysis and procedures	
	uses the results of the applied research to improve the teaching process, the competence of the teacher and the work of the institution	

Key job	Competencies of teacher in adult education	Assessment +; -; +/-
PLANNING THE TEACHING IN ADULT EDUCATION	applies knowledge of the development, system and organization of adult education when planning the teaching process	
	applies contemporary andragogic theories during planning of the teaching	
	creates a teaching process considering contemporary knowledge in the areas of psychology, didactics and methods that are important for adult education	
	selects the teaching strategy when planning adult education	
	selects teaching methods, forms of work and teaching technology when planning adult teaching	
	creates a plan and program for adult education in cooperation with professionals	
	correlates teaching contents and learning outcomes with the contents of other subjects	
	develops teaching by linking theoretical knowledge and practical aspects of teaching work in accordance with the principles of adult education	
PREPARING THE TEACHING IN ADULT EDUCATION	creates teaching materials while recognizing the notions of andragogy, didactics and teaching subjects	
	critically selects literature and teaching materials from teaching subjects	
	prepares the teaching process according to the performance plan and program	
	creates a curriculum, taking into account the characteristics of the participants and their previous personal and professional experiences	
	creates the goals and outcomes of teaching lessons in adult education	
	prepares for teaching lesson	
	creates ways of evaluating learning outcomes	
	selects and applies teaching strategies, methods, forms of work, teaching technology and materials with respect to the characteristics of the teaching unit and the individual needs of the learner	
	makes teaching materials	
	prepares a lesson by linking teaching contents to the contents of other subjects and examples from practice	
applies knowledge from adult development and learning		

Key job	Competencies of teacher in adult education	Assessment +; -; +/-
CONDUCTING CLASSES IN ADULT EDUCATION	realizes a lesson based on contemporary andragogic and didactic-methodical knowledge, considering the learner's specifics (motivation, learning styles, previous professional and personal experiences, target groups)	
	motivates participants to actively participate in teaching and for cooperation and teamwork	
	creates situations in all forms of teaching process for problem solving, creative and critical thinking	
	encourages students' responsibility for learning outcomes and teaching activities	
	effectively manages all elements of the teaching process	
	provides participants with constructive and supportive feedback in all forms of teaching process	
	encourages students to develop metacognitive skills and effective learning strategies	
EVALUATION AND (SELF)EVALUATION	applies different forms of monitoring and evaluation of student achievements	
	creates materials for tracking, assessment and evaluating learner achievement based on the set learning outcomes in the immediate teaching process	
	provides timely and accurate feedback to participants on their achievements	
	creates evaluation criteria in accordance with the docimological principles	
	(self)evaluates his own work, the quality of teaching and encourages the students to (self)evaluate	
PERSONAL AND PROFESSIONAL DEVELOPMENT OF TEACHERS IN ADULT EDUCATION	applies the processes of self-reflective practice	
	explores opportunities for continuous improvement of his own professional practice	
	he is training in andragogue and teacher knowledge and skills and in subject of teaching	
	continually studies contemporary literature from the subject area	
	researches and evaluates its own role within the institution for adult education	

Key job	Competencies of teacher in adult education	Assessment +; -; +/-
COOPERATION WITH INTERNAL AND EXTERNAL STAKEHOLDERS	applies strategies of supportive and constructive communication in relation to all stakeholders	
	acknowledges the specifics of stakeholders in communication processes	
	cooperates with internal and external stakeholders to improve the quality of the teaching process and ensure cooperation in practice (depending on the needs of a particular program)	
	provides a supportive teaching environment and atmosphere	
PROFESSIONAL ORIENTATION OF PARTICIPANTS AND PERFORMING OF ADMINISTRATIVE DUTIES IN ADULT EDUCATION	applies the legal regulations pertaining to all aspects of adult education	
	leads the teaching and other documentation in adult education	
	participates in the preparation of individual student plans	
	provides support to the students in the process of educational and professional orientation	
	applies the regulations related to the protection of the rights of the participants	
	implements the ethical principles in working with the participants	

Ethical perspective in adult education

If we are talking about the professionalization of andragogic activity, ethics becomes sine qua non of adult education. The ethical nature of andragogy practice [37] is reflected in possible dilemmas in decision-making processes that may occur during:

a) a planning process that precedes the teaching itself (Whose needs are primary when planning the program and in what proportion: the needs of the participants, the needs of the employer or the needs of the society? What about tuition? Is it equal for everyone or is it preferable? Should adult education be available to everyone?)

b) teaching process itself (What content to teach? Whose ideas and the worldview speak out of these contents? Who is responsible for how individuals teach, what they teach, and how they communicate with their students?).

Regardless of whether they are aware of it or not, the andragogic workers face ethical dilemmas in practice every day. They directly or indirectly decide who should be taught, what should be taught and whose goals should be the most important, which is not just a question of profession or methodological-didactic decisions, but also questions that concern the ethics area. You have probably noticed that ethics is also referred to as one of the competencies in the proposed occupational standards listed in the tables above, which further demonstrates the importance and relevance of this and, often inadmissibly

neglected, themes. Brockett and Hiemstra [38] in their considerations of ethics in adult education cite six moral principles pertaining to adult education:

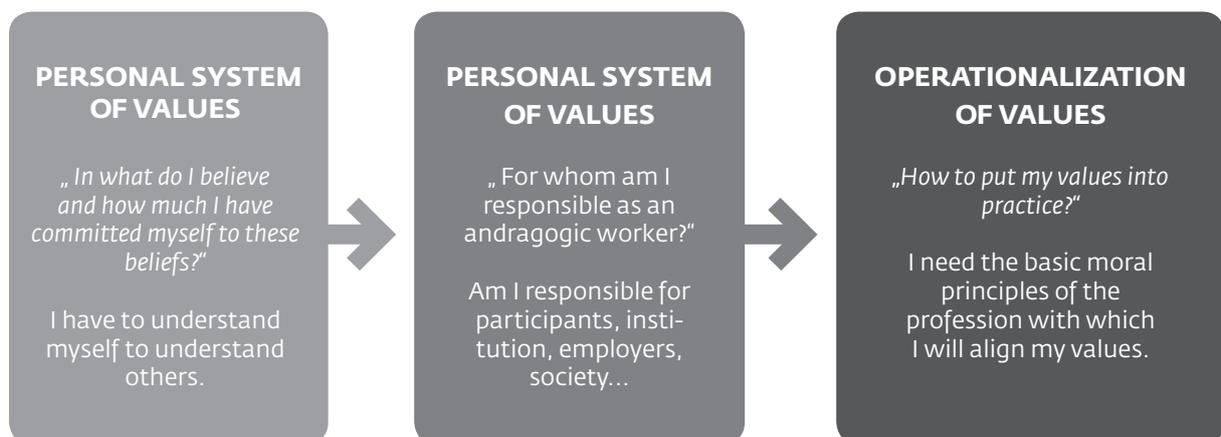
1. respect for program participants
2. justice and equality towards program participants
3. obligation towards program participants and all involved parties
4. mercy, minimizing harmful, and maximizing positive outcomes
5. care about program participants
6. self-awareness and reflection on his own work as an andragogic worker.



Since the andragogic worker is the one who decides what to learn, is it ethical for him to provide superficial information and not to do lessons he considers boring or unnecessary?

Ethical model and ethical codex

Many ethical models are proposed in the literature that should facilitate the adoption of the universal ethics code for andragogic workers. The three-dimensional model proposed by Brockett and Hiemstra [30] encompasses the personal system of values, consideration of multiple responsibilities, and operationalization of values (Picture 8).



Picture 8. A model of making practical decisions related to ethical issues [30]

The presented model can help in the process of making practical decisions related to ethical issues that arise in adult education, but it does not represent the theoretical framework nor offers end solutions but helps the andragogic workers to understand the dimensions in which the ethical dilemma may occur. So, this model needs to make us aware of the existence of implicit theories of education, ethical dilemmas and possible ways of solving them [30].



Would you forgive a tuition fee for a participant who can not afford it, and in turn increase the price to other course participants?

The student misses three points for passing on the last exam, and on the diploma he receives depends on how quickly he will be employed. What are you going to do??



The ethical codex refers to a set of formal and informal rules, regulations, and good practices in performing the service. It embraces the moral principles, norms, ideals, and rules of conduct that apply to the individual and the community. There is no universal ethical codex in the Republic of Croatia that would admit and protect the rights of institutions, of andragogic workers and participants and offer guidelines for professional and ethical work [37], while in foreign literature more examples of such codex can be found. As in most issues of ethics, morals and relationships of power, in this case, the opinions are divided: one side stands for the introduction of the ethical codex, while others oppose it by stating, as its main argument, the question of the ability to decide what is ethical, and what not.



Do we have the standards of ethical conduct on which we base our work on adult education?

Do you think we need an ethics code of adult education? Which components should be included?

Do you think it would be useful to form an ethics committee to consider ethical issues (eg practice, common values in the field of adult education etc.)?

Did you encounter an ethical dilemma in your practice? Try to analyze it with Brockett's decision-making model.



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03

NEEDS ASSESSMENT AND PLANNING OF TEACHING PROCESS IN ADULT EDUCATION

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After reading this chapter you will be able to:

- ✚ to list and explain the phases of andragogical cycle
- ✚ to explain different methods of needs assessment
- ✚ to pick appropriate method and conduct a needs assessment
- ✚ identify external and internal factors that may affect the educational needs
- ✚ to list the elements of the cycle of planning of the teaching process.

Andragogical cycle

Unsuccessful planning is a failure planning.

Alan Lakein

In the first chapter you met the andragogical cycle as a methodological approach to curriculum development in adult education. Simply put, andragogical cycle (picture 9.) is a system of procedures for achieving the goals of adult education. During the andragogical cycle, analysis of the educational needs of society, institutions and individuals is carried out, and the results obtained may influence the planning and programming of adult education, the direct preparation and implementation of programs or processes, and the monitoring and evaluation of learning outcomes [1]



Picture 9. Andragogical cycle

Needs assessment in adult education

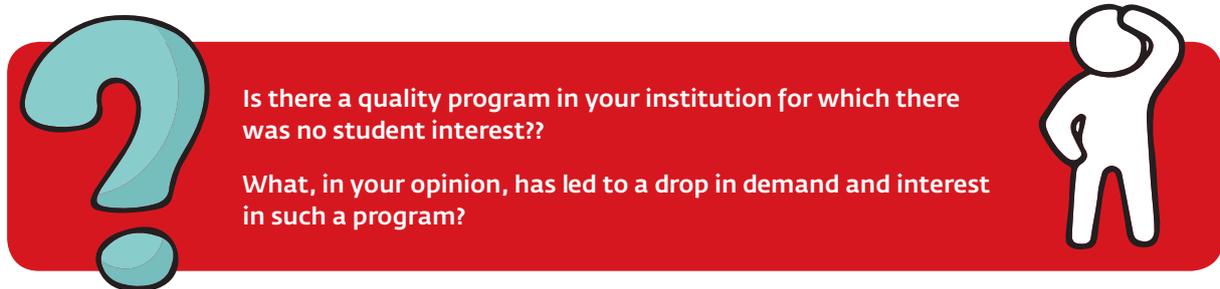
Planning the needs of adult education is also the first step that is necessary to make in order to ensure the sustainability of educational programs and the adult education institutions themselves.

Unlike educational programs that are organized during formal education, and which are decided by an education policy that is often very tricky and has the focus of the society as a whole, adult education is more flexible and is often based on the needs of an individual. Likewise, adult education has a marked volitional dimension - in most cases, it is not compulsory, as opposed to formal education, especially the obligatory one. For this reason, adult education institutions are in the position that the needs analysis is a prerequisite for their survival.

Adult education has numerous and sometimes completely mismatched goals. Often it meets the needs of the labor market, corrects the shortcomings of primary and secondary education and ensures the horizontal mobility of the participants in education. At the same time, it meets the needs of an individual who are not always oriented towards employability and in its informal forms, adult education cares about the interests of adult learners. Satisfying their needs, the quality assurance of adult education helps develop a full and functional person with the necessary competencies for achieving goals in social (micro and mesocontext), but also in their business life. Educational needs of participants can be intrinsically and extrinsically motivated (for example, a foreign language course can be enrolled in an adult who needs to improve his/her language skills as he plans an annual vacation abroad and wants to be able to communicate in a language spoken in the country he is planning to visit). Likewise, a participant attending a foreign language course could have entered it after the employer had instructed him in order to provide prerequisites for expanding his activities to the international market. In an ideal situation, individual's needs and the needs of the employer can be harmonized, but that is not always a case. These motives have a great impact on further organization and implementation of the program,

but we'll say a few things on that a bit later.

In order to respond to the multiple and diverse needs of an individual, the planning of an adult education program is based on a needs assessment of the participant itself, then the needs of the employing institution or the need for a job market recognized in society. However, you should also not forget about the needs assessment of the institutions themselves, which are planning and organizing adult education programs in order to ensure the program's viability, including their own existence. It is possible that institutions have an offer of high quality and interesting programs that are not carried out solely because there is no demand for them. Likewise, programs that are implemented and not fully aligned with the needs of the individual, their anticipation and motivation for attending the program, can very quickly cause student dissatisfaction and even cessation of their implementation.



Is there a quality program in your institution for which there was no student interest??

What, in your opinion, has led to a drop in demand and interest in such a program?

An analysis of educational needs is a process of identifying problems that are manifested in deficiencies, in accordance with standards or external requirements that can be eliminated in whole or in part by education [2; p. 93 – 100]. The basic objective of identifying the needs is to identify and incorporate the results obtained into the overall planning process of educational programs.

The needs assessment refers to the assessment of the identified needs and selection of the most important ones in accordance with the planning of the activity. Is there any need in conflict with other needs? Is there an agreement at all levels of target groups on the importance of needs? The needs assessment is considered a crucial task, it leads to the development of relevant programs that meet the needs of the target groups [3].

Educational needs represent a space between existing competencies and desirable behavior. These needs can be identified by the student, and can be attributed to him by the employer. Educational needs can be symptomatic, normative as well as social and institutional [4]. Namely, these needs may be caused by deficiencies that are symptomatic in an individual's daily life. Some of them may be normative or established due to the shortcomings and weaker results that an individual achieves with respect to the expected norm or standard. Likewise, both society and institutions can express the needs and expectations they have of an individual.

If you want to perform a needs assessment, you need to be aware that there are three levels:

- **macrolevel** – needs of society
- **meso-level** – needs at the institutional or educational institution level
- **microlevel** – needs of an individual.

The needs of macro-regions are recognized with regard to social and economic trends (eg migration

of the population, development or extinction of certain industries) and based on the meta-analysis of data obtained from various international and national researches such as *Adult Education Survey – AES*, *Continuing Vocational Training Survey – CVTS* or *Programme for the International Assessment of Adult Competencies – PIAAC*.

Needs in meso-level are often the needs that are determined with respect to human capital that has a certain company or consortium. These needs are determined with regard to the purpose, mission, vision, priorities and goals of the institution. Determining the needs on the meso-level ensures the survival and financial profit of the company and their sustainability in the market. Personal needs, ie needs on microlevel, are the needs of an individual determined by his interest, but also with regard to the level of competence and knowledge an individual possesses.

This topic can be discussed over and over, but for the purposes of this manual, you will be acquainted with the factors that influence the needs for analyzing the educational needs of adult education institutions. Contextually conditioned indicators that encourage institutions to analyze educational needs are often a new legislative framework, changes in laws and regulations and user requirements.

Likewise, multiple processes that take place within the institutions can stimulate the analysis of educational needs. Potential drivers for the analysis of educational needs may be new employment within the institution, reduction of the number of employees, redistribution of new service jobs, new systems, procedures or methods of work, new equipment, modernization, business success, strategic decision on improvement, change of mission etc. However, there are also negative indicators that may trigger a needs analysis to address the deficiencies found in reports of unrealized jobs, deviation from prescribed procedures, complaints from parties and/or employees, labor disputes or the departure of experienced employees. These are the indicators that indicate the ultimate moment for the needs assessment.



DO IT YOURSELF



EXERCISE OF NEEDS ASSESSMENT

What is it? What is it for?

Needs analysis is the first step in the education cycle and the key to success in all further activities. There is often a question: what is it that encourages us to conduct a needs assessment, ie when and why a need assessment needs to be done in an adult education institution and based on which indicators we will make a decision on conducting a needs assessment.

When yes? When no?

If we want to check whether our institution needs to undergo a needs assessment based on which we will plan and organize professional training of teachers, we will conduct the exercise with three simple questions (exercise 1.).

<p>1. What is happening in an institution/ organization that could activate, or has it already activated the need for improvement?</p>	<p>Describe potential drivers</p> <p>Example: introduction of new services/ programs, redistribution of jobs, results of business success, professional development plans ...</p>
<p>2. Are there any negative indicators in the institution/organization that would trigger new needs?</p>	<p>Specify negative indicators:</p> <p>Example: delay and unrealized tasks reports, complaints of users/attendants, increased number of quality staff departures etc.</p>
<p>3. What external influences can in the future be the drivers for new advances?</p>	<p>Specify external drivers:</p> <p>Example: new laws and bylaws, user/student requirements, etc.</p>

How?

Answer the questions you asked (the “brainstorming” method) and think about the answers you received in order to complete a detailed needs assessment for professional training. Remember - to make vocational training or any other form of education meaningful, concrete needs need to be identified at all levels: organizational needs, group needs, individual needs. Analysis of organizational needs leads to the identification of educational needs in different departments, sectors, groups or occupations, and they will determine the education needed by individuals. This process also takes place in reverse: analysis of individual needs brings us to common (group) needs, and the sum of individual and group needs will help us in defining organizational needs.



Methods of needs assessment

Some methods of needs assessment that you can apply in everyday practice, which we will explain in more details are:

- interview with participants, employees, and employers
- focus groups
- a printed or online survey polling the educational needs of employers
- SWOT analysis
- PEST analysis and PESTLE analysis.

Interview

The interview you will conduct to analyze the needs should provide free flow of conversations on pre-defined topics or defined problems [5]. In our case, this may be educational needs, institutional needs, program cost-effectiveness analysis. Questions that are raised to respondents during the interview should be open type questions. This means that they should allow interviewed persons to have a high degree of freedom in answering the question. Questions during the interview should not be leading questions. You can make a directory of questions for a particular situation and thus ensure their structure and ability to replay with other interview participants. It is recommended to use a semi-structured form of deep interviews. A deep interview is sufficiently open and non-standardized enough to allow the respondent to express personal opinions and vision.

Sometimes a narrative interview can also be used. If you estimate that you will get better results by unstructured interviews, it is possible to organize it so that the participant does not face standardized questions, but rather encourages them to speak freely. The basic idea is that there are subjective structures of meaning that are expressed in free narration.



Think of some open type questions that will help you analyze the viability of a particular training program you plan to include in your educational offer.



Focus groups

The focus group method is useful when determining the needs (educational) within a particular work group or the adult education institution itself. The main feature of the focus group is a group discussion on a particular topic or problem. The focus of the focus group is to encourage a deep discussion to explore the needs of participants, their attitudes and opinions [6]. The focus group discussion should be comprised of 8 to 12 participants. A greater number of participants might prevent the involvement of all members of the group. In order to successfully complete the focus group, you need to follow certain steps and keep in mind some of the specifics of this method:

1. identify the aim of the focus group (educational needs in a particular company, local community, city, sector).
2. Select the participants in the focus group: when selecting participants, you should carefully consider which factors affect the validity of the same method. If, for example, you want to determine which educational needs of a particular group of workers are in the production line or in direct contact with customers (customers), make sure that there are no differences in the workplace level among the participants. Namely, the power relationships that exist in each organization can be very difficult if they are not taken into account when determining the actual needs of employees. It is also possible to plan a separate focus group where only middle management or management is involved.
3. Prepare a guide and discussion questions (questions should be open type, clear and unambiguous). During the discussion, it is necessary to provide opportunities for discussion among the participants to determine the real needs. In no case should the conversation take place with the dynamic of the moderator's question - the response of the participant. The aim is to involve as many participants as possible in the discussion and encourage them to comment, question and discuss the answers to the questions you have set. In brief, we will describe the usual focus group protocol: Begin at the beginning, announce the focus group target, and begin with the questions that will open the conversation, then the introductory question follows. Continue with transition issues and move on to key topics. When the discussion develops, go to key questions. When you notice the discussion calms down or the end of the agreed time for the discussion is reached, ask the final questions.
4. Select the focus group location. Space should be pleasant. It would be desirable for the participants to sit in the circle so everyone can see and talk to each other.

5. Spend a focus group for 90 to 120 minutes. Explain the purpose of the discussion, announce the goal and duration and explain the rules of decent behavior (warn participants not to interrupt each other and, if necessary, arrange for a sign to be used when someone wants to take a word). During the focus group, note the participants' answers. During the focus group, two people are usually in charge of implementing the room: moderator of discussion and assistant who is recording (writing, recording audio or video).
6. Analyze the obtained answers. During this phase, it is necessary to categorize the obtained answers. The data obtained is subdivided under a common denominator, encoded and analyzed.
7. After the focus group, you need to write a brief report summarizing all the most important conclusions.

Surveys

The survey is one of the most widely used methods used in research and analysis of the situation and needs. This method can collect data on the opinions and attitudes of respondents by asking questions in the form of a questionnaire [7]. The survey can collect data on the economic, demographic, sociological needs and characteristics of a particular group of respondents. Likewise, a word survey may indicate a process in progress that puts a number of questions to the respondents: oral or written. The number of questions you will put into the survey depends to a great extent on the readiness of respondents (potential learners, teachers or employers) to answer questions in your survey. Here we will outline the general criteria for compiling survey questions.

When compiling a poll you should make sure that the survey is not overly long or short. The validity of the same survey depends on the validity of the question that it contains. Therefore the questions should be simple and unambiguous and should not be biased and leave the impression that other conceptual and value points are excluded.

The survey can be conducted using a paper - pencil method, it can be a telephone or online survey. We need to consider and choose the method we think will have the highest response. Although the oral survey is time-consuming, in some cases it is the most efficient way of collecting data.

SWOT analysis

For the purposes of evaluating the process of introducing new programs, as well as assumptions for planning the strategy for further implementation of innovation in different programs, changes in the implementation and organization of educational programs, a SWOT analysis is used. The acronym SWOT is composed of the first letters of the words: *strengths, weaknesses, opportunities, threats*. The SWOT analysis is based on the recognition of strong and weak institutional sides as well as opportunities and obstacles that can be expected in attempting to achieve a goal. During the SWOT analysis, the effectiveness of the educational program is identified and taxed. SWOT analysis can be seen as an assessment of organizational (programming) internal strengths and weaknesses, as well as opportunities and obstacles represent by environment. Understanding of external factors (which consists of opportunities and obstacles) together with an assessment of internal strengths and weaknesses of organization or programs enable the formation of a vision of future action [8, 9, 10].



An example of SWOT ANALYSIS

	Strengths	Weaknesses
INTERNAL FACTORS	motivated participants	overburdened teachers
	competent teachers	insufficient work materials
	adequate premises	challenging agenda
	Opportunities	Threats
EXTERNAL FACTORS	opening new jobs in the local community in the branch	competitive companies
	possibility of funding by CES	slow program accreditation
		lack of support from local community

PEST and PESTLE analysis

PEST analysis tool is for market assessment for a particular program or service at a given time. This analysis is entirely oriented towards external factors that affect the success of the program and identifies them with respect to the four areas that are extremely important for economic viability, in our case of educational programs. Behind the acronym PEST there are terms that indicate: political, economic, social and technological factors that influence the sustainability of educational programs. By analyzing these factors, external risks and opportunities it is possible to make better business decisions.

A somewhat more complex form of this analysis is the PESTLE analysis which, after identifying factors in the political, economic, social and technological sectors, also takes into account legal and environmental factors [11].

These analyses take into account external factors that can in many ways affect the sustainability of an educational program, but we know how the circumstances in which we work can change almost overnight (political, economic, social), so it is necessary to take account of changes in order to ensure successful implementation and sustainability of a particular program.



An example of factors that are analyzed during PEST and PESTLE ANALYSIS

PESTLE ANALYSIS	PEST ANALYSIS	Political factors	Economic factors
		market policy	unemployment rate
		educational policy	interest on loans interest
		government changes	rates
		financing of education	taxes
		lobbying	specific taxes pertaining educational programs, textbooks...
		pressure of foreign investors	local economic situation
		conflicts in the political arena	economic trends
		Social factors	Technological factors
		ethnic and religious factors	technological development
		educational trends	R&D
		availability of programs	trends in technology improvement (educational, sectoral)
	educational trends	patents	
	global changes	licences	
	demographic circumstances	access to modern technological solutions	
	laws affecting the social factors of changing lifestyles of participants and employers	intellectual rights	
	historical circumstances	maturity of certain technology	
	Legal factors	Environmental factors	
	work law	natural environment	
	specific regulations (depending on program)	ecological values of the employer	
	regulatory bodies	teachers' attitudes on ecological issues	
	current legislation	ecological regulation	
		ecological values of participants	
		market value	



DO IT YOURSELF



TASK FOR THE IMPLEMENTATION OF THE PROCEDURE OF THE NEEDS ASSESMENT AND APPLICATION OF CORRESPONDING METHODS AND TECHNIQUES

What is it? What is it for?

The methods and techniques which we use for conducting the needs assessment are the tools that we will use in the process of identifying the problem.

The choice of methods and techniques depends on the scope of the assessment and on the available resources (eg finance, time, etc.). It is important to use more techniques and methods so that we can see from a variety of sources a complete picture of the state.

How?

Group work task:

Your working group is in charge of conducting a needs assessment in an adult education institution that wants to increase its competitiveness. Based on the needs assessment you are going to accomplish, the goal of professional training will be defined.

You have the following information:

The adult education institution, in accordance with its strategic documents, plans to introduce new educational programs that require modernization of equipment, as well as new knowledge and skills of employees. However, there are some negative indicators in the institution (reports of unrealized jobs, customer complaints) that have further stimulated the leadership of the institution to organize professional training of its employees.

The task of your working group is:

1. determine goal/scopes of needs assessment and implementation plan
2. determine the target groups depending on the type of needs assessment (individual needs, group needs, organizational needs)
3. select instruments (methods, techniques) depending on the type of needs assessment and the target group
4. create a roadmap to present the objectives of the needs analysis and provide clear guidelines for the implementation and use of the instruments

Task evaluation:

When the groups are finished, tell them to mutually exchange created roadmaps so that members of the other groups can evaluate their work. Propose them to write a comment on a post-it and attach it to the part of the roadmap they consider important. After the evaluation is over, the group presents their task in order to give an overview of the feedback received.

Planning of teaching process

Generally speaking, there are five reasons for planning, organizing and implementing adult education programs in relation to the target group [12, p. 10]:

- encouraging continuous growth and development of individuals
- helping people to respond to practical problems and issues from their daily lives
- prepare people for immediate and future job opportunities
- assist organizations in achieving the desired results and adapting to changes
- provide an opportunity to explore social issues, encourage changes for the common good, and promote civil society.

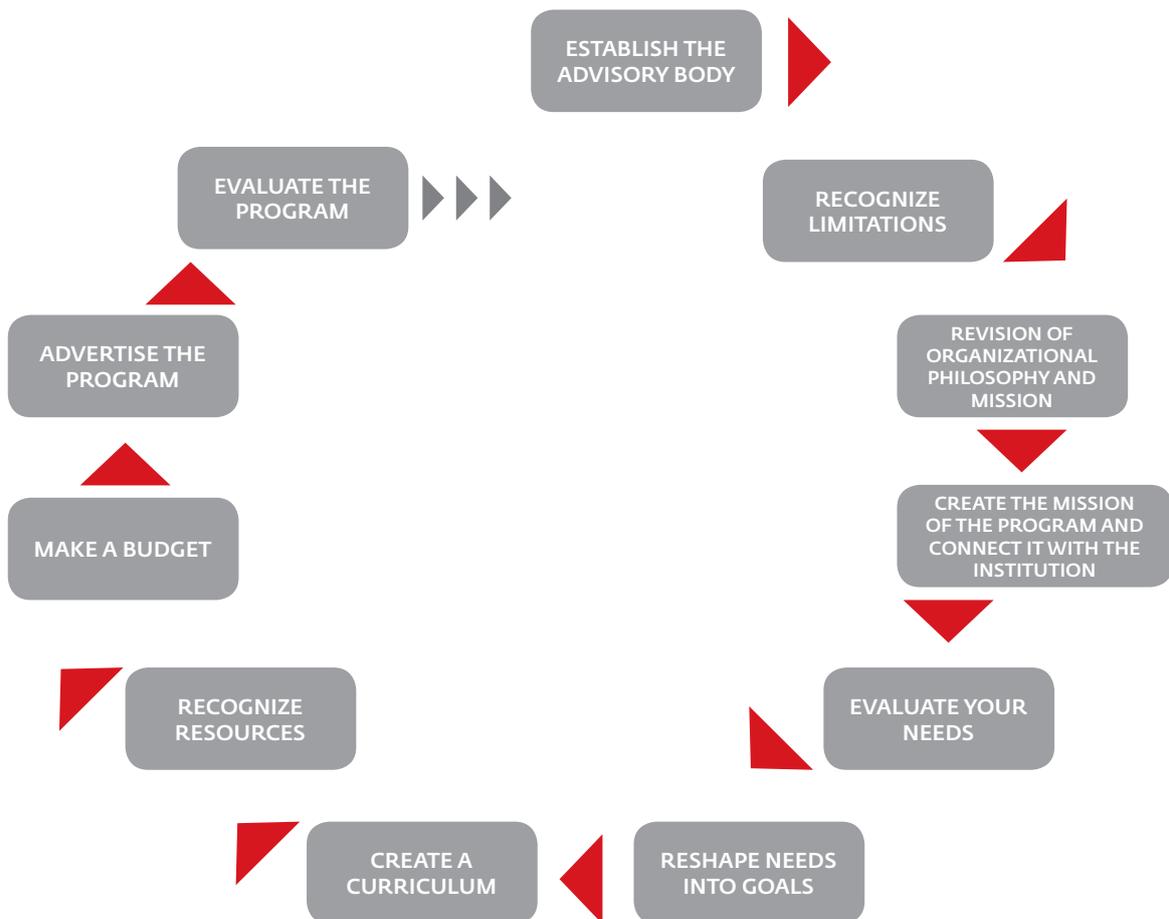
However, since the majority of adult education institutions are aimed at financial gain, these goals are often not initiators of the process of planning the teaching process [13].

Planning in adult education is a more complex process than it may seem at first glance. Adult education planning encompasses procedures that align resources, activities, and conditions to reach the expected goals more efficiently. We can plan staffing needs, planning of education, as well as planning educational activities as part of the andragogical cycle. As we have already seen, the needs of an individual do not necessarily need to be in accordance with the needs of the labor market or the employer. Thus Pastuović (1985) recognizes the global and differentiated needs of adult education. Therefore, when planning an adult education program, account should be taken of the general plan, but also the individual plan for adult education participants. The education plan is based on global educational needs, and the plan of education as an element of the andragogical cycle starts from the individual (differentiated) needs.

Planning becomes part of the andragogical cycle only when, starting from the differentiated goals, it defines all the relevant elements for the organization, performance and evaluation of adult education programs. **The plan is a system of basic guidelines** for the work of all those responsible for the performance of individual phases of the andragogical cycle [1, p. 110].

There are elements of planning a program in adult education that are recognized as critical. This includes the use of counseling councils, needs assessment, goal formulation, resource allocation, teaching planning, management reviews, and program evaluation. Successful planning requires the use of these critical elements in the context of ecological and organizational settings.

Good planning is cyclical. It is not a process that can be neglected over a long period of time, given the fact that planning is viewed as a constant. Evaluation of the program concludes a cycle and provides data for the reconstruction of the process. It is important to recognize the limitations that will affect the process of organizing adult learning experiences. These limitations can be found in the environment, organization and planning process. Another critical factor that is particularly relevant for adult education is the participation of attendees in planning a program that has its own positive aspects, but it is necessary to plan well the inclusion of learners. (picture 10).



Picture 10. Critical steps in planning an adult education program (4, p. 101)



DO IT YOURSELF



PLANNING OF TEACHING PROCESS - EXERCISE

What is it? What is it for?

Planning is the second step or the second stage of the education cycle. Planning implies the definition of objectives and learning outcomes, the selection and organization of teaching content, the definition of order and ways of carrying out activities and the selection of appropriate teaching methods and techniques, the way of assessment of student's achievement. [14] There are several reasons why planning is important and why we should not miss any steps during our planning. By planning, we ensure tracking and evaluation of learning outcomes, reflection and self-assessment of effectiveness, structure and organization of the teaching process and emotional safety of teachers.

When yes? When no?

The planning exercise can be done "step by step", depending on the previously acquired knowledge and skills of the learner. To be sure how much detail you need to devote to what step, it would be good to do a self-assessment exercise * knowledge and skills prior to the task itself.

How?

Form the groups.* We give examples of tasks for three groups.

TASK FOR THE FIRST GROUP

Share the results of the needs assessment with first group members together with written instruction that says:

The adult education institution has a problem with evaluating the achievements of the participants. You are the head of adult education and you have obtained the results of the needs assessment that was conducted at your institution. Your job is to plan professional trainings for teachers to solve the resulting situation. Based on the results of the needs assessment define the outcomes and the objective of professional training, determine the content of the education, the sequence of activities and the appropriate method and technique. Determine the ways of evaluation during professional training and after completion.

RESULTS OF CONDUCTED NEEDS ASSESSMENT:

Participant's opinion (results of the poll and overview of written complaints):

- participants are not familiar with the evaluation criteria that clearly point to the different levels of knowledge and skills adoption
- feedback on learning outcomes is not timely (scores of assessment are waiting for more than a month), and guidance for further learning is usually absent
- evaluation is not fair
- the participants did not acquire the skill of self-assessment of their own work and work of their colleagues (evaluation as learning).

Teacher's opinion (results obtained by self-assessment of teachers, observation of teaching, insight into the preparation, focus group):

- teachers fail to apply a variety of methods of evaluating learning outcomes and skills learning processes (evaluation of learning, formative/evaluation for learning, evaluation as a learning
- teachers do not know how to make objective-type tasks, so they prefer to test participants orally
- teachers do not know how to evaluate written exams.

TASK FOR THE SECOND GROUP

Share the results of the needs assessment with second group members together with a written instruction that says:

The adult education institution has a problem related to communication and conflict resolution. You are the head of adult education and have obtained the results of the needs analysis that was conducted at your institution. Your job is to plan professional training for teachers to solve the resulting situation. Based on the results of the needs analysis define the outcomes and the objective of professional training, determine the content of the education, the sequence of activities and the appropriate method and technique. Determine the ways of evaluation during professional training and after completion.

RESULTS OF CONDUCTED NEEDS ASSESSMENT:

Participant's opinion (results of the poll and overview of written complaints):

- teachers do not take into account the needs of the learners and do not develop mutual trust (they blame them for the delay in coming to class or the lack of coming that is conditioned by the student's workloads, arguing that it is a deliberate omission)
- Participants do not feel comfortable at the institution (some teachers use sarcasm in teaching and insult them publicly).

Teacher's opinion (results obtained by self-assessment of teachers, observation of teaching, insight into the preparation, focus group):

- interpersonal relationships in school are disrupted: there is no mutual trust, support and no feeling of communion
- the institution does not encourage positive communication among the participants (teachers complain that the participants are guilty of causing conflicts, and the participants claim the opposite; both claim that they are the result of frequent "noise" in communication and mutual discontent)
- teachers are not aware of the difference between the learners (knowledge, skills, abilities, personality traits) and do not adapt their work to those differences.

TASK FOR THE THIRD GROUP

Share the results of the needs assessment with second group members together with a written instruction that says:

The adult education institution has a problem with the quality of teaching. The students complain about the methods of teacher's work. You are the head of adult education and have ob-

tained the results of the needs analysis that is conducted in your institution. Your job is to plan professional trainings for teachers to solve the resulting situation.

Based on the results of the needs analysis define the outcomes and the objective of professional training, determine the content of the education, the sequence of activities and the appropriate method and technique.

Determine the ways of evaluation during professional training and after completion.

RESULTS OF CONDUCTED NEEDS ASSESSMENT:

Participant's opinion (results of the poll and overview of written complaints):

- teachers only dictate on teaching and do not apply interactive methods under the pretense of “not having enough time“
- the teaching is dry and monotonous, there are no concrete examples (examples from practice)
- Participants do not have the opportunity to work alone, in pairs or in smaller groups
- Participants want more problem solving tasks and more training sessions.

Teacher's opinion (results obtained by self-assessment of teachers, observation of teaching, insight into the preparation, focus group):

- teachers only teach lectures because they estimate that adult learners do not want interactive methods
- most teachers feel that they do not have enough time for student-orientated classes, so they focus their work on content
- part of the teachers assessed their knowledge and skills of interactive teaching as very low: they know how to list several methods, do not know what the choice of method depends, can not cite the advantages and disadvantages, limitations and possibilities of the method.

Kako?

* Depending on the number of participants, the self-assessment results, and other data you will have about the target group you are working with, you decide on how to do the described exercise. We give you several options:

- a) Each group is doing to do a different problem/task. You will use this feature if you have more topics you want to work or repeat (eg evaluation and self-evaluation, communication and conflict resolution, methods and techniques ...). If you choose to do this, you have to design the task out of the examples that we give you.
- b) Two groups solve the same problem/task. If you decide to do this, then the groups that have the same task give the feedback to each other (they post comments on the paper and return a poster to them).
- c) All groups work on/have the same problem/task. Carefully guide the groups in work. Depending on the number of groups, you decide how to lead them, ie how many steps will be taken. First, give instructions to each group to write the outcomes and task targets they have received. When all groups end up writing the learning outcomes, they change the poster (eg clockwise). In the next step, each group based on the written outcomes assigns content and then they switch the posters. Now, based on outcomes and content they determine the schedule of activities. In the last change of posters, the methods and techniques of writing are written and then the poster returns to the basic group that has written the outcomes. By the end of the job the poster returns to the basic group that will give an overview.



DO IT YOURSELF



EXAMPLE OF EXERCISE FOR SELF-ASSESSMENT OF KNOWLEDGE AND SKILLS

HOW?

Create two posters with the scale in percent (eg 10%, 20% and up to 100%).

On a poster write *About education planning I know...* (based on this, teachers evaluate their previous planning knowledge).

Write a statement on a second poster *My planning skills are:* (teachers evaluate their skills).

Participants evaluate their knowledge and skills by adding a mark they will remember (star, emoticon, flower, sun, etc.) beyond their estimated percentage. It is important to place posters so that the participant can, unobstructed from the viewpoint of others, put his label (turn the posters on the stand away from the view of the group). This will give you more sincere results. After completing the overall planning education, use posters with self-assessment results for one of the evaluation and feedback on planning: Ask the participants to re-evaluate them on the same posters after you've gone through the planning topic. Have the participants compare the results before the start of the exercise and at the end of the exercise.

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04

TEACHING PROCESS IN ADULT EDUCATION

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After reading this chapter you will be able to:

- ✚ well organize the teaching space
- ✚ to choose the appropriate ways of creating a positive atmosphere in the teaching process
- ✚ create a comfortable and working atmosphere
- ✚ apply interactive methods in teaching of adults
- ✚ choose the appropriate teaching method.

Material and emotional preparation of teaching process

It is better to know something about everything than everything about something..

Blaise Pascal

Unlike the pedagogical approach in which the teacher most often plays a dominant role, andragogical is focused on the learner and on the way how adults are learning. Adults themselves decide WHEN and WHAT they will learn and what is important to learn at the moment and they expect it to be immediately useful for them.

This is helped by life experiences, previous knowledge and skills. For this reason, the important role of the teacher is to take care of their needs, interests and emotions, to enable them to be active in the design of teaching contents and in the evaluation process of learning outcomes, as adults want to be self-directed and active in the education process.

The teaching process for the participants starts at the moment the teacher enters the classroom or the place where the lessons will be held. Well prepared for the lesson, the teacher must reach the classroom in time. It would be best if the classroom/room was chosen by the teacher in accordance with the goals previously set. Depending on the teaching unit and the content, the teacher should check the organizational elements necessary to achieve the goal before entering the classroom:

- Is there enough room for all the participants? (If not, can you provide it?)
- Is there enough room to move around the classroom? (Depends on the number of participants, on the layout of chairs and desks, whether tables can be arranged in the desired position, ie in U shape; round table; group work; work in pairs...)
- Is the room temperature optimized for work? (Can the temperature be regulated by an air conditioner, by opening the window, by lowering the roller shutter?)

- Is there enough light? (Can the room be darkened for projection purposes or can the light level be enhanced?)
- What teaching aids are available? (microphone, speakers, TV, DVD player, CD player, computer, projector, graphic case, camera, camera - check if they are functional...)
- What teaching material is available? (What can be of benefit to your lesson - best not to count on "it should be there" but to provide yourself everything you could need.)

It is not excluded that you will, despite the good preparation, have to change something in your plan during the immediate teaching process. So, always have a backup plan (for example, you may suddenly lose electricity due to the weather, and you have prepared a movie or presentation).

In addition to providing organizational and technical conditions, the most important thing is that the teacher is well prepared and authentic. A good mood and a pleasant work atmosphere in the classroom will certainly be helped by your positive attitude and a quiet and convincing tone (this can be practiced). Even though you can find out something about participants based on the enrollment administration, allow them to present themselves to you during the first encounter and "break the ice" in communication with you.

The learning process is extremely important for creating a positive atmosphere for the work of group members in the process of learning and teaching. Namely, at the moment of getting acquainted, the group is in its full composition. Most often the participants do not know each other, but that does not have to be a rule. In the process of planning and preparation of the teaching process, this is one of the important segments to which special attention should be paid since it is the beginning of the workshop. It is important to apply the appropriate method of introduction because the workflow is dependent on its realization. The purpose of introducing is to achieve a high-quality preconditions for a more successful achievement of the goals of learning and teaching, namely:

1. to break the initial tension
2. creating a positive atmosphere for work
3. good co-operation of participants within the group
4. student and teacher interaction.



MOST COMMON MISTAKES:

- not to pay attention to whether or not the participants know each other (the possibility of using the wrong method of introduction)
- sudden start of the workshop, without establishing contacts between the participants and trainer
- a stressful method of getting acquainted (people are stressed out, they do not know what to say about themselves, they are awaiting until they are called out)
- not to take into consideration the number of attendants.

It is important for each participant to stand in front of others during their presentation, as this encourages their further activity in the teaching process, thus being encouraged to find something in common: it will facilitate further communication and cooperation. After the mutual presentation you need to expose the work plan, expectations you have of them, but also to hear their expectations, to agree on some rules (coming in time, using cell phones, going to the toilet, free time, ending time...). In the beginning, it is much more comfortable to talk to the whole group so that the participants will find that they are respected and that their suggestions are accepted.



DO IT YOURSELF



EXAMPLE OF VISUAL APPLICATION OF GETTING ACQUAINTED

Each student gets A4-size paper and flomaster and must write specific information (name, surname, occupation, hobby, interest ...). After a maximum of 10 minutes the participants can attach their papers to the flipchart. After that, they all come closer together and read the information about others and thus get information about each other [1].

Name and surname...

I work at...

Occupation...

My favorite hobby is...

My favorite music is...

My favorite sport is...

I like the most...

I don't like...

If possible, the papers remain visible all the time and can be updated at any time, so everyone can get an information if they are interested in someone's hobbies, interests, etc.

The student's needs and interests are the guiding principles for designing educational activities, therefore the role of a successful teacher is to direct and encourage them by respecting the specifics of adult learning.

Ten most important factors pertaining to adults participating in the teaching process are:

1. Motivation factor - adult person is more motivated if there is a reason, purpose or goal for participating in education (seminar, training, etc.) Motivation can be:

- **Intrinsic (internal):** depends on the natural, internal stimulations that come from the person.

Learning is therefore motivated by the desire for new skills and knowledge, and the result is a sense of self-esteem and satisfaction.

- **Extrinsic (external):** depends on the external incentives that determine the intensity and duration of the person's behavior in order to achieve the possible goals that meet the economic and social motives. Learning is motivated by the acquisition of certain competencies for the award: good grades, money, promotion, recognition, emphasis, etc.

- **Motivation oriented towards achievement:** depends on the personal challenge of fulfilling educational tasks and the strategic approach to learning. Learning is organized to achieve a good ratio between effort investing, the achievement of results, and expected learning outcomes.

2. Control factor – adults have an inherent need to control life. They are self-directed and want to have an active and not passive role in their own professional development. It would, therefore, be desirable to include them in training planning.

3. Experience factor – adults knowingly or unknowingly associate new learning with what they already know, as they have come to know. They evaluate new information/ideas/knowledge based on existing experience.

4. The factor of difference – adults are different in their lives and years of experience. This diversity can enhance education processes through common dialogues and group discussions or projects. Teachers should, therefore, provide more time for networking of participants. Likewise, they should also prepare lectures, training, etc. to suit all learning styles.

5. Age factor – the learning speed decreases with age, but the depth of understanding/learning increases. By lifelong learning, adults ensure the flexibility of the brain to new information and knowledge and the greater possibility of their “absorption” to emerge.

6. Goal factor – adults are educated with the goal and want to apply the learned as soon as possible. They want the information to be provided in an organized and systematized way with key elements that are clearly defined.

7. The factor of relevance (importance) – adults want a reason why they learn something. This should be applicable in a professional or private life.

8. The factor of habits – adults often have previously shaped habits that may be in contrast to those that are to be achieved in the learning process. There can be resistance and a reduced degree of flexibility in accepting new knowledge. Hence, adults should be made aware that their established ideas and opinions have value and weight.

9. The factor of changes – while some adults are motivated by change, others resist. Learning usually requires changing attitudes, beliefs, behaviors, and ways of acting. It is therefore important for adults

to explain each “why” and “how” in the process of teaching.

10. The actor of respect – everyone deserves a respect - adults expect it and demand it. The respect can be expressed by taking their ideas and opinions seriously into account [2].

Teaching methods

Teaching is the most systematically organized aspect of the educational process and is based on teaching methods. Greek word *méthodos* means a deliberate process, mode, and action during the learning and teaching through which we want to achieve the goal. Teaching methods respond to anxiety about achieving the set goals, no matter what the stage of teaching is and whether it is about teaching or about the learning process [3]. Each method should suit both the teacher and the student in the various degrees of activation of all the participants in the teaching [4]. By guiding learning outcomes, the teacher independently chooses the teaching method he believes he will facilitate (and accelerate) the learning process or assist the trainees in solving the set tasks. To select the appropriate teaching method, the teacher needs to know the advantages and disadvantages of different teaching methods by answering the following questions:

1. Does the method match the set goal? Does it lead towards the development of skills, knowledge or attitudes?
2. Does the method enable the inclusion of different learning styles?
3. How much time, space and materials are needed to implement the method?
4. Which degree of knowledge and skill does a certain method require?
5. Is the method in alignment with the teachers' teaching style?
6. Does the implementation of the method require a participant's activity? [5].

Methods can be divided into traditional methods that are mainly focused on the teacher and the methods that are aimed at the learners, as a basis of interactive teaching. You can read more about them in the first

chapter of this manual. Teachers are traditionally predisposed to teaching instruction that allows them to better control their teaching, but at the same time, they achieve poorer results because they ignore the needs of adults in the teaching process. According to some research results, the method of a lecture is only in the tenth place, and participation in practical work, professional assistance of teachers in work, discussion groups and written materials for students are far ahead in the participants' preference scale. Interactive teaching implies that teaching is carried out on a particular topic with certain goals, but the emphasis is on understanding as an integral and contextual process and in different learning styles.

The features of interactive teaching are:

- exchange (experience, knowledge, beliefs and needs between teachers and participants, but also between the participants themselves)
- linking with your own experience and practice (from experience, analysis of experience and practice, application and change of practice)
- co-operation and partnership (collaborative learning and a relationship based on equality, complementarity, competence, respect and democratic structure) [5].

Key job	Traditional teaching models	Interactive teaching
STARTING POINT	learning as a transmission of knowledge	learning as an active knowledge structure
	learning as a process that is the same for everyone	learning styles and individual differences in learning abilities
	learning as an isolated cognitive process	learning as an integral and contextual process
	learning as individual activity	collaborative learning
TYPES OF ACTIVITIES	uniform type per function limited number of methods	different types of activities per function a large number of different methods
	Components of teaching process	
PREPARATION	orientation towards the lecturer	orientation towards participant, context and procedure
	goals with respect to the lecturer and topic	orientation towards participants, process and subject
	neglecting the context	organizational and technical assistance of the participants
REALIZATION	focus on the result	orientation towards process, relations and results
	linear interaction	multiple interaction
	teacher as instructor	teacher as facilitator
	teaching evaluation – not planned separately or only knowledge testing is carried out	evaluation: of teaching process and final evaluation
MONITORING	there is no systematic tracking of attendance progress, only end-testing	developed monitoring strategy as a process of support for students during classes

It is important to emphasize that no method can dominate. Domination of any method leads to the monotony that reduces the concentration and attention of the learner. The value of each method was determined, besides the primary communication medium, by the tasks of education, the nature of the content, the experience and mental condition of the participants, the andragogical and psychological culture and the attitudes of the teachers themselves [6]. It is important that attendees become active participants in all teaching activities that encourage practical, convergent and divergent learning and learning through discovery, and to continuously encourage interaction between teachers and learners. There is a wide range of learning methods that promote and encourage active learning among adult learners, and only the application of a variety of methods enables active participation of students in teaching, thus teaching becomes interactive [7].



DO IT YOURSELF



EXERCISE: RECOGNIZING METHODS ORIENTED TOWARDS PARTICIPANT AND LECTURER-ORIENTED METHODS

What is it?

The participants are divided into 4-member groups. At the table they receive prepared cards describing the activities of teachers and students. Their task is to identify which method is oriented towards teacher, and which towards student and to put the card on the appropriate flipchart. The flipchart has previously printed headlines: lecture-oriented (traditional) methods and learners-oriented methods.

What is it for?

Exercise wants to make us certain that some methods are more focused on the learner, and some on the teacher.

Be careful!

Exercise can be done individually, but because of simplicity and mutual knowledge it is recommended to be in groups. It is important that the groups are more or less equal and that everyone is actively involved.

Speech/teacher's lecture

Teacher verbally summarizes the content, explains and describes it using projector or board.

The teacher asks, participants answer

Questions and answers in a traditional way. The teacher asks a question, participants raise their hands and answer.

The teacher demonstrates

The teacher shows how to do something. It can be a practical procedure. Demonstration can be on board (eg. the teacher shows to participants how to analyze a sentence or solve a mathematical problem.

Teacher asks with „stand-by time”

Questions and answers in pairs. The teacher raises hard, provocative question or at least open question and gives them couple of minutes to discuss it in groups. After that teacher looks for an answer.

Buzz groups

Participant work in small groups for a couple of minutes in order to answer the question or perform a task. Teacher asks for volunteers to provide their group's answer.

Participants make flyers or posters

Participants are provided with summary of what they have to make, eg. flyer/poster of summary on ensuring of dental care; they work in pairs.

Participants watch a video/movie

They watch video/movie, no further activities included. Discuss within group how to apply/change this method.

Tests and quizzes

Usual way of testing/quizzes: questions have been asked and participants answer them. After that teacher writes down right questions and participants or teacher mark the answers of participants.

Experimental/practical „recipe“ way

Participants have a task and are provided with needed materials followed by thorough description of how to accomplish the task. Answers of participants.

Participants make a „handout“

Participants are given summary, eg. they have to make handout about ensuring the dental care; they work alone or in pairs.

Assertive questioning

An open question is raised. Participants work individually or in pairs 1-5 minutes. Teacher asks them if they know the answer. If they don't, he helps them. Teacher is choosing who will give the answer.

Teacher opens a discussion in the class

Teacher raises question and volunteer or someone called answers to whole class. Participants can raise the questions themselves or contribute in some other way.

Working paper

A working paper is given to participants with various levels of questions: from initial essay upwards.

Formative tests and quizzes

Teacher raises questions, participants answer them. They mark their own answers according to previously provided model. They determine what answers are wrong and they work on them by themselves. Test/quiz is repeated next day, but they answer only the previously wrong answered questions.

Practical work of participants in pairs

Participants work in pairs on written task through which they practice the skill demonstrated by teacher, such as: calculation, division of sentence etc.

Buzz groups (assertive way)

Participants work in small groups for a couple of minutes in order to answer the questions or accomplish the task. Teacher asks groups do they have an answer and helps those groups that have no answer or ask for help. Teacher seeks the answer from whole group (not from volunteers only).

Individual written tasks for participants

Participants are asked to write a paper, an essay or something similar to that.

Questions from the last exam

Participants are provided with working paper containing both easy and hard questions.

Experimental/practical „discovering“ way

Participants get a task without instructions. They plan a method, checked by teacher prior to beginning of performing the task. Those of them who can not find a way how to solve it, receive a „recipe“, ie. auxiliary paper or the teacher helps them in some other way.

Checking the results in pairs

Participants mutually check their work (eg. their colleague's calculation, division of sentence etc) after they've been solving the tasks by themselves.

Different methods in teaching

Different methods need to be applied in teaching because they fit into different learning styles, the same topics can be elaborated by applying different teaching methods, and learning processes can be individualized in terms of learning capacity.

Methods must match the expected learning outcomes, your style of work, participants, content, context, and your “comfort zone” [8].

The methods themselves must contain activities that are of a good taste, understandable for the participants, must not be very stressful and must be a combination of seriousness but also fun.

Methods and activities depend on the size of the group, on how much the participants know each other, about how well you know about the participants, about group needs, length of activity, about the general atmosphere in the group, the materials needed, the skills it requires.



DO IT YOURSELF



REVIEW OF SOME METHODS OF TEACHING THE ADULTS WITH EXERCISES

PRESENTATION METHOD

What is it?

Presentation/lecture is the method we apply when we want to introduce our students to new information and we apply it for transferring content to educators, seminar participants ...

How?

At the beginning, ask the questions and ask them, everyone for themselves, to write the answers on the paper.

What is a successful presentation for you?

When was the last time you were on an excellent lecture?

Why do you think it was successful?

Specify other criteria for good presentation.

After that, you can play a bad presentation and let them try to note what they have noticed that it was not good.

Talk together about the elements that make a good presentation and give them explanations and instructions on how to prepare a good presentation.

The most important thing is to know yourself as a person who will hold a presentation [1], to know your advantages and limitations, where your own, as well as someone else's experience, is important, you should be aware of yourself and how you look to the participants, what advantages you have in order to use them in front of the participants, but you also need to know your limitations on which you must work systematically. To make a good presentation, you need to set the clear goal you want to achieve, to know in advance what your audience is and what their interests are, what is the range of their previous knowledge and what benefit they expect from the presentation.

After that, you have to ask yourself a question of how to tell them the story and how you will convince the audience of what you are talking about, and how will you bring the topic closer to those who do not have enough information to understand what you are doing. In the introductory section, you need to establish good contact with the audience, and you can do this by asking the audience, presenting some interesting facts, anecdotes, quotations, aphorisms, and so on [9]. It is important for your presentation to conform to your personal style. If you draw attention in the first 90 seconds, define the goal and show credibility, you will win the audience.

At the beginning of the presentation, it is good to give an overview of the content, to tell what the planned completion time is, and to highlight why is that what you are talking about useful to the public. Try to make good contact with the participants, do not be too quiet, do not talk too fast. In the presentation, be enthusiastic as it shows you compelling and has a strong impact. Whenever possible, put examples of your own experience or link your situation or experience with the experience of the participants.

Always demonstrate to participants in the teaching process that you respect their knowledge and consider them to be experts in their work.

To avoid possible uncertainties during presentation, you need to know what you are talking about and to pre-structure how and what you will say. Exercise should be exercised before exposure, especially if you do not have much experience. Make a trial run before your colleagues/friends or film and analyze yourself. The participants expect you to know the content you are talking about and look convincing. It is extremely important to respect the attitudes of the participants whether they agree with you or they think the opposite way. It is desirable to keep their attention throughout the presentation so that it could be successful. Remember that more than 50% of the message is transmitted through how (mode) and not what (content).

When yes? When no?

Use a presentation/lecture as an introduction to a topic, to convey important information, when you have a large group that you need to pass important information or if your time is limited. If the participants have different prior knowledge about the given topic, it will be difficult to adjust the way and speed to all the participants.

Be careful!

During this exercise, make sure that presentation, and therefore exercise, does not become dry and boring. Furthermore, when you make a presentation, keep in mind that you are addressing the audience, not the audio-visual device. Given that the participants are watching each other and commenting on the presentation, one has to watch out that individuals do not go to the extreme of criticizing and pointing out only the shortcomings, but to emphasize the good side of the presentation.

MENTAL MAPS

What is it?

With mental maps you can organize information and ideas for reports, reminders, letters, prepare presentations, meetings, project management, purchase lists, notes management... The mental map is a visual way of creating notes [10]. In the center, there is a central idea or image that expands with the main branches that represent the main ideas. From each major branch, the underlining of these ideas is further elaborated to the details we need. In such a presentation, it is apparent that all the ideas are linked from the main branch with additional details and to mental map is given a width that an ordinary list does not have, as well as the list that points out facts that show no interdependence at all.

By expanding the folder from the center to the ends, ideas are actually elaborated just as our brain connects or stores them, so all data and facts are easier to access. During the making of mental maps, it is necessary to use different colors, drawings, symbols, words and pictures in accordance with a series of simple, basic and rules suitable for brain. A long list of data transforms into an easily memorable image that follows the processes that take place in our brain.

What for/why? How?

Tony Buzan [11] has devised mental maps, and the technique itself can easily be adopted if you put some effort and time to learn and gain new knowledge.

For creating mental maps, you need a blank paper (format A3 or larger), pencils in color, your

good will and your imagination.

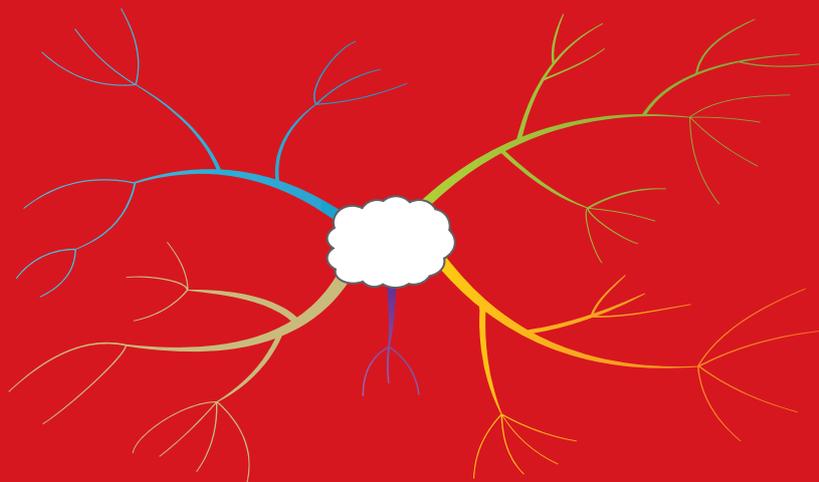
Pre-exercise for creating a mental map [8]:

1. Give the papers to participants and tell them to start writing associations the same word given to everyone (eg, a house).
2. When everyone writes down 8 associations on the topic, ask them to read the last word they've written.

You will already see the diversity of thinking of our different brains.

In agreement with the participants, assign a subject, word or idea that is to be written or even better, presented with a drawing or a symbol, most often in the circle at the center of the blank paper. If you put a beginning of a mental map in the center, it'll give the brain freedom to spread in all directions.

On the central image, place the branches and main associations or subthemes of what is set. Connect those main branches with the central image, connect the branches of the second and third levels to those on the first and second levels. Use the curved, non-straight lines, write just one word on a line or a drawing or a symbol, use the images while you create a map and let your imagination run away. You can supplement your mental maps whenever you want.



Picture 11. Example of mental map

When yes? When no?

You can use the exercise well for the repetition and systematization of the lessons learned because you can follow the thinking process of individual learners. Exercise is good also during learning or systematizing of certain parts of the content or for getting an overall picture of a topic. You can use it to develop creative ideas, as an aid to the self-organization of time, to develop some events, or as a reminder of your obligations. By using mental maps, you become more creative, save time, concentrate more easily and remember much easier. This method is not suitable for group/teamwork because each member of a group or team has a different course of thought and different associations, so it is most effective for everyone to do their mental map.

Be careful!

Never impose your mental map on someone because it is useless to others. Your mental map follows your flow of thoughts, ideas and priorities.

ROLE PLAY

What is it?

Role-playing is an ideal method for a better understanding of problems in interpersonal relationships, making decisions easier, helping to deal with a particular situation, improving communication and interpersonal relationships, and it can serve for the anticipation of other people's reactions [12]. It is also a method in which only the framework guidelines can be given or it can be allowed a game to be lead by the participant's personal experiences or to define the scenario and role of the participant [13].

What for/why?

In the role play, it is important to follow the rules that you must clearly give to actors and observers. Actors need to be given enough time to prepare, tell them to stick to the guidelines and to be spontaneous. In the beginning you have to set clear goals, that is, say what are you using this method and briefly discuss the task. Adjust the scenario to the needs and specifics of the participant and create a suitable environment. Choose persons to play roles (actors), give them the role description card, and briefly describe the scenario.

Observers should be warned that they should not interfere in acting, but follow the role of the game itself or be given clear guidelines on what to observe (body language, professional competence, discussion culture, active listening, reality and authenticity of the situation, overall impression). You as a teacher do not participate in acting, but watch and follow and have a very important role in analysis and discussion. In the discussion ask the actors how they felt playing roles, and the viewers what impressions they gained. Discuss the problems that have arisen and how they were solved, who has assumed a dominant leading role and on which merit. Analyze conflicts that have emerged, that is, why they came up, who and how they solved them, and who assumed responsibility.

By applying this method, participants learn by working, imitating, observing, or giving feedback. It is extremely important to have an analysis after performing the exercise.

How?

Exercise task: You are all a collective who plans the design and implementation of the project. Choose one of the participants who will be the project manager. His role is to motivate people to get involved in the project and to contribute with their engagement to successful realization. To other participants you may give the papers on which their roles are written (a person who always complains, a person always optimistic and expecting a good outcome, a person who is always accusing someone else, a passive-aggressive person saying that he always has to do everything by himself, a person who always sees all the negative ...) You can add more everyday life roles. The manager has to try to assemble a team that will successfully complete the task and solve all the problem situations imposed by the role players or actors [14].

When yes?

If the desired goals can be fulfilled by a role play and outline a good idea, then this is one of the most desirable methods of learning. Participants are emotionally involved because they actually act in a realistic situation. In this way, they release the emotions we sometimes want to conceal, but in the role play we attribute them to acting. With this method, you can anticipate the reactions of other people in advance and better understand certain situations and problems. This method is good for easier managing of everyday situations and making decisions, and the greatest benefit you will have when you decide to improve your interpersonal relationships and understand the behavior of other people.

When no?

It is not desirable to apply this method when it comes to new content or situations because actors can not play what they do not have enough knowledge about. Do not force persons who do not want to expose themselves or feel bad while acting. You can not conduct the same exercise with different participants expecting the same results.

Be careful!

It is necessary to keep in mind that no one should not be forced to this method and that everyone adheres to certain rules of communication and mutual respect. It's easy for actors to sometimes get carried away by the acting, and then they act too long, so the important role of a teacher is to give instructions and control the process itself. Be careful because the situation may get out of control and go in an unwanted direction.

SIX HATS**What is it?**

Six hats is a technique of parallel thinking made by Edward de Bono [15]. It represents a simple and effective process that resolves the problem situation and looks at it from different aspects. In this way co-operation is promoted and creativity and innovation are being increased.

What for/why?

Six hat technique allows you to consider a given problem in six different ways. In this way, you can look at the given problem or situation from six different aspects of thinking. That's how you explore the possibilities of solving problems and alternatives that can come out of the framework of the solutions that have been offered. By this technique, you develop creativity and you're given the opportunity to express an opinion about the problem or situation that you sometimes would not say aloud. Under the shelter of the "hat", solutions that you do not have to justify or argue at the moment can emerge.

Any thinking in this situation is attributed to a "hat", there is no conflict of opinion or confrontation, so this method is extremely pleasant and creative. Finally, when you analyze the method or the problem, you comment on all the suggestions and jointly make acceptable solutions.

How?

Exercise will be shown in the example of justification for using smartphones in the classroom. Divide participants into 6 groups.

One group with a blue hat has the task of observing everyone else and at the end collects all opinions and drawing conclusions.

The other five groups approach each of the 5 tables featuring hats of different colors and, on the basis of instructions for reflection under a certain hat, at that desk form their thoughts, ideas, conclusions and write them on paper at the center of the table. After 10 minutes the groups rotate and complete written thoughts of the previous group.

The importance of this technique/method is that a certain color of the hat dictates the way of thinking that we might never think about.

The white hat is interested in the information we have or those we are missing. It directs us to the existing based on which we can draw conclusions or information we still have to look for.

The black hat calls for caution and anticipates all the bad possibilities. It expresses concern about the decisions, looks for weaknesses in order to overcome them and prepares you for the difficulties that may arise.

A green hat is creativity and creating new ideas, regardless of whether they are viable. It promotes a free flow of thought and helps develop creative solutions.

The red hat relieves feelings, suspicion, guesswork, and intuition, regardless of whether they have a foothold. Under this hat you are thinking on your own and other person's emotional behaviors.

The yellow hat symbolizes brightness and optimism and looks at all the positive sides of the solution. It helps people to endure difficult situations.

The blue hat is used to control and monitor the whole process. He comments on ways of thinking under other hats, looks for summaries, conclusions, and decisions, and suggests the following steps.

When yes? When no?

Choose the problem you need to consider from different sides and try to solve it in different ways. Using the parallel thinking technique, turn off all the external factors other than those that are dictated by the color of the hat and write down all the ideas that come to your mind without thinking about your own or other people's opinion about it. Groups can rotate from table to table, ie from hat to hat or groups stay at the table, and the hats are "walking" around.

Be careful!

During the exercise, the moderator must keep in mind that the discussion does not become too long and that there can be no deviations from the assigned theme or the process control can be led by the participants wearing a blue hat.



Slika 12. Goran and Sanja during realization of this exercise

GROUP DISCUSSION METHOD [16], (WORLD CAFE)

What is it?

This is a method in which small groups discuss topics of choice or proposed ones relaxed as in a cafe. A similar method is *one remains, others are walking (or: one stay, three stray)* [17], only in the application of this method the participants at each table have the same theme/task, and walking to the other tables shows the differences of access of particular groups to the same problem.

What for/why?

Use the method when you have a large group and you want to encourage people to bring their own ideas that are much easier to pronounce in a small group. Place large pieces of paper on the tables (A3 or larger, representing tablecloths) and on each table place one topic for discussion. Determine the host of the table that stays at that table while the other participants move clockwise. In the background, music is played, the participants comment and discuss the theme, write their opinions on the tablecloth, after 10 minutes the music is turned up as a sign for the moving of groups. The host remains at the table and welcomes the following group, briefly telling them what the previous group discussed and writes down the thoughts and ideas of the new group.

How?

An example of exercise with topics on the tables that participants are discussing:

- What methods of learning/teaching do I apply and why?
- What learning/teaching methods will I apply and why?
- Describe the interaction you have with the participants.
- My style of learning and my teaching methods (similarities and differences) are...
- Why do we need different teaching methods?

When yes? When no?

This is an extremely good method when you have a lot of attendants because you can activate and include them in this way. Apply the method when examining opinions and attitudes on a topic. You can apply it to the exact sciences, but then the participants should have certain fore-knowledge about certain topics because otherwise, they can only speculate.

Be careful!

When planning this exercise, you need to know the number of attendants in advance, and then arrange tables and choose topics that are interesting or necessary to get the solution you need.

PUZZLE METHOD

What is it?

The method of collaborative learning in which the participants are divided into groups, each of them having an individual task to do, and then all the individual tasks are put together to get a common result within the group [17].

When each group presents its own task, a complete picture is obtained, so the method is called puzzle method.

How?

Implementing the method will be shown on the subject of Multiple Intelligence Learning [18], which you can read more in Chapter 5 of this handbook. Participants should be divided into 4 groups (preferably 8 participants per group, each of them being assigned with one kind of intelligence). Participants receive the materials they need to study or the task to find information on the topic.

The first group describes intelligence, the second group describes learning environments in some types of intelligence, the third group describes the teaching strategies that need to be applied in some types of intelligence, and the fourth group what cognitive skills are the most developed in some types of intelligence.

Each member of the group gets the job of describing the default attribute for one type of intelligence (one describes a linguistic, other interpersonal ...). It is good to prepare colored papers for individual intelligence in advance in order to get a clear puzzle.

Everyone outlines a dozen important facts in the text about a particular type of intelligence, and then the group must agree which important 5 to 10 facts they should transfer to other groups that have a different task than theirs.

Each group presents its part of the puzzle and only when all ends, a meaningful whole is obtained.



Picture 13. Puzzle method

What for/why?

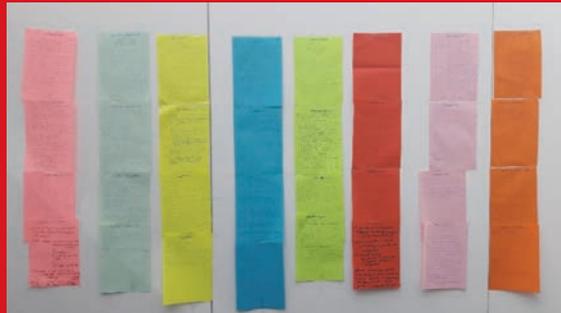
It is used in cases where there is a lot of materials that need to be studied. Such a task takes a lot of time and concentration, and in this way the material is divided into smaller units. Each group studies one part and presents briefly the most important facts so that everyone does not have to read everything. If the results of each individual are stuck to the wall, they all have a reminder on the entire material.

When yes? When no?

Often, individuals do not know how to extract essential facts from the text. With this exercise, you can help them realize what is important in order to compare and adjust their thinking to the whole group.

Be careful!

It is necessary to prepare the materials well in advance, to anticipate the time needed for individual work and for group discussion. If individuals in the group are not motivated, it is necessary to find a way to encourage them because their inertness can slow down the work of the whole group.



Picture 14. Puzzle method in different colors on the wall

SIMULATION

What is it?

Similar to playing the roles method, the simulation method puts the participants into a situation where they need to solve a concrete problem. Also, it is important to say that the problem must be resolved by consensus and mutual agreement. There are observers who record participants' behavior in certain roles. Students are asked to enter deeply in a realistic situation in which they need to solve an important problem [12].

How?

In this exercise, divide the participants into two groups. Each of them has the task of preparing a short-term presentation of the given topic within a given time frame. The instructions to the participants are as follows: The organizer is responsible for providing the necessary workshop material for the groups to work in parallel. However, he reports that he does not arrive at the time to bring all the necessary materials due to traffic jams. To participants are available only materials already present in premises where they have to be (classroom).

Each group gets a list of available materials from which they can only choose the five things they need to hold the workshop, as the other five will use the other group. Individually, each one chooses five items for himself, then the group must agree on which of five items they need. When making a decision, the opinion of each group member should be taken into account and the decision should be taken unanimously.

AVAILABLE ITEMS	PERSONAL CHOICE	GROUP CHOICE
a laptop		
markers		
A4 papers		
colored papers		
laser presenter		
adhesive tape		
projector		
colored post-its		
speakers		
flipchart papers		

Once they have individually and in a group way chosen the five items they need most, each group must properly explain and argue why they have chosen these things and what do they need them for.

PRIORITY LIST	
CHOSEN ITEMS	EXPLANATION

If both groups have the same item in the list, the teacher has to decide to whom it will be given, considering the reasons they've provided. Observers observe and record behavior in the group, observe the dominant ones, ie those who are imposed as leaders, observe how decisions are made, whether the views of all participants are taken into account etc. These features are even more obvious if participants have time constraints. In that case, they are thinking more about time and less controlling their reactions.

When yes? When no?

In life situations when pro et contra decisions have to be made sometimes on the surface appear hidden or to participant still unknown characteristics. It is important to evaluate a group and predict their behavior in mutual communication. When making decisions, they must take into account the opinion of each member of the group. The decision should be made unanimously and everyone must agree with the proposal.

Be careful!

During exercise, it may happen that others give up on the task if there is an extremely dominant person in the group, so group members simply give themselves up to the leadership and decisions of that individual.

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05

LEARNING AND TEACHING OF ADULTS

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After reading this chapter you will be able to:

- ✚ to harmonize the ways of teaching with individual learning styles
- ✚ differentiate the child's approach to learning from approach of an adult
- ✚ to unify andragogical theories for their interpretation into the teaching process
- ✚ to assess the types of intelligencies represented in the educational group and to adjust the way of working in accordance with its structure
- ✚ to recognize the most effective motivational incentives
- ✚ to recommend to the participants different ways of acquiring new knowledge and experience, taking into account individual preferences
- ✚ to identify previous educational experiences and align them with new approaches.

What do we know about how adult person is learning?

Who is not ready to learn for his whole life, he did not learn the most important thing.

R. Haak

You have already met the principles of adult learning in the previous chapters:

- active participation
- problem-solving oriented learning
- previous experiences as the central part of the learning process
- the importance of content for an adult (“Why do I need it and how will I use it?”)

The starting point of the adult learning process are the beliefs, attitudes and values previously formed, where beliefs and attitudes can cause positive and/or negative responses to different situations, persons, ideas, objects, and can be altered under the influence of recently obtained information, accumulated experience, social impacts. On the other hand, values [16] represent the organization of personal needs, desires, and adopted social norms of behavior, and enable decision making. It is up to you to take differences between individual and intellectual abilities, as well as those that are conditioned by the natural and social environment and turn them into the ability to create a different teaching process and to encourage the curiosity of adults.

Andragogy is no longer a secret to you, but now is the time to turn the theory into practice and apply it to adult teaching. It is important, when you teach adults, to remember these simple principles that describe your trainee, his motives, attitudes, beliefs, experience and values:

WHY LEARN:

Why do I have to learn, how and what will I learn.

SELF-AWARENESS:

During growing up and maturing, the individual moves from the state of the dependent person to the state of the self-directed person.

PREVIOUS EXPERIENCE:

During growing up and maturing, an individual collects experiences that become the starting point for various learning.

READINESS TO LEARN:

Readiness to learn becomes more and more focused on the development of skills and abilities that society expects from individuals.

ATTITUDES TOWARDS LEARNING:

The perception of time is changing: from learning for the future to learning for the time being

MOTIVATION FOR LEARNING:

An adult has a developed internalized learning need.

Picture 15. Features of adult learning [11]

During the class, do not forget that your student wants to participate actively, show what he already knows and can, that he is only interested in what matters to him and only wants to solve his problem!



At the end of this guide you can find more detailed information about teachers and scholars who wrote about education and led us to this book: John Dewey (1859 – 1952), Lav Vygotsky (1896 – 1934), Carl Rogers (1902 – 1987), Robert M. Gagne (1916 – 2002), Jack Mezirow (1923 – 2014) and not the last, but Croatian, Albert Bazala (1877 – 1947).

Multiple intelligences – everyone is intelligent in their own way

In the eyes of each of us, the world is differently interesting, and on how we think and in what stage of life we are in depends how we experience it, explore it and change it.

Each person has their own story, their choices, their own attempts, successes and mistakes. Each person experiences life differently. Each person has a different combination of skills he shapes through lifelong learning to the extent permitted by external circumstances and the inner willpower.

Howard Gardner in his book *Frames of Mind: Theory of Multiple Intelligences* [4] was the first who drew attention on the theory of multiple intelligences. He defined eight intelligences, but he also left a space for consideration of the ninth that refers to an individual's ability to find and understand his place in different social and cultural contexts. Everyone is intelligent in their own way, and the combination of ways you are exploring the world around you will discover what you are special about.

Visual/spatial intelligence emphasizes your visualization power, and it's evident in rendering graphic and pictorial representations, movies. If you enjoy watching the world with eyes wide open, if you have a strong imagination, if you love painting, drawing, puzzle, if your spatial orientation is something quite natural for you, you possess this kind of intelligence.

Verbal/linguistic intelligence is manifested in the degree of eloquence, the tendency to play with words in written and/or oral form, the use of verbal humor, the way you debate, explain, talk or narrate.

Logic/mathematical intelligence makes it easier for you to manage in the world of numbers, solve multiple component problems, enjoy riddles, rebuses, brain teasers, but also abstract ideas that can be translated into a mathematical form.

Physical/kinesthetic intelligence is your best if you remember better when you are moving, if you feel comfortable in your body, love dancing or doing sports, have good coordination of movement, if you like anything to do with your hands-whether it's art or technique.

You possess the music intelligence if you feel good rhythm and sound, if you easily recognize and deal with music patterns, remember the melodies and enjoy singing and playing, but if you also know how to appreciate the silence.

Interpersonal intelligence is yours if you have good communication skills and you can easily evaluate other people's emotions, desires, motives, create positive relationships with people, and resolve conflicts easily, and, most importantly, if you are a person who understands others.

Intrapersonal intelligence is manifested in a high level of self-consciousness, introspection and auto-reflection, and it is yours if you appreciate the time spent in a silent analysis of the environment, theory, ideas and general life.

Naturalistic intelligence focuses on the interest of exploration and preservation of the environment and is expressed if you are aware of the subtle changes in the environment, if you understand nature, love to dwell in it, and you are aware of its importance and power.



OVERVIEW CHART OF MULTIPLE INTELIGENCIES THEORY [1]

INTELLIGENCE	BASIC COMPONENTS	PROFESSIONS (EXAMPLES)
LINGUISTIC	sensitivity to the sounds, structure, meaning and function of words and language	writers, orators
LOGIC-MATEMATICAL	sensitivity and capability of noting logic or numeric regularities	scientists, mathematicians
SPATIAL	capability of noting visual-spatial world and shaping the informations	artists, architects
PHYSICAL-KINESTHETIC	ability to manage body movements	sportsmen, dancers, sculptors
MUSIC	capability of making and noting the rhythm; sensitivity to the forms of musical expression	composers, performers
INTERPERSONAL	the ability to recognize moods, motives, and desires of others	advisors, psychologists
INTRAPERSONAL	the ability to differentiate one's own feelings, abilities and weaknesses	psychotherapists
NATURALISTIC	the ability to distinguish and recognize other species and to monitor the relationship between them	biologists, animal rights activists

If you give preference to certain types of intelligence, it does not mean that you do not use the other in certain life and education situations, but that you give yourself and every adult education participant the opportunity to find yourself in the best way of mastering new knowledge and skills. In doing so, you should take into account the complexity of the shared intelligence that each person has and which most people can develop to an appropriate level of competence.

What characterizes adult learners is more developed, the so-called. crystallized intelligence [1], ie the abilities you have acquired or learned during life. The knowledge you've accumulated needs to be pulled out of long-lasting memory, where you will come up with a knowledge of beauty and countless possibilities of combination - whether crystallized versus fluid or declarative versus procedural knowledge.

Prerequisites for success in the above-mentioned educational processes are the knowledge that you as teachers need to have in terms of vocational, didactic-methodical competence, knowledge of cognitive and motivational processes as well as the cognitive, emotional and social development of each participant. The skills that accompany them relate to the planning and performance of teaching, the determination of learning outcomes and the coordination of work of very heterogeneous groups.

In short, knowing different kinds of intelligence and recognizing their innumerable combinations helps you explore your own, but also the potential of the people you teach. In accordance with their combinations, appropriate learning styles are developed.



DO IT YOURSELF



Exercise: SEARCH FOR INTELLIGENCE

What is it?

This exercise is both a motivational tool and an introduction to the theory of multiple intelligences that starts from the assumption that every person can be seen as a "treasure chest" filled with special gifts that we are sometimes unaware of.

Why?

Participating in the exercise, attendees will experimentally gain insight into the types of giftedness and discover them in their colleagues. Everyone gets the same list of tasks and instructions they need, moving around and communicating with each other, searching for people that will perform them. A person who successfully fulfills some of the tasks puts his or her initiatives alongside the appropriate gift. Each participant is trying to get as many initials on his list. The following is an example list of tasks that you can modify according to the content of your area [1].

Find someone who can:

- sing something (musical talent)
- perform some music step or sports movement (physical talent)
- recite a few verses or tell an anecdote (talent for words)
- explain why, for example, the sky is blue (logical skills)
- describe his recent dream (sensitivity for yourself)
- draw, for example, an animal (talent for pictures)
- honestly admit whether he is relaxed and understands others during the exercise (sensitivity for others)
- name five species of birds or plants from the environment (sensitivity for nature).

When yes? When no?

It is recommended that you present the theory of multiple intelligences by *Search for intelligence* exercise at the beginning of the education cycle, as it is a way to get the participants to get to know each other, and often can serve as an “ice breaker”. Exercise works in a motivating way, because both group and individuals find common areas of interest, get close to each other and they are more likely not going to give up from education.

Be careful!

There is a possibility that one or more participants might fail, ie not to be able to successfully solve any task. It is possible that persons at a given moment can not manage and fail to find themselves even in one gift, which can be demotivating. If you estimate this might happen, exercise instead of a task list can also be based on images showing activities associated with a certain gift and which students will choose according to their preferences.

How our brain learns

You have heard that the human brain has the left and right side, and probably also that the left side is in charge of math, writing, science, and the right side for emotions, music and speech, and this is how we are different.

The truth is not that simple [2]. The research on which this story relies upon was based on a sample of patients with the physically interrupted left and right side of the brain. There is still a huge lack of understanding the brain and ways how the brain learns. If you are interested in this topic, we recommend that you read the texts about the different misconceptions we have about the brain [15, 16].

We differentiate between different types of memories, and when we talk about adult learning, then we have to take care of them. The research carried out by Joshua Hartshorne and Laura Germi [22] analyzes the various memory capabilities of people throughout their lives:

- Emotional memory reaches its peak between the age of 40 to 60 (the longest lasting one).
- Verbal memory reaches its peak in the late 60's, ie early 70's.
- The numerical memory peak is reached at the age of 18 (measures mental ability).
- Visual memory peak is reached at the age of 25.
- Working memory reaches its peak during the middle 30's.

The brain [16] contains millions of millions of neurons. Its part in the size of sand grain contains 100,000 neurons and one billion synapses. The brain is always “switched on”, and during the whole life it is cross-linking, and that's what we call “brain plasticity” [24, 25].

Neurobiology [24] is a science that deals with the question of how we learn while andragogy and pedagogy are concerned with what and why we are learning and therefore are complementary. The areas of the

brain associated with motivation are active in individuals who are learning assignments and receive feedback as opposed to those who do not receive feedback – feedback is a key contribution to motivation [26, 27]. Specific, positive feedback stimulates the prefrontal cortex that then reflects on the ways in which it will increase the effectiveness, while the negative may never reach the prefrontal cortex. It reaches the lymphatic area where stress is produced and results in cortisol release - strong negative emotions come out on the surface, intrinsic motivation drops and part of the brain responsible for learning is “switched off”. Past experience always influences new learning – they’re located in long-term memory. The working memory relies on an individual’s previous experience to help answer two questions: „ Does this new information make any sense?“ and „ Does this new information contain some meaning for me personally?“ If sense and meaning are both involved, there is a greater possibility of long-term storage of information. We need to believe in the learning process of each individual and enable the participant to develop their own representation, theory and action instead of trying to convey knowledge. Carefully and cleverly devised experiential experiences of learners that aim to generate new ideas and theories are very powerful. Adults will most likely make a change when new experience conflicts with their existing theories. When participants have positive emotion-related feelings, endorphins and dopamine chemistry compounds are excreted - dopamine stimulates the prefrontal cortex thus keeping the individual in a state of attention, interactivity; endorphin is responsible for the feeling of euphoria. Negative feelings stimulate the cortisol hormone that puts the brain in a state of survival [23, 24, 25].

It is important to connect subconsciousness and learning because 90% of brain activity is occurring subconsciously [16, 26, 23]. Conscious cognitive activities are perception, memory and emotions and they affect all other cognitive processes. The perception of the world is reflected in the process of interaction between stimulations from the environment with experience, knowledge, expectations, intentions and it becomes a dynamic, subjective, unique and constructive process - the part is at a conscious and part at the unconscious level. This means that both a teacher and a student receive information at a subconscious level and that it can also influence the learning process. Examples: „ When you feel some uneasiness in your stomach, and you do not understand where does it come from“, „ When you feel the pressure in your head, but you can not figure out why“, „ When you feel/experience emotion, but it’s not clear from where does it come from“ ... The entire space, room, teacher and attendant energy works in this space and alternates, it is invisible and perceived at a subconscious level. Three different parallel processes take place simultaneously:

1. the interaction between the learner and his social, cultural and material environment
2. interaction with the teacher
3. internal psychological processes of acquisition and processing of information.

All this provides us with a wider picture of how an adult learns, what disables it, and how do we apply the different teaching methods that you have read about in the previous chapters.



If you are interested in this topic, we recommend watching the movie **Human mind and how to best use it** – learn it through following link <http://www.youtube.com/watch?v=2cjNcZvovOE> [31].





DO IT YOURSELF



Exercise: HOW WE REMEMBER

What is it?

Exercise *How we remember* allows participants to gain insight into how they individually and how others in the group remember differently displayed information.

Why?

Exercise participants confirm the assumptions about the different preferences of learning styles in the participating group, and they are getting acquainted with theories of learning styles, shown through examples.

How?

In the next exercises, let us check how we remember:

a) Write words on flipchart or make a presentation as follows (33 words):

COFFEE	SHARPENER	BANDAGE
HANDKERCHIEF	DOLL	CLOSET
PIDGEON	SONG	DOG
GLUE	GHOST	COMPUTER
CREAM	WINE	CARPET
APPLE	GOLF	NETTLE
KALENDAR	POPLAR	MOVIE
BEE	ROD	CROISSANT
CHOCOLATE	FACEBOOK	BED
HEART	PHONE	LAKE
BENCH	MACKEREL	UMBRELLA

Picture 16. Example of words that can be used in exercise *How we remember*

b) create an image with drawings (49 drawings).

– some drawings are the same, and participants have to identify and count them several times, but do not give them that instruction



Picture 17. An example of items that can be used in exercise *How we remember*

c) On the table, place 35 items from the classroom, from their bags, from home; it is important that they are not stacked on the table by categories, but have been accidentally arranged, thus giving the participants the ability to touch the objects but not move them.

In all three assignments, show the picture to participants for 1 minute, then hide the picture (or objects on the table). Participants have 2 minutes to write the names of the items they've remembered. Then you discover the image and let anyone write down how many items they have remembered.

Write on the flipchart individual scores for each exercise. Your students and you will see that they've mostly remembered images and objects, and not words, but it is not a rule, so look for differences in the interview at the end of all three exercises.

Ask students what memory techniques they have used and talk about them.

When yes? When no?

Exercise can implement after the students have met each other enough so as not to cause discomfort or resistance. Exercise is excellent for warming up after longer breaks (lunch, coffee) or longer lectures.

Be careful!

Do not perform these three exercises one after the other, let between pass at least 1 to 2 hours. Exercises can be tedious and boring if you are running them in a row and you will not get the result you want. Take care of competitive participants as well as those who easily give up and encourage them to participate.

Teach me how can I do it by myself

You've often heard that adults learn best when they do something by themselves and that is displayed by triangle known as **Dale's cone**. Here are usually written percentages of how much we remember just by reading, and how much if we just do something and then we present it to others. You recognize from your own experience that you better remember something and you have the most benefits if you discover, create, make something on your own and less if it is only shown to you or you have read about it somewhere. This view is important for understanding how does an adult learn, when he's learning the best and what is the medium that allows him to remember for a long time. Dale's cone is based on experience and represents a starting point for the choice of methods and teaching strategies. Over time, it has been changed by adding percentages [28, 30] that have never been verified, but the experience you and all who teach adults possess confirms that every person is best taught when he is active. This also confirms the theories you have read in the first paragraph.



Picture 18. Dale's cone [30]

Learning styles

It has been noted that adults learn differently and it has been tried to classify the learning styles. In the following sections, you will learn more about different learning styles. The learning style is the dominant input channel when it comes to receiving information, the way person processes information in learning, the preferred way of thinking, processing and understanding of information, the way of learning where the person is most successful [19].



Svaki čovjek ima svoj stil učenja i svaki čovjek ima neke jače strane. Taj je stil osoban kao i potpis. Nijedan stil nije bolji ili gori od drugih stilova. U svim grupama – kulturnim, akademskim, muškim, ženskim postoje svi stilovi učenja. Osobni stil učenja mijenja se s vremenom.

How people learn according to Myers – Briggs?

Myers-Briggs is an introspective self-assessment questionnaire to point to a variety of psychological preferences in the way people see the world around themselves and make decisions and, consequently, how they learn. Interestingly, all the learning styles you will meet, especially this, show that adult learning styles change over time. The MBTI questionnaire shows differences after a few months.



For more information on this style, read the link <https://www.myersbriggs.org/my-mbti-personality-type/mbti-basics/>.

VARK – learning style

Do we learn by listening? Watching? Touching? Smelling? Tasting? People get information through all five senses, but mostly by watching and listening. The VARK model describes how we learn using four channels: visual, auditory, textual and kinesthetic, which shows that we are learning through all of our senses. Three experiences are dominant: visual (sight), auditory (hearing) and kinesthetic (touch and movement) [32]. In 1987, Neil Fleming divided the visual dimension into two parts: visual (V) as one side and symbolic - text as read/write (R), and thus a new, improved version known as the VARK model. With the VARK model, it is very easy to understand the learning preferences. See these typical features:

Visual style

- they learn best by watching
- they like to see a teacher
- they sit in a front row
- they think in pictures
- they like graphics, illustrations and contents
- good in spelling, neat, organized

Auditive style

- they learn best by listening
- they like to discuss contents with others
- they learn easier aloud
- they like to record text
- they remember procedures, jokes
- they do not like spelling, so they may have difficulties with writing and math

READ/WRITE style

- they like information displayed as words
- they like to read manuals
- they make lists, memes
- they like to read and easily remember definitions
- they like to make powerpoint presentations
- they like when teacher uses presentation or handout
- they adopt new information by reading and searching on the Internet
- they make notes during classes and while reading a book

Kinesthetic style

- they learn best through movement and touch – activity
- it is difficult for them to sit for a long time
- they like when they can do something, not just read or listen
- while listening, they often draw
- their space is unorganized
- they like video content - moving images

For good teachers, it is important to accept the fact that participants may have different learning styles, so it is important to consciously design content that is balanced between all styles. The teacher should apply different approaches, techniques and activities that deal with different VARK preferences such as:

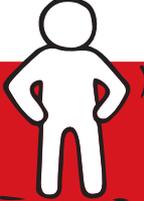
- visual: creating graphical models, drawing concepts, taking notes, using flipcharts, presentations
- auditorial: use spoken words, enable conversation, discussion
- read/write: written preparation, reading materials, keeping a diary for work, plenty of time to write notes

· kinesthetic: include manipulation stuff like modeling, color, simulation, experimentation, practical work.

Taking into account that there are different learning styles, it is important that the teacher does not apply his preferred learning style, but adjusts to the majority of participants' wishes. The learning styles explain why not all participants can learn at the same pace.



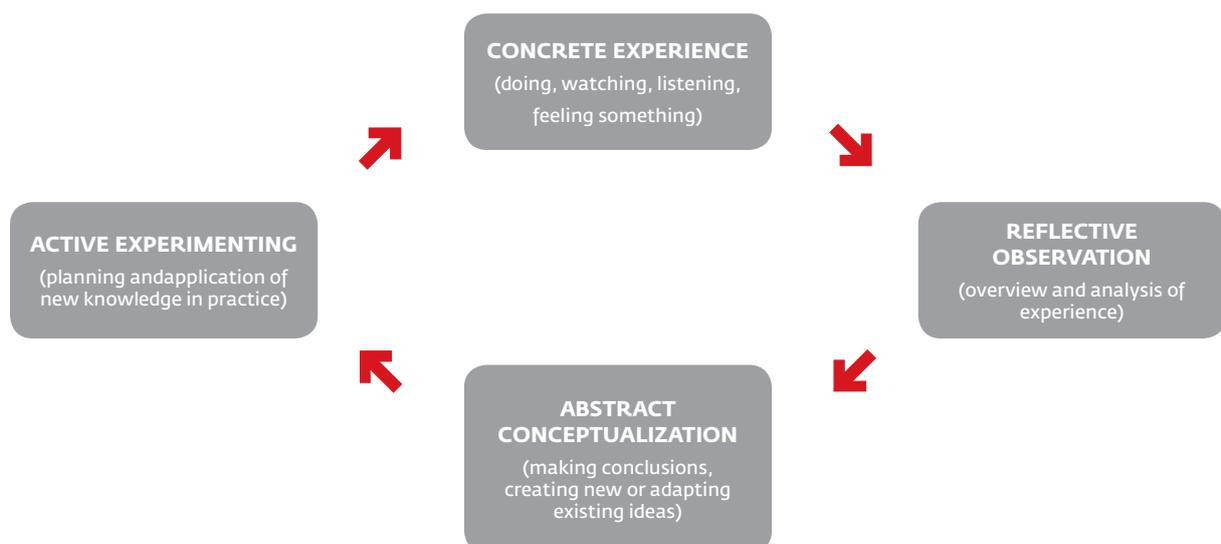
Fill out the questionnaire to better understand the VARG style of learning <http://vark-learn.com/upitnik-vark-2/>; this will help you to define your own learning style



KOLB'S learning style

Learning experts such as David Kolb and Neil D. Fleming have developed a model of how we learn [20]. Kolb's research shows that effective students need the following four types of abilities: concrete experience, reflective observation, abstract conceptualization, and active experimentation [21]. He believes that each one of us relies on one of the abilities more than on others, so there were also four learning styles emphasized: DIVERGING, ASSIMILATING, CONVERGING, ACCOMMODATING (pragmatists, interpreters, theorists and activists). His model is appealing because it explains how people learn in all situations, not just in education.

Kolb's experimental learning process is described in Picture 19, where you can see the description of learning most commonly encountered in adult education, especially in teaching various skills.



Picture 19. Kolb's experimental learning process [21, 33, 34]



Based on Kolb's stages of learning, four learning styles have been defined:

PRAGMATISTS – DIVERGING
INTERPRETERS – ASSIMILATING
THEORISTS – CONVERGING **ACTIVISTS – ACCOMMODATING**



You can look at their advantages and disadvantages below in the table below [21]:

ACTIVISTS

- they like to be involved into new experiences without prejudice
- they want immediate benefit
- they don't like to listen for too long
- not interested in theory
- they prefer groupwork and tryouts
- they like teachers-experienced

INTERPRETERS

- reflection on experience is put at the first place
- they observe, listen, think, compare
- they like descriptions, stories, examples
- they dislike exercises
- quiet during discussions
- they love teachers who talk with enthusiasm about what they teach

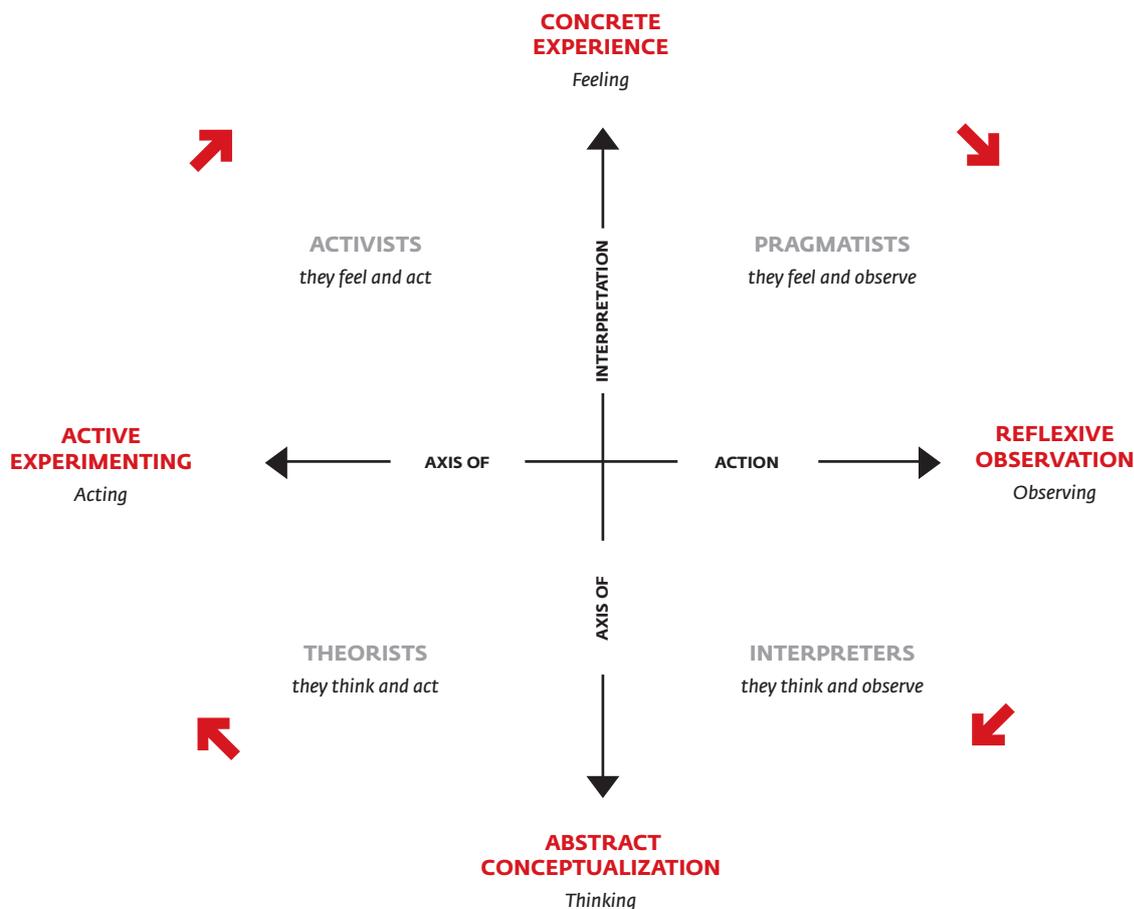
THEORISTS

- they like systematic approach
- they start from basic theory or a principle
- interested in definitions, facts
- they like discussions
- they dislike exercises
- they like teachers who are professional authorities on a subject they teach

PRAGMATISTS

- they want to see the link between learning and practical application of this knowledge
- they want to see if a theory works
- they like to apply what they've learned
- they love teachers who understand (deeply) the processes they teach

Collaborative learning styles are most easily presented in the form of a table of 2 x 2. Each style is a combination of two desired styles. This table also points out Kolb's terminology for four types of learning: diverging, assimilating, converging and accentuating [21].



Picture 20. Learning styles according to Kolb [21]

	Active experimenting DOING	Reflexive observation WATCHING
Concrete experience FEELING	<i>accomodating</i> (ce/ae) activists	<i>diverging</i> (ce/ro) pragmatičari
Abstract conceptualization THINKING	<i>converging</i> (ac/ae) theorists	<i>assimilating</i> (ac/ro) interpreters



On the attached link <http://www.ycarhe.eu/uploads/Document/learning-styles-kolb-questionnaire.pdf> you can fill out a questionnaire that will give you an answer which learning style you have according to KOLB.



DO IT YOURSELF



Exercise: LEARNING STYLES

What is it?

Exercise *Learning styles* is a workshop-type play role in which attendees actively present their understanding.

Why?

Exercise enables active adoption of VARK styles and their easier adoption.

How?

Play a role play with your attendants. Divide the group into 4 groups and give each one the task of introducing the Fruit tree after the rain to one of the learning styles (VARK). One group should present it using only visual means, the second using only auditory, third by writing and reading, and fourth by the movement. Allow groups to have a style dominated in their view, which is most dominant in the questionnaire, but point out that they can also use other styles. After completing the exercise, discuss the displayed tasks and styles. Ask a question for the discussion: "Is each style applicable in every situation?"

Fruit tree after the rain

Look at that small fruit tree after the rain
It is full of raindrops and it swings them,
And magic luxury of its branches
Sparkles in the sunlight.

But if the sun is hidden just for a while
All that magic disappears
It is again, as it was before
Ordinary, poor small tree.

Picture 21. A poem of Dobriša Cesarić *Fruit tree after the rain* which you can use in the exercise

When yes? When no?

The exercise is excellent as a completion of the presentation of the styles of learning, after attending the questionnaire on personal styles, as an opportunity for the participants to relax and actively engage in the teaching process. In determining a group, take into account the student's preferences and form them so that each has participants with different preferences.

Be careful!

Role needs to match the participants, and if the participants do not know each other well or if there are participants from the same institution but from different positions, then this exercise may be inadequate.

Some didactic recommendations

Adults try to compensate for their slowness in tasks of psychomotor learning, trying to be more accurate and making less effort-fail mistakes. Adults are inclined to understand the mistakes personally and it is more likely that they will affect their self-confidence. When you are planning to teach as a teacher, you need to know if concepts or ideas will be in line or conflict with people who are taught. Some exercises should influence on the change of established beliefs and value systems. The program should allow for the acceptance of individuals' viewpoints of different ages with different value systems.

Adults prefer self-directed learning as opposed to experience when a teacher conducts group learning. An adult chooses different learning media, wants to control the beginning and end of learning. Self-directed learning does not necessarily mean isolation because at least 10 other people are involved in the same process - through conversation, searching for literature, guidelines, etc [36].

Adults come with expectations and it takes time to explain and articulate all expectations before starting classes. Adults provide a great lifelong experience of education that needs to be recognized, accepted and used. They can learn a lot in conversation with the teacher and other participants of the lesson [11]. New knowledge needs to be integrated into the existing, whereby you as a teacher need to provide time for exchanging opinions and ideas or discussion.



It is necessary to ensure a uniform division of learning intervals, pauses and repetitions.

The best recovery is achieved at the beginning of the break, ie during the first three minutes. There are pauses during which there is some work, ie a short pause (2-3 minutes) that have the effect of stimulating the work effect (learning) but also longer (more than 30 minutes) that do not allow an increase in work performance, so there is a danger that the level of motivation for further work falls.



DO IT YOURSELF



Exercise: FOCUSING OF ATTENTION

What is it?

Exercise is an introduction to the motivation of attendees and their focus on teaching subject.

Why?

Exercise enables active adoption of VARK styles and their easier adoption.

How?

Divide the participants into 4 groups and assign them a task:

By focusing only on the target group, or the subject that makes the course, describe what, in relation to it, is **IMPORTANT** in the preparation and implementation of the training. The target groups and the subject of the **TEACHING** are: **PARTICIPANTS, TEACHERS, ORGANIZATION** (preparation of classes, submission of attendance), **CONTENT OF TEACHING**.

After that each group presents their thoughts, which are written on the flipchart. Other members confirm or deny the above given, regarding the subject they present. You then put a tag on the flipchart for content accepted by the entire group.

When yes? When no?

Exercise is exceptionally good at the beginning of the day when we talk about student motivation, so participants actively engage in creating a basis for understanding how to successfully motivate learners in the teaching process.

Be careful!

Since the exercise can be interpreted differently (organization - whether it is a training organization or organization that sends the person to training), it is up to you to define a precise task or increase the number of groups to 5 depending on the group. It is important that as a teacher during the exercise you actively monitor the work of the participants in the groups and guide them to the task the group has received to emphasize the role of routing the participants.

WHAT IS FOCUS OF TRAINING

Participants

Teacher

Content

Organization



Picture 22. Focus of training

Learning motivation of adults

Most important things in a world are achieved by people who did not give up when it seemed that there is no hope left.

Dale Carnegie

The aging population trend in front of the education system, and therefore in front of you as a teacher, sets the requirements of flexibility, adaptation to individual needs, and dissemination of teacher competencies. In the real-life situations of each individual, there is a certain degree of readiness and orientation towards lifelong learning. This degree is different in transitions from one stage of life to another. The main drivers of the struggle for acquiring and maintaining the position on the labor market and the need for self-actualization, and the maturing process, keeps an eye on the need to look at society as a whole and long-term orientation.

You know that motivation as a complex process depends on the uniqueness of the individual, the peculiarity of the situation, and represents a chain reaction: the need are leading to the goals, the unfulfilled demands cause the tension that drives the actions for their realization and the final result is satisfaction. Goals can be career advancement, desire for lifelong learning, a more comfortable working atmosphere and communication, and to increase the quality of life [19].

The first step, decisive for the decision to continue investing in education, is to overcome any negative self-image, which leads to finding opportunities, ways and means (financial and time) necessary for continuing education. You should, therefore, distinguish between general and specific motivation. The general refers to the aspiration to adopt knowledge and skills in different learning situations, and specific to the acquisition of knowledge and skills in a given field. However, all the theories involved in motivation contain the component of the need for personal development and are usable at different times. They need to be recognized and put in the right context in a timely manner.

Among the most commonly discussed thoughts about motivation issues are Glasser's motive list,

Maslow's hierarchy of needs, and Herzberg's theory of two factors [5, 19].

Glasser starts from the need for survival, then through love, power, and fun to freedom [19]. Maslow's hierarchy begins with the need to meet the physiological needs that need to emerge for security, belonging, love, then for reputation and respect and, at the highest level, for self-actualization that depends on realizing their own potential, talents, abilities. It should be stressed that talent is not necessarily a success, but a natural potential for achieving it [6].

There are also needs basing on certain behaviors, which can be categorized into two groups: the first group is the need for a deficit, and it is about the needs for survival, security, affiliation. The second group is the need for growth, ie the need for education, achievement and realization of its own potential. The relationship between the mentioned groups is hierarchical, meaning that just satisfaction of the deficit leaves room for readiness or motivation for learning. However, these needs are often caused by external circumstances, such as illness, family problems, unemployment, etc. Such circumstances at a given moment lead to an individual's insecurity.

Intrinsic and extrinsic driving forces

*Who looks outside, dreams;
Who looks inside, awakes.*

Carl Jung

Intrinsic motivators do not depend on possible material gains, and learning is motivated by curiosity and interest in the content itself. In this case, the basic motions are curiosity and the pursuit of discovery. It is based on the primary need for acquiring knowledge and skills, and this motivation is essentially the constant discomfort of the human spirit and the pursuit of discovery. The social elements that best explain it are the sense of social belonging and power and the ability to decide.

The underlying motivators of intrinsic motivation are curiosity and aspiration for discovery and knowledge, and you can leverage them on an individual approach, or by linking mandatory content with examples of life, inclusion and promotion of activities, giving options for choice and achieving success that will stimulate positive expectations and sense of self-competence [18].

The extrinsic motivators depend on potential material gains, which relate to learning to acquire certain competencies necessary to achieve goals that meet economic and/or social motives. Sources of motivation, besides potential material benefits, may include grades, praise, awards, and the like, all motivators coming from the outside [13]. Emotional external motivation tools that positively influence success include support, humor, and suggestion... Extrinsic motivation is clear, inevitably expressed by the award, conditioned by material and social gains, or by meeting the economic and social motives [19]. You can influence it with specific evaluation methods and timely, clear and unambiguous feedback that will help your participants to track their own progress. In this case, the teacher's individual approach to each participant is expressed.

Elderly people have more intrinsic motivators and greater demands for choice, quality, and manner of performance of educational programs, and hence the higher expectations of teacher competencies [7],

which is why one of the biggest objections to monotony. It is a disadvantageous emotional experience that hampers progress, which is why you have to make a positive stimulus in every stage of the teaching process that should prevent the feeling of saturation.

Need for self-actualization

Wit is educated insolence.

Aristotle

Adult people have a greater need to know, to do, and to evaluate which profits (material or immaterial) will be achieved by learning and how much they should invest in the process of acquiring knowledge and skills or having the need for useful knowledge with the real possibility of its later application [7].

The same certificate or diploma that the attendees will get is not enough motivation if they are not convinced that in the foreseeable future they will have a certain benefit. However, one can not ignore either the self-consciousness or the feeling of dissatisfaction in cases when someone else imposes their opinions and attitudes, and their extraordinary life experience speaks differently.

Furthermore, adults enter educational activities with different educational experiences. This means that in their education they may come back to the old habits of pre-school education that often involves the incorrect acceptance of teaching contents and the ways in which they are presented. This inevitably leads towards a conflict between self-consciousness and long-adopted habits [17], and habits are sometimes not easy to change. When it comes to adult education, then it is where you as teachers belong in a story.

As in real life situations, and in the process of education, the readiness and orientation to self-construction are developing, and this can be very different in the transition from one life stage to another. Ways for its inspiration are numerous and specific, which will help you to tailor vocational counseling and guidance to specific groups. Orientation should be directed to the fact that adults want to learn only what will help them solve real-life problems, meaning that they acquire the newest knowledge most effectively and adopt new values and attitudes when you present them the content in the context of applicability in life situations. And again, there remains an open question of educational motivation, which was mentioned in the previous chapter.

According to the undefined rule, the process of education is generally continued by those whose experience of early life learning has been successful and experienced in a positive way. Ultimately, an adult will invest time, effort and money in further education if skills, general and professional knowledge are officially verified and socially adopted. In front of you is a challenging matter: what to do with those who have experienced failure?

Given that the motivation of participants to participate in andragogic activities is the basic driver of the whole process, you as trainers and teachers discover intrinsic and extrinsic motivators and take them into account when planning and realizing each process.

Knowing the motives of the learners contributes to higher quality outcomes of the educational process, which makes it easier to adapt the methods of work in the education process. It is therefore necessary to encompass psychological dimensions, socio-demographic factors, the role of the environments in which the participants find, gender-specific components, obstacles encountered by costs, displacement, terminology, and many other variables.

The other side of decision-making freedom and its implementation is the responsibility for the consequences. The most common mistakes are the consequences of premature decision-making and tendencies that can not be realized realistically. It should be emphasized that the efficiency of knowledge acquisition depends not only on intellectual abilities but also on motivation that varies significantly in certain life spans. Each individual has personal systems for evaluating his / her own achievement, and motivation changes in accordance with changes in his own expectations, expectations of the environment and possible material or non-material rewards, which is reflected through the interplay of two basic groups of factors, economic and non-economic [7].

When it comes to the adult education process, there are a lot of questions to be asked all the time, including: *How to motivate students to enroll in an education program? How do you motivate them to participate actively? How to keep them?*



DO IT YOURSELF



Exercise: MOTIVATE A PARTICIPANT

What is it?

Exercise is a workshop such as a role play where participants have the opportunity to showcase their experiences in motivating the participants and sharing their experience and skills with other participants in the workshop.

Zašto?

Participants love when they can show and share their knowledge and experience with other attendants. This workshop allows you to talk to the participants at the end of the workshop to motivate them to carry out similar activities in their institutions.

How?

Organize a workshop with participants that will play the role:

How does a teacher, ie adult education manager, motivate future learners in the next 4 situations?

- a) Participant has no previous knowledge.
- b) Participant has no money.
- c) Participant does not know what would he want and why he needs to learn.
- d) Participant is aggressive – he has to, but he does not want to go for a training (employer sent him).

One of the participants plays the role and he is accompanied by three persons playing: a trainee who has successfully completed his education, a teacher and adult education manager, all of them motivating him to enroll. At the end of the workshop, talk about the experiences the participants had during the role play as well as the similar experiences they have in their adult education institutions.

When yes? When no?

Exercise is appropriate at the end of a one-day workshop where participants can summon all-day work on the topic of their motivation in adult education. The workshop is inappropriate at the beginning of the day when all the content that is important for motivation has not yet been discussed.

Be careful!

Like any other, the role play must match the participants. If they do not know you or if you have people from the same institutions but from different positions in the group, then this exercise may be inadequate. You need to make sure that the one who presents the content of the “table” does not take over the role of the person who judges what the other students have written but to present the entire content.

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06

COMMUNICATION AND GROUP DYNAMICS

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After reading this chapter, you will be able:

- ✚ define basic characteristics of verbal and nonverbal communication
- ✚ distinguish authentic and non-authentic communication
- ✚ achieve a rapport in communication
- ✚ define terms of group and group dynamics
- ✚ recognize the roles of individuals within the group
- ✚ detect and understand group processes.

Communication

It is impossible not to communicate in a situation when two people see each other. Because activity or inactivity, word or silence, they all have the message value.

Paul Watzlawick

As a social being, one lives with others and realizes, builds or interrupts contacts with other people every day. Relationships with other people have a great importance for a man's self-image and to a large extent contribute to the satisfaction of an individual.

It is wrong to believe that a man is as it is and that in the case of some, conditionally, nothing can be done regarding this issue. The purpose of this chapter is to suggest the complexity of communication processes, get familiar with some techniques of successful communication, and convince you that by acquiring the existing techniques, you are opening the way towards better communication and better interpersonal relationships.

A. Mehrabian found out that in the communication the verbal part of the message was represented by 7%, the vocal section (including voice and other sounds) with 38%, and the nonverbal (or visual) portion of 55%. He calls them the three "V elements" (verbal, vocal and visual) that in a particular situation and in a given context have a greater or lesser influence on the speaker [30].

Verbal communication

When we talk about verbal communication, we are primarily talking about sending and receiving messages via the language as a media, by speech or in writing. The conversation is the main form of verbal communication, which implies speaking skills, but often neglected listening skill.

Communication comes from the Latin word (*communicare*), meaning to make something general, well known. Often, however, it happens that something that is common and known to someone to others does not seem to be like that.

It is so commonly ignored that the words often carry ambiguity and incompleteness and are often misunderstood. Apart from informative, words also carry emotional meaning. They often become so-called triggers that initiate internal associative processes that may be neutral, pleasant, or unpleasant.

It is extremely important for the teacher to realize that his role is demanding and important and encourage him to use those words that will make a positive contribution to the interlocutor and avoid words that can cause fear, anxiety, anger, threat, etc [11].

When getting to know students or attendants, as well as in further communication, you should definitely give some information about yourself and thus avoid the initial distance. Make the conversation possible for the interlocutors to engage. It is desirable to show affection and interest, to emphasize positive things, to step into relationship gradually and to work on communion [11].



DO IT YOURSELF



Exercise: DRAWING INSTRUCTIONS

What is it?

It's a pair exercise where the participants sit facing each other. One participant in front of him has a drawing and gives a verbal instruction to the other participant how to make the same drawing. The second participant is drawing.

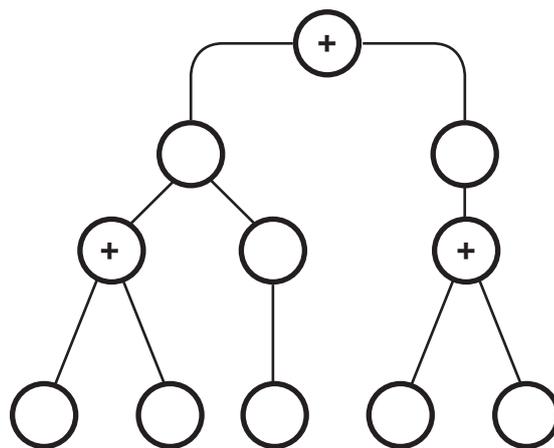
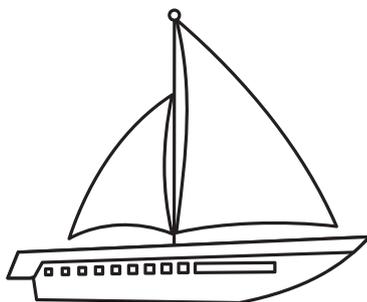
Why?

The aim of the exercise is to raise awareness of the weight of transferring concrete ideas or giving instructions to another person and show that something that for one person seems logical and understandable does not have to seem to be so to the other person, which will certainly affect the desired result.

Be careful!

To perform this exercise well, it is extremely important that the first person who gives the instruction tells just how to draw the line, in which direction and where to draw it on the paper. He should not describe a drawing or talk about the purpose of a drawing subject etc.

It is of the utmost importance that a person who draws does not see a drawing (it can be practical if the person giving the instructions puts drawing on the book) and it is equally important how the pairs are arranged in the room, so that those who draw can not see other pairs and other drawings, so that more drawings can be used. Picture 1 shows the idea you can apply for making this exercise.



Picture 23. Suggestion for conducting the *Drawing instructions* exercise

Nonverbal communication

We often ignore that, apart from the words we send to our interlocutor, we send the whole message that is affected by many things:

- physical behavior (posture, orientation and movement of the body during sitting, standing and walking)
- face mimics (forehead, cheeks and chin)
- eye contact
- speech characteristics (speed and rhythm of speech, strength and color of voice, articulation)
- hands and fists gestures
- touching
- dressing
- spatial behavior (respect or disrespect of an intimate, personal, social and public area of an individual)
- time behavior (respect or disrespect of the timezone of an individual)
- external context of communication situation [9].

Mimics, gestures, tone, and voice colors can completely change the meaning of the message. Sometimes the speaker seems to be able to conceal the current state or mood or that he is not even aware of his condition. However, the lack of linguistic and non-linguistic elements clearly shows the impression of inauthenticity that the interviewee clearly recognizes as such. Someone can say, "I'm fine!" However, the expression of the face, the head bent, the frozen face mimic and the tone of voice will clearly give the impression that our interlocutor is not fine at all.

While verbal communication is mainly planned and controlled largely, nonverbal communication is very spontaneous, often at an unconscious level, and we are often impressed with it much more powerful than by the word itself.

What makes the impression is our intuitive feeling when we look for the match of verbal and non-verbal elements. We are talking about **authenticity (congruency)** or **lack of authenticity (incongruency)** - in the case of authenticity we are inclined to believe and add to the person the positive personality characteristics according to our system of values [37].

Neurolinguistic programming also speaks of congruence and non-congruence. It is said that congruency is the state of unity with itself and the complete sincerity of all parts of the person. When we are congruent, our beliefs, values and interests work together and give us energy to achieve goals. Congruent people seem to be present, charismatic and dynamic and they leave the impression that they know what they are talking about.

Incongruency is a state of mind when we are not entirely devoted to the outcome and this inner conflict is seen in our behavior. The message we send is confused and creates a sense of ambiguity. So we sabotage ourselves - we seem confused and indecisive, we are hard to follow, give the impression that we do not really know what we want.



DO IT YOURSELF



Exercise: AUTHENTICITY

What is it?

Exercise is performed in small groups of up to five or six participants. The workshop leader creates two types of cards in different colors. On one type of card there are sentences like "I'm really happy that you chose me as a member of this working group!" On the other type of card there are emotions or emotional states such as surprises, amazement, humiliation, sadness, etc. Participants take one card from each group and pronounce the sentence they extracted, but trying to show the emotional state they have drawn on the other card.

Why?

Though somewhat caricatured, the exercise emphasizes the unnatural situations in which things that are said do not respond to the current emotional state of the speaker.

When yes?

Exercise is very useful when talking about self-image and feedback. It is important first through workplace mode, pre-applying exercises for mutual acquaintance of participants and "icebreakers", to achieve relaxation and confidence of participant and then encourage sincere feedback about themselves.

Be careful!

It is important to familiarize yourself with the group beforehand and know if one of the participants is unkind to act. A team leader should always guide the group in order to prevent possible sabotage of exercises by setting those persons in advance as observers who will report on the course of the exercise later on.

In communication is often ignored a **personal space** or personal area that largely determines the feeling of comfort or discomfort of individuals. Usually, the intimate zone is considered a distance of 15 to 46 cm, a personality of 46 cm to 1.2 m, social from 1.2 to 3, 6 m, and the public zone more than 3.6 m. Depending on your relationship with an interlocutor, you can estimate if communication is inadequate, feel that the interlocutor is too distant or feel that the relationship is not as close to what he considers. Zoning distances are culturally conditioned.

If you are watching a group of people gathered at an event that gives the impression of a relaxed and comfortable atmosphere, you will notice that the interlocutors are in the personal space of each other and that they take the same moves and positions of the body. Such an imitation, we might call it a mirroring, is a way for one person to show the other that he/she agrees with his/her ideas, attitudes or beliefs.



DO IT YOURSELF



Exercise: PERSONAL SPACE

What is it?

The participants are divided into two groups. Each group stays in one row. So now we have two rows, each participant in one row has another participant across (pairs).

The distance between the two persons is, depending on the spatial possibilities, about 3 meters. One row gets the instructions to stand and wait for their pairs from across. On the leader's sign, participants from the other row are starting to approach their pair easily.

The participant who is standing and waiting, at a single moment, when he wants his pair to stop, will raise his hand giving the agreed sign.

Why?

Exercise is intended to awaken the sense of pleasure or discomfort of letting another person enter into our personal space. How close we let them depends on personality of this other person and generally on feel of pleasure or discomfort of entering into the personal space, but also on how familiar or close to us is the person who approaches us.

When no?

If the leader sees that someone is highly introverted or thinks that this exercise might cause him a discomfort, he may order that person to be an observer and report on the course of the exercise.

Be careful!

It is important that walking is slow in order to achieve the goal of exercise, ie, that there is enough time for people who are waiting for their partners to feel the comfort or discomfort that comes with their approach.

Communication process

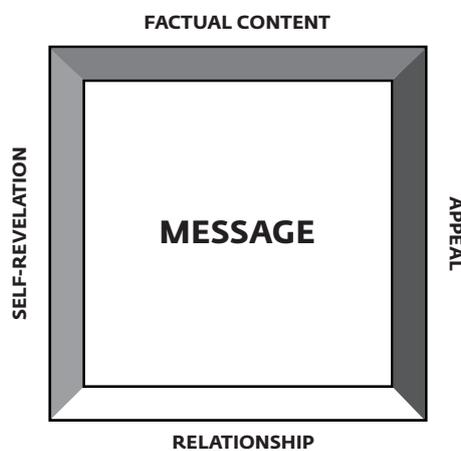
In life, you don't get what you deserve, you get what you communicate.

Tad James

Un essence of every communication, speaker sends a coded message that is clear to him - he is clear about what he wants to say and with what purpose. The recipient of the message is the one that has to decode it.

He does it based on his entire knowledge, beliefs, values and perceptions of the world. Sometimes it happens that when decoding a sent message, it appears as different from the message sent by the sender.

There are four aspects of communication in interpersonal communication. The **factual aspect** is related to content being transmitted. The **relative aspect** deals with the relationship between the sender of the message and the interlocutor. **Self-revealing aspect** is our picture of ourselves that we convey to the interlocutor while we speak, and the **appealing aspect** points out what the speaker wants to achieve with his interlocutor [35].



Picture 24. Four aspects of message [35]

So one message contains many messages - regardless of whether the sender intends to send only one. In the facial aspect, we provide information about a subject. In each notification, information about the sender's personality (self-examination) is also hidden. The notice also shows how the sender refers to the recipient, and in every message is also hidden the intention to influence the recipient [35].

Beginning of misunderstanding

Misunderstandings can arise when people automatically assume that others think the same as they do.

Robert Sommer, *The Mind's Eye*

And while sender sees a message as very simple and understandable in itself, it actually contains many messages, given its linguistic and non-linguistic parts. For example, if we say: "Close the window" the message is clear. However, if said, "Someone should get the window closed!" it is not clearly said that who is expected to do so and it can cause a sense of humiliation with the interlocutor because the sender of notice expects him to do so, so the interlocutor realizes that sender of message imposes domination on him.

The communication noise can be objective (poor printing in writing or noise) or subjective (ignorance of code, mood or attitude of an individual) [10].



THE BLIND MEN AND THE ELEPHANT / John Godfrey Saxe

*IT was six men of Indostan
To learning much inclined,
Who went to see the Elephant
(Though all of them were blind),
That each by observation
Might satisfy his mind.
The First approached the Elephant,
And happening to fall*

*Against his broad and sturdy side,
At once began to bawl:
“God bless me!—but the Elephant
Is very like a wall!” Cried: “Ho!—what have we here
So very round and smooth and sharp? To me ‘t is mighty clear
This wonder of an Elephant
Is very like a spear!”*

*The Third approached the animal,
And happening to take
The squirming trunk within his hands,
Thus boldly up and spake:
“I see,” quoth he, “the Elephant
Is very like a snake!”*

*The Fourth reached out his eager hand,
And felt about the knee.
“What most this wondrous beast is like
Is mighty plain,” quoth he;
“‘T is clear enough the Elephant
Is very like a tree!”*

*The Fifth, who chanced to touch the ear,
Said: “E’en the blindest man
Can tell what this resembles most;
Deny the fact who can,
This marvel of an Elephant
Is very like a fan!”*

*The Sixth no sooner had begun
About the beast to grope,
Than, seizing on the swinging tail
That fell within his scope,
“I see,” quoth he, “the Elephant
Is very like a rope!”*

*And so these men of Indostan
Disputed loud and long,
Each in his own opinion
Exceeding stiff and strong,
Though each was partly in the right,
And all were in the wrong!*

You've certainly got shocked with situation when the interlocutor has made it clear to you, often accompanied by strong emotions, how he understood or what were his impressions made by something you said, which was by no means your intention. Those are very often referred the "triggers", the beliefs and values mentioned above that a person has, and something that you have said provokes a feeling of grievance or disrespect of those, to which an individual strongly responds. It is very likely that your interlocutor has experienced a message as a sort of attack on his beliefs and values. Each misunderstanding basically implies a series of assumptions by both interlocutors.



Exercise: HOW DOES MY LIVING ROOM LOOK LIKE

What is it?

Exercise is done so that the workshop leader chooses a participant who will describe how he thinks living room of other participant that is also chosen by the manager looks like. After the description, the participant whose living room was described will say what his/her living room actually looks like.

What for?

The goal of the exercise is to show how we are inclined to assume and to imagine and create an opinion about something based on the assumptions. Exercise is also suitable as a feedback to the participants whose living room is the story about – they can hear what others are assuming on them.

When yes?

Exercise is used as an introduction to the complexity of communication and as a starting point for speech about communication and for raising the awareness on the mechanisms that influence communication that we are often unaware of.

Be careful!

Exercise can become monotonous if we involve too many participants. Two or three pairs would suffice. When selecting pairs, it is important to take care that a participant describing the second participant's living room was never in the home of the person whose room he is talking about.

In this strong reaction, the recipient most often blames the sender because he assumes his intention to hurt, humiliate, or just cause his strong emotional reaction. There may be a conflict followed by strong emotional reaction that we often experience as a counterattack, or the interlocutor can retreat into the silence, even the role of the victim, without taking responsibility for further communication.

In neurolinguistic programming, it is about achieving **rapport** in communication. The word itself comes from French, meaning relationship or connection. It is a situation in which correspondents feel that other person understands and respects them, they're relaxed and have a sense of community. Rapport

is achieved in three phases. The first phase is the alignment we achieve with physiology (we imitate the attitude of the body, expression of the face, gesture and mimicry), tonality (we adjust the color and tone of voice, the speed of speech, the speech break) and in the words (repeating the keywords, paraphrasing, we achieve the impression of common experience). Then we apply mirroring technique, ie. we discreetly imitate small parts of a person's behavior and movement like in a mirror, which will inadvertently create the impression of deleting boundaries in a relationship. Finally, we are beginning to guide a person - we are aligning ourselves with a person at different levels in order to lead him/her towards a change in the direction we desire.

If it is a person who is in a state of extreme agitation or anger, then we will not be aligning in physiology and tone of voice, as this could only lead to the deepening of that condition. When establishing rapport with angry people, it's important to let them know that we understand them and not attack them, then be calm and patient as long as their emotional expression is continued, and begin aligning at the moment when we estimate that the intensity of the emotional state has diminished.



DO IT YOURSELF



ACHIEVING A RAPPORTA

What is it?

Exercise is performed in groups of three participants. One participant selects a fictional or real-life situation, acts as an angry interlocutor. The other person is trying to achieve rapport. The third person is the observer, he will report on the process (was the process smooth, which were the obstacles).

The person establishing rapport passes first through the alignment phase, then mirroring and finally the guidance.

What for?

The aim of the exercise is to introduce students to the techniques and skills of good communication.

When yes?

The exercise is applied after the participants have been introduced into the complexity of communication, have become aware of the existence of the "lower slope of the iceberg" and the need for their own active role in the communication process in order to achieve the goal of communication.

Pazi!

The manager should estimate how much experience the participants have in similar exercises (acting in pairs with the observer). If he considers it necessary, to begin, it's recommended to choose a pair according to his personal assessment, a pair on which he is certain that they will not be uncomfortable and demonstrate the exercise in front of everyone.

The teacher may find himself in a situation where a dissatisfied student, a participant or a parent may go down on him, often in a state of great agitation. Keeping in mind what we want to achieve (first calm down the emotional state of the moment and open space for a quiet, reasoned conversation), we need to nonverbally send a message implying that we don't take dominant position (we are positioned in a way that we are not at a higher level and we are closer to the interlocutor). We then declare that we understand the emotional state in which he is at the moment (we express our emotional state repeatedly, paraphrase and repeat it so that the interlocutor through verbal expression diminishes the need for further state of stressing the situation). In the end, we are looking for common solutions to make everyone happy.

And that's how we come to the fact that communication, in its complexity, is the starting point of our social relations.

The inadequate emphasis of the teacher's educational role today implies mastering of various communication techniques that can help a teacher in his day-to-day work and attainment of formational and educational goals.

As the endless desire of each teacher is to root some concrete knowledge or skills into the personality of their students or learners, the purpose and some of the techniques listed here will help him in this endeavor.

Group dynamic

Group and group dynamic are the subject of interest to many scientists and practitioners from various fields such as education, psychology, psychosocial work, so it is not surprising that there is a large number of definitions. Organized learning in principle does not take place as individual teaching, but mostly in groups [38].

That for which there is consensus is that this is a group of people who are in some way connected to a space and time and connected to some common goal or experience. These factors can be considered, as necessary preconditions for determining how the group exists. A key and necessary condition is that these same people share a notion of themselves as members of the same social unit [13]. This is also shared by other authors [32] who say for the group that it is a group of several persons whose relationships have the following characteristics: there is an interaction of members, members participate in a system of interrelated roles and positions, there are group norms and standards that determine the behavior of members in a group, members consider themselves as belonging to a group, ie they have a sense of group affiliation, members perceive the group as a whole and strive to be seen as a social environment group. Each group, as well as educational, as a separate organism, ie the body, has its own dynamics, duration, processes, rules, and role-sharing. It has its own norms, psychological atmosphere and expectations [39]. In this chapter, you will learn the importance of the learning group and focus on group dynamics, group roles, and potential challenges in group processes.

Before we go further, you need to differentiate the group from group work when it comes to education. Namely, group work is the form of work in the teaching process. In such a form of work, in such an environment, participants can successfully exchange their rich professional experiences [39]. You can use group work when you want to break the monotony of learning because it is desirable to periodically divide participants into groups of three to five to work independently on specific tasks. Tasks can be given orally or in the form of teaching leaflets. Group participants can have all the same task (undivided

group work) or each group can get different tasks for standalone work (divided group work). Apart from training for independent work, this form of teaching activity has particularly important socialization functions. From the didactic strategies in that social form of work, it can be particularly pronounced learning by discovering and learning by solving the problem [24]. A large number of authors associate group work with collaborative learning, keeping in mind the activities of pairs, group activities, research projects, and agree that collaborative learning takes place in groups and that all members of the group work together to accomplish group tasks with positive interdependencies of members and individual responsibility [6]. Although it happens in the group, you should not neglect importance of individual work for collaborative learning as well. Effective principles, which actually represent the stages of collaborative learning, are: (1) to think - individually, for themselves; (2) exchange - in a pair or a smaller group; (3) present - results, tasks etc. [16]. Collaborative learning is based on the idea that learners will find it easier to discover and understand more complex concepts if they talk to each other about the subject of learning [20]. It is good to remember that, before applying collaborative learning, participants should learn some specific skills such as active listening, giving good explanations, engaging others in activities, tolerance, and some social skills [16]. It is no wonder, therefore, that for the purposes of this Handbook the topic of group and group dynamics is described together with communication.

The goals of group teaching are consisted in a way that [38]:

- by taking over the teacher's management activities, a higher degree of attendance by the participants in the teaching process is achieved
- freedom in choosing a method of solving encourages the independence of thought and work, and at the same time links the more intense memory of content
- capacity for social co-operability (communicative ability, sensitivity, coordination, social learning) gets developed by group working on tasks
- to some extent it can be emphasized contribution to democratic forms of behavior and characteristics of mature and development of their own personality-oriented personality.

In the "life" of a group, you will notice how individuals within that group occupy, take over, or have a certain role assigned to them. It is important to realize that roles have a certain function within a group work and they are to be observed as such. Role differentiation is a widespread feature of group life precisely because roles imply division of work among members. It contributes to introducing order in the life of the group and is also an integral part of the way in which member defines an experience of himself. [14]. Differences within the role (two or three) can often result in conflicts within the group and viceversa - their compliance contributes to successful communication within the group. In view of their role, each member enjoys a particular position or status in a group [17]. Someone can play simultaneously or alternately more roles, and when someone is given a certain role and status, then the group also feels safer, and the individual knows what he is expected to do [5]. Within the group will recognize a number of different roles including the achievement of group and individual goals are particularly important: the dominant member, the informal leader, a silent one, saboteur and an entertainer, a scapegoat, misfits [19]. They greatly affect group communication, group dynamics, group cohesion, and then total functioning. Roles that individuals take are not valued equally or have the same influence or control over others, which means that some people are respected or loved at a different

degree [13]. Roles can be formal - assigned by an organization, an institution, and sometimes even a group to make order and informal - those that are not officially assigned to members, and their existence is rarely recognized [4]. Roles can be achieved by several members, some of them can be achieved by several people at different times. In the group you will find work roles (helping the group to identify goals), social roles (they call them the role of maintenance because they support relationships among members), but also dysfunctional roles (a role that is not constructive, prevents the group from working effectively). In following table below you can see some of the most important roles in the group, as well as examples of their typical behavior [4].

	ROLES	TYPICAL BEHAVIOUR
WORKING ROLES	initiator / associate	contributes to ideas and suggestions, proposes decisions and solutions, proposes new ideas or explains the old
	information seeker	asks for an explanation of the commentary, asks for information or facts, suggests the information needed before making a decision
	information provider	offers facts and generalizations that can be associated with the task of the group
	opinion provider	gives beliefs and opinions about the proposals, indicates which should the attitude of the group be
	elaborator /one who explains	elaborates ideas, offers justifications for suggestions, tries to conclude in order to make some idea work when adopted
	elaborator/pojasnitelj	elaborira ideje, nudi opravdanja za prijedloge, pokušava zaključiti kako bi neka ideja funkcionirala kada bi se usvojila
	coordinator	clarifies the relationship between information, opinions, ideas and suggests the integration of information and opinions
	diagnostician	tells what the problems are
	orienteer / summarizer	sums up what has happened, highlights the starting point of the goals, returns to the central point of the problem, raises questions about the direction in which the group is going
	action provider	constantly promotes action
	process instigator	guides the routine of tasks such as seating arrangements, equipment
	secretary	keeps notes, photocopies
	reviewer / critic	constructively analyzes group achievements
SOCIAL ROLES / MAINTENANCE ROLES	encourager	praises, confirms, accepts statements of others, offers warmth, solidarity and recognition
	moderator	calms down disagreements, alleviates differences, reduces tensions by allowing members of the group to explore their differences
	tension reliever	by jokes or in other ways reduces the formality of the situation, relaxes members of the group
	peace mediator	offers new options when his ideas are involved in conflict, he's ready to admit mistakes and maintain group cohesion
	doorkeeper	maintains communication channels opened, encourages interaction, especially among members who are otherwise silent
	feelings expressioner	makes explicit feelings, moods, relationships in a group, shares his feelings with others
	follower	passively follows the group's movements, accepting the ideas of others

What you can encounter in a group are individuals who will obstruct the processes, interfere, take up the so-called, dysfunctional, non-constructive roles. You can see some of the most common dysfunctional roles and typical behaviors for them in the table below [3].

DISFUNCTIONAL ROLE	TIPIČNO PONAŠANJE
blocker	refuses ideas or takes a negative attitude towards some or all of the solutions, hinders group progress, refuses co-operation
aggressive	fights for his status, disparages others, praises himself, criticizes
deserter	retires in some way, remains indifferent, sometimes formative, dreams, goes away from the subject, engages in impersonal conversations
dominator	breaks and engages in long monologues, he is authoritarian and tries to monopolize the time of the group
appreciation seeker	he exaggerates trying to get attention: he usually praises his previous achievements, looks at irrelevant personal experiences trying to earn sympathy
joker	shows a lack of involvement in the group through foolish humor and cynicism
cynic	reduces chances for group success

Each group has its own stages of development, **group dynamics**, or processes within the group. Although, as we have pointed out before, every group is unique and original, there are some regularities that we notice in the stages of group development or group dynamics. What are group processes at all? One of the first researchers of this area was Kurt Lewin. He defined the group as a dynamic system in which changes occur constantly and in which changes in one part cause changes in other parts. It is precisely Lewin that calls this area of study of processes and group changes a group dynamics. Under the concept of a dynamic group we mean on a group of processes, activities and the changes taking place in the group and on which the group acts, is maintained and achieves its goals [1]. The group is constantly evolving, and changes are constantly present and relate to all forms of interaction among members, resulting in changes in individual behavior, changes in relationship between members, and group task solving. Of course, they include, among other things, mutual observation and evaluation of members, their co-operation or competition, conflicts and the way in which they are solved, the way of decision-making in the group etc. These are all elements that are desirable to follow when working with any group. Scientists and practitioners dealing with this area agree that the dynamics of group development, group dynamics, however, takes place according to certain regularities. The group goes through different phases of development that logically complement one another - from the establishment of the group to its completion. One of the widespread interpretations of the development phase of the group was offered by Tuckman [1; 19]. According to him, stages in the development of personal relationships of the group members and stages in the development of relations of members with regard to the task, ie. achieving the group's aim, should be distinguished. To ease the visibility of the phases, we will show it to you in the table.



TUCKMAN'S MODEL OF GROUP DEVELOPMENT PHASES (Tuckman, 1965; 1971)

PHASE	DEVELOPMENT OF PERSONAL RELATIONSHIPS	DEVELOPMENT OF RELATIONSHIP TOWARDS THE TASK AND GROUP'S AIM
I	mutual connection	orientation towards aim and group task
II	conflicts	resistance towards the fulfillment of the group task
III	group cohesion	group action
IV	consentient work of the group	solving the group task

Let's study the first detailed **stages of personal relationships development**. In the first stage **(1)**, there is mutual interconnectivity and interdependence. Members seek to identify areas of mutual similarities, what are the relations possible and acceptable to them. During this phase, the members are mutually orienting themselves and check interpersonal relationships. The group is dependent on the manager, so there are also great expectations of the group leader. In the second phase **(2)** there are already conflicts that are either latent or open. There are hostility between members, competition, their jealousy, conflicts with the leader or withdrawal from the group. These processes appear as an expression of aspirations for personal affirmation in the group and as an expression of resistance to subjection to another (leader or group). At this stage, positioning and determining of role in the group appears. In the third stage **(3)** group cohesion is reached. There is a sense of group unity, group identity develops. The group itself is accepted by members, group members are positioned, they've taken certain roles in the group system, and generally they're accepted as they are. They are open and willing to cooperate. This phase marks the transition from "addiction" to "affiliation" to the group members, so the role of leader is weakened. This is a time when everyone "likes each other", and conflicts are avoided. This phase is also marked by the customization and mutual support of group members. In the last stage **(4)** the group works agreedly. Personal relationships are tightened, members feel safe, there is atmosphere of trust, receiving and giving feedback. Individual differences between members have been re-adopted and they do not strive for group consensus at the expense of individuality. This stage is not achieved by all groups.

When we look at the dynamics of the group in relation to the **development phase of the relationship to the task and target of the group**, we will recognize the following phases: **(1)** orientation towards the goal and task of the group so that group members check the work area of the group, the specific task of the group, their role in it, the role and the way the leader works, and which are the basic rules of the behavior of that group. In the second stage **(2)** there is resistance to performing a group task. Group members are emotionally responsive to the demands and expectations associated with achieving a group target and they perceive them as overpowering or transcendent, meaningless, or inconsistent with their personality, etc. In the third stage **(3)**, however, there is a group action. The common goal and task becomes easily recognizable. Members exchange information important for achieving a group goal. Roles important for achieving the target group are established. And the last stage **(4)** leads to the final execution and solving of the group task. Stable interpersonal structure of the group contributes to the successful achievement of group goals. The group decides independently and it is also the final stage of the work.

Group cohesion can be defined in the terms of attraction that members have for the group idea, the idea of its consensual prototype image, and the way it reflects on the behavior of members and their typical characteristics [13]. So, the cohesion of the group itself is related to the connection, the relationships within the group, or to the extent to which the members of the group are attracted to

each other and to which extent the group attracts them as a whole [11]. Group connectivity, cohesion, good relationships, and good atmosphere are key to work, team functioning, and group work and/or group results. The research conducted by Bognar in 2006 speaks in favor of it. Namely, the students emphasized collaborative learning, they were more effective in the field of group work in which they nurtured positive relationships, they've emphasized interpersonal relationships in the group, and they were more creative and self-confident. Once again, research has shown that cohesion based on the commitment of a group assignment is more effective determinant of performance or group work than the one that is based on interpersonal attraction [13]. This means that stronger identification of members with group goals as a determinant of increased cohesiveness has beneficial effects on group productivity. Furthermore, members of the group where cohesion is strong show mutually acceptance, mutual support, and the tendency to develop relationships important for them. If an appropriate, supportive and stimulating atmosphere is found in the learning group, participants can exchange their negative experiences and learn from their own, but also from the other's failures [39]. Keeping in mind the above-mentioned statements, as well as the experiences of practitioners that lead groups, always be aware of the importance of group cohesion and actively take care of it.

At the end you will find out something about the **leading of the group**. In one of the first and most influential studies on leading, it is indicated that for success is not important who you are, but how you behave. It is already emphasized that one of the most important functions of the group leader is to create a social environment in the group (see section on group cohesion) and that the morale and efficiency of a group will depend on the nature of the environment produced [23]. It should be noted that this is one of the universal premises, proven arguments, when it comes to the functioning of any group - whether it is a family, a class or a working collective. You will encounter different names in the literature (social climate, psychosocial climate, atmosphere, cohesion, etc.), but everyone agrees that the relationships that rule among members are key to the positive (or negative) outcomes, results, and even health of members these groups. Let's go back to the leader of the group. Leaders are expected to possess a vision, readiness to respond quickly and find themselves in unknown situations, good communication and motivational skills, self-confidence, but not self-reliance and knowledge of their own capabilities [22]. The modern leader, as they call it, nurtures bi-directional relationships - guides and leads and simultaneously hears and learns. Most authors agree that there are at least three types of leadership in the group: autocratic, democratic, and indulgent. There is a clear hierarchy in autocratic leadership, and only the leader decides on goals and values, he decides by himself and disregards group thinking. In the laissez faire style of governing the chaos, the group is without frame and goals and the impression is made that the group as such does not exist. The leader passively observes group processes and does not have a clear opinion. He does not affect the group. To lead the group in a safe manner, it is recommended to have a democratic, partner leadership style. To lead means to take responsibility. A leader must be a reliable person who enjoys the confidence of the group. Democratic, partner style of leadership implies a certain responsibility. We need to take care of the group's motivation, influence the events in it, and engage in certain activities. The group leader creates the necessary conditions for participating in group work. These conditions may be external (room, work material, etc.), but may also relate to facilitating free and transitory communication between group members and between leader and a group. Democratic and partner style of leadership manifests itself as responsibility, commitment, partnership, participation, understanding, critical dialogue, information and advice [41]. In the table below [41, p. 53] are shown the styles of group leadership and the ways in which a particular style communicates, assigns tasks, and what are the potential advantages and disadvantages of the mentioned style.

LEADING STYLE	NATURE OF AUTHORITY	TASK ASSIGNMENT	COMMUNICATION	STRENGTHS	WEAKNESSES
Autocratic	Leader retains the authority and responsibility.	Leader deploys individuals on clearly defined tasks.	Uglavom je jednosmjerna, naniže prema članovima grupe.	Speed, precision, predictability.	Smothers individuality, initiative, creativity.
Democratic	The leader shares a part of the authority, group decisions that are the result of the discussion are made.	Group members distribute tasks and share responsibility based on a participatory decision-making process.	Actively flows „up“ and „down“, horizontal, respecting.	Promotes individuality-connection, participative, based on cooperation.	The processes sometimes require a long time and sometimes cause a division in the group.
Laissez faire	Leader allows group members to act at will, giving up authority in the group.	The members of the group perform tasks individually, as they see fit.	Preferably takes place horizontally between equals. It seems chaotic.	Allows highly motivated and competitive members of the group to lead without interference from the outside.	The group often works without a goal, no direction, no focus. It seems chaotic..



DO IT YOURSELF



EXERCISES YOU CAN APPLY FOR GROUP DYNAMICS SUBJECT

Exercise: JOINT DRAWING

Divide the group into smaller groups (3-4) members and give them a task to draw a joint drawing. Let everyone get one color. During the exercise they should not communicate.

What for?

To observe the dynamics group, yourself and your roles within the group. In the discussion, discuss, and let everyone examine whether they've more followed or led, how much dominant or withdrawn they were. How did they feel in that role? Let them link this experience with real life, especially with behaving in other groups of people.

When yes? When no?

There are no special circumstances in which the exercise could not be realized.

Be careful!

Pay attention to whether all participants feel good after exercise. Namely, it may happen that a participant becomes aware of or re-introduced into an emotional condition that is difficult to bear (eg, always follows a group, he is withdrawn, his or her voice is not expressed in other groups outside this).

Exercise: GROUP LEADER

Divide the group into two groups (or more, if a larger group). Part of the participants makes a poster or plays the role of “ideal group leader”: how he looks, how he behaves, what works/does not work, and the rest of the group does the same, but on the “leader from a nightmare.”

What for?

To raise awareness about what a good leader should be, what is expected of him, how should he behave. In addition to the awareness, the attendees are also informed of the quality features of the group leader.

When yes? When no?

There are no special circumstances in which the exercise could not be realized.

Be careful!

Make sure the content does not become vulgar or offensive. Also, if you decide for playing of roles, be careful not to force the participants to participate. Some people have resistance to such a form of learning.

Exercise: GROUP STATUE

Ask participants to set up a statue as a group, a statue that consists of them. They need to be placed in the shape of a particular statue that is a metaphor, an association with their group. After they've been up, look around with them where everyone stands. Then come forward one by one member and ask him how he feels where he is and what he represents.

What for?

Exercise is good for revealing group roles, assessing group dynamics, connectivity, assessing your own position in a group. It is good because the on-site intervention can also be done by asking a group or group member to take a position where they would feel good, safe and accepted.

When yes? When no?

Perhaps it is better to avoid exercising in highly formal groups or groups that are not inclined to creative and projective techniques.

Be careful!

Exercise can be extremely emotional, requiring a lot of skill and experience from the leader.

Exercise: OBSERVE THE GROUP DYNAMICS

At the beginning of the day (or at the beginning of a group, group assignment, etc.), give the participants a list with the task of observing the behavior of the other participants. On the list is entered:

- egocentric behaviour – at least three characteristics (eg. deals with himself, disregards everyone, thinks only of himself, occupies time by talking of himself)
- unselfish behavior – at least three characteristics (group oriented, wants to help the others, doesn't think of himself, shares, involves others, asks...)
- task orientation – at least three characteristics (ways he helps in realization of a task...)
- ways of communication (note how they communicate, diversity in communication, their access to others, inadequate communication, quality communication...).

What for?

To “sharpen” group dynamics, for noticing the group roles.

When yes? When no?

There are no special circumstances in which the exercise could not be realized.

Be careful!

Care should be taken that in the discussions is being talked generally about the dynamics, processes, focus on yourself and your observing skills to protect a group of rough confrontation, offensive behaviour. Exercise is more of a form of self-assessment of your own skills and areas for personal improvement.

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07

ASSESSMENT IN ADULT EDUCATION

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After reading this chapter you will be able to:

- ✚ explain the term and role of assessment in andragogical cycle
- ✚ distinguish assessment in regard to system levels
- ✚ explain different methods and procedures of assessment
- ✚ choose appropriate tasks of objective type when making the exams
- ✚ apply appropriate method of assessment in regard to learning outcomes you are checking
- ✚ explain the importance of constructive alignment of learning outcomes and assessment methods

What is assessment?

*When the cook tastes the soup, that's formative,
when the guests taste the soup, that's summative evaluation.*

Bob Stake

Assessment is an indispensable part of the educational process. Dokimology is a science that deals with the research of assessment and evaluation in the educational process. It examines what affects the evaluation (evaluation criteria), then assessment models, the impact of rating on motivation of evaluated persons etc. School dokimology is specific scientific discipline that studies the forms of assessment in the school, the factors influencing the choice of models and assessment criteria [1].

Evaluation is the process of determining the degree of achievement of the goals of education and the identification of factors responsible for the outcomes and effects of education [2]. The final phase of the andragogical cycle is to evaluate the achievement of planned learning outcomes and evaluate the effectiveness of programs and teachers in education. This stage of andragogical cycle is indispensable because it provides feedback on the effectiveness and efficiency of the program, enables us to monitor and warns us on defects in the process of adult cycle.

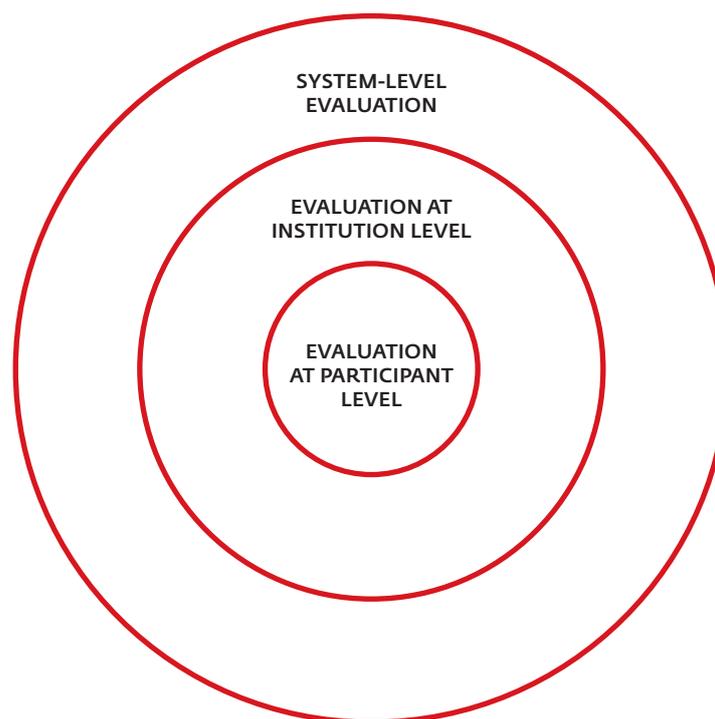


Consider how feedback from evaluation is useful to students and how to teachers? How can the data obtained by checking the knowledge of attendees be used by the institution and by the competent bodies?

The basic concepts that relate to the evaluation processes are assessment and evaluation. Unfortunately, these terms are often not systematically used - both in the world and in our country [3]. In its publication OECD [4 p. 25] tries to clarify their application and states that the term assessment refers to the **assessment of the performance of the learner**, and the term evaluation refers to the **evaluation of the effectiveness of the educational programs**.

In the literature, the notion of evaluation differs in terms of level: whether it is a system, institution or individual evaluation.

Evaluation carried out at the level of adult education system is carried out in order to develop strategies to ensure the improvement of the system. System-level evaluation can be based on criteria or standards. Evaluation at the institution level is carried out to improve the quality of the andragogical cycle of adult education.



Picture 24. Levels of evaluation

Assessment in education consists of four related dimensions. Assessment implies the one who assesses, ie the evaluator, then the one who is assessed, what and how is assessed. It is clear that dimensions are related and depend on each other [5].

Due to the multiple purpose of the assessment, different forms of assessment are carried out, depending on the relationship of the assessment dimension (external, internal, summative, formative, self-assessment) with different methods (written, verbal, practical work, portfolio, collegial assessment).

We will explain some of the concepts related to assessment in adult education.

External and internal assessment

With regard to who is responsible for the implementation of assessment procedures, we distinguish external and internal assessment.

External assessment is an evaluation carried out by persons and institutions that are not part of the andragogical cycle. Evaluation of the effectiveness of the adult education system in the Republic of Croatia can be carried out, for example, by the National Center for External Evaluation of Education, the Agency for Vocational Education and Training and Adult Education. However, in order to determine the effectiveness of the system in relation to the systems of adult education in the countries that surround us and which are competitive, it is possible for supranational bodies to carry out the external evaluation, eg. OECD - Organization for economical development.

Examples of this type of valuation that are useful to mention are *Programme for the International Assessment of Adult Competencies – PIAAC*, *Adult Literacy and Lifeskills Survey – ALL* and *International Adult Literacy Survey (IALS)*.

Internal assessment is an evaluation carried out by persons involved in the planning, organization and implementation of the andragogical cycle within the institution in which the cycle is being conducted. Thus internal evaluations can be conducted by participants, andragogues and heads of institutions.



DO IT YOURSELF



TASK FOR PRACTICING THE ASSESSMENT IN CERTAIN PHASES OF ANDRAGOGICAL CYCLE

What is it? What for? – Ex-ante evaluation

Assessment (evaluation) follows every phase of the work. After we carry out the needs assessment and do the stocktaking, we create the program. At this stage, we assess (evaluate) the assumptions and needs on which the program/training is based and the concept of the program itself. The results obtained by the carried out evaluation at this stage will serve us to adapt the program or to improve it. Evaluation conducted prior to the start of implementation of the program is referred to in the literature as ex-ante evaluation. Imposing (testing) expectations of participants is activity is commonly carried out at the beginning of every program or training, immediately after the presentation of the goals. With this activity, participants are actively involved in the learning process at the beginning, but we also conduct one of the ex-ante evaluations. The results, ie the expectations we get, do not necessarily correspond to the results we have obtained by needs assessment. With their implementation we contribute to the quality of the program and they become the basis for the evaluations we will implement during the implementation of the program. Teachers must be prepared to accept the expectations of participants, discuss them with them (and the rest of the team when it comes to training/seminar, lead by coaching couple) and integrate them into an existing program. It may happen that the participants express expectations for what is immediately clear that it is not possible, but it is important to explain it too so that the participants would not have the feeling that their needs are not important. This process establishes a relationship between the participant and the teacher. Likewise, it is important at the end of the program as part of the final evaluation to give the participants an opportunity to report feedback, ie to say whether their expectations have been met and to what extent.

When yes? When no?

There are several ways in which we can examine the expectations of students, and the choice depends on the duration and type of program, the time we have available to carry out these activities, the number of participants, resources, etc. Besides the usual, routine questions, it is important to ask relevant questions, ie. the issues arising from the objectives. If we secure the participants with anonymity in imposing expectations, we will get a more objective answer..

Be careful!

Place posters with questions in the classroom. The number of posters depends on the number of questions you want to receive the answers for from the participants. In addition to questions, these may also be sentences that need to be supplemented.

Examples of questions or phrases for expression of expectations:

- I am most interested in this workshop/seminar in...
- I can contribute to the subject with...
- I will leave the seminar satisfied if ...

Share the participants with post-its to write the answers and put them to the questions. If you do not have papers, participants can record their expectations on each poster too, but then it is important to ensure their anonymity (turn stands with paper so they do not see who wrote what).

When finished with the writing, divide the students into groups and give them to discuss expectations and groupe them by analogy. Grouped expectations set in relation to the planned objectives so that participants may note the extent to which their expectations are realistic and achievable. By the end of the program, keep the posters with stated expectations and in the final evaluation give the participants the opportunity to show which of their expectations have been achieved. If you are limited by the time, you can give the participants a piece of paper to write (anonymously, but mark your list with a symbol) their expectations that you will read alone or with the team members in order to give them feedback at the next meeting. In the final evaluation, the participants find their list of expectations and give feedback on their achievement. The second way is to randomly select one's expectations and give an overview of how much they have been achieved and whether the expectations were real. In this way, the author of expectations remains anonymous but we learn about the realization of expectations.

Formative and summative assessment

Depending on whether we use the collected information and the data obtained by the evaluation to improve the teaching process and ensure the learning of the learner or to collect information on the student's overall achievements, we speak of formative and summative evaluation [6].

Formative assessment refers to the procedures and methods of evaluation that are carried out during the andragogical cycle. The main purpose of formative evaluation is to obtain timely feedback on the effectiveness of the educational process and feedback on participant's achievement of learning outcomes. The processes of formative evaluation provide an opportunity to correct the planned activities, for adaptation of teaching methods and dynamic of introducing the new educational content.



DO IT YOURSELF



TASK FOR PRACTICING THE ASSESSMENT IN CERTAIN PHASES OF ANDRAGOGICAL CYCLE

What is it? What for? – Assessment during program

During the implementation of the program, we continuously conduct evaluations to revise the program: on-going, intermittent and midterm assessment.

By evaluating, we are verifying whether the program responds to the results obtained by needs assessment, whether we are doing well in terms of achieving learning outcomes and our goal. At this stage of implementation, we conduct daily evaluations: oral and written feedback from participants, daily evaluation groups. The information we receive from the learners enhances mutual communication, but also contributes to the understanding of self-evaluation in the context of the evaluation.

The review is one of the techniques that can be applied during mid-term evaluation in adult education. In addition to repetition and determination of the previously adopted, this technique gives participants the opportunity to discuss the challenges they encountered in the time between workshops.

When yes? When no?

There are educations/professional trainings which are planned so that students between the two workshops can apply something which was adopted at the previous workshop. With the arrival of the next workshop, before all the planned activities, we'll conduct a review.

How?

There are several ways we can make a review, and choosing a way depends on the goals we want to achieve.

Example 1.: Students individually write down the answers to these questions:

1. Which of the methods / techniques / strategies learned in the last workshop you have applied in your work? Please provide an example of the application.
2. What are applied methods accepted in your community (students, colleagues, director) and did it result in any changes in them?
3. Do you have any further questions on the subject on which you would like to get an answer?
4. Your proposals for improvements.

Example 2.: Form groups. Let each group answer on some of the questions:

1. On last workshop we've learned... (show it as a mental map)
2. What of the lessons learned at the last workshop you've applied in your work? Have the applied knowledge and skills resulted in any changes in your environment or work?
3. What topic of the last workshop would you like to find out more about?
4. What did you like the most at last workshop?

Example 3. All is in my hands

We sometimes can make a review so that we also make an "ice-breaker". Give the A4 size paper to participants and tell them to draw the palm of their hand (as we all did in the first few days of school). For each finger specify a question for which you expect an answer that will be useful in further activities.

The answers you receive will help you in further work and in achieving your goals.

Example 4. Reflection using an association

Prepare multiple different photos, postcards and pictures, then ask your students to look back at the recent workshop using associations. Each participant selects a photo that he associates with the workshop and presents it to the entire group.

Summative assessment refers to the procedures and methods of evaluation carried out at the end of the education cycle to determine the level of the matter learned, then achieving the expected achievements and to give the participant a certificate of the completed degree of education or determine the effectiveness of the educational program. Summative evaluation is carried out at the end of a particular educational period when it is nearly impossible to change or improve what has already happened.



DO IT YOURSELF



TASK FOR PRACTICING THE FINAL EVALUATION

What is it? What for?

At the end of each program we carry out a final evaluation in which the emphasis is on respondents' reactions, their assessment of the learning outcomes achieved, and the level of goals and tasks achieved.

How?

There are numerous procedures and methods applied for summative evaluation at the end of the education cycle. At the end of the vocational training workshops, questionnaires are most often used to make long-term decisions on the program and teachers.

If at the beginning we examined the expectations of students, then at the end of education we should look for feedback on their achievements. There are several ways and they are described in the exercise *Expectations of participants*.

Be careful!

At least six months after the end of the program/course/training should be carried out so-called ex-post evaluation. In this evaluation, the emphasis is placed on the progress of the learners which has emerged as a result of education. Based on the results of the survey questionnaire we find out how the program influenced the participants personally, but also the institution which they came from.

Self-assessment is a form of evaluation that requires the learner's consistency and self-confidence. Analyzing his learning in relation to the expected results, the participant develops skills that provide him with constant and credible interpretations of learning [7]. In order for self-assessment to be valid, participants need to be introduced to the expected learning outcomes, the elements and the criteria for evaluation. This form of evaluation can be very motivating for the participants.

Collegial assessment is carried out by colleagues who participate in the educational process. Possible forms of peer evaluation are mutual assessment of participants and mutual assessment of teachers in adult education. Participants evaluate the achievements of their peers by means of predefined elements and assessment criteria. These criteria can be agreed within the educational group or can be determined by the teacher himself. Collegial assessment is a common form of co-operation between teachers, and its purpose is to professionally improve and improve the quality of the educational process.

Some authors as a purpose point to evaluation as **evaluation for learning, evaluation as learning and evaluation of learning** [8].

Evaluation **for learning** is a process of collecting and interpreting evidence of learners' learning. Evaluation for learning is a very useful strategy that is applied while the learner learns and serves to improve his learning. Evaluation **as learning** implies that participants are actively involved in the evaluation process. This means that participants are following their own learning, using feedback from teachers and other participants, and self-assessment procedures to determine the next step in learning. **Evaluation of learning** (and what's learned) is carried out in order to see the progress of the achievements and effectiveness of the educational program.



Give an example of how your participants are actively involved in the evaluation process. Describe the example of self-assessment of adult education students.

Performance evaluation requires participants to demonstrate mastery of a certain skill or competence. It is extremely important in adult education programs, primarily in training and education programs. Participants should demonstrate the ability to design and implement experiments, work with other attendees to accomplish a task, demonstrate expertise in using tools and instruments or applying work techniques, modeling and mapping, writing final exams, critique, writing poetry or short stories, creating folder - portfolio.

When evaluating the performance, it is expected that each task has clearly defined performance criteria for two reasons:

1. The criteria define the expected behavior or characteristics.
2. a well-defined evaluation system enables teachers, participants and other stakeholders to evaluate performance or career in the most objective way [6]. Teachers therefore often use rubrics, checklists, or charts to evaluate participant's performance.

Evaluation of achievements determines the level of achievement of expected learning goals that are often defined as formal achievements in formal education. Evaluation of achievement can be normative (one that compares a student's accomplishments with the achievements of others) or criteria-based (which determines accomplishments based on predefined standards or criteria). Evaluation of achievements is often carried out by tests of knowledge.



DO IT YOURSELF



TASK FOR REFLECTION ON THE IMPORTANCE OF DEFINING CRITERIA

What is it? What for?

Criteria (value principles), methods and procedures for evaluating a particular subject are created, ie, defined by teachers of the same subject, ie the educational area at the local, regional and national level. Participants need to initially know what is expected of them. Evaluation activities and success contributes to the awareness of participants on self-assessment.

When yes? When no?

If we want to encourage teachers to think about the value principles and the importance of defining the elements, we will use the exercise to show them that.

How?

Form groups. Each group needs to get identical work materials: a larger amount of newsprint of different dimensions and strength (magazine covers, catalogs, brochures, leaflets and similar materials). Instructions for group work must be clear: within five minutes of build (create) the highest tower possible using only the materials given to them. After the expiration of time, specify two members who will measure the height of the built-up towers and determine whose tower is the highest. *

Evaluation: groups review the groupwork.

You are proceeding with another assignment immediately. In the second task, participants work individually, and not in the group: give them A4 paper format and assign them a task to draw a tree. Attendees will certainly ask for additional explanations regarding the task (a type of tree, pencil type/flomaster with which to draw and other questions), but tell them there are no additional instructions. Give them two to three minutes for this task and then pick up all their drawings. Leaves turn so that the drawing is not visible to students and ask everyone to take a drawing and rates it from one through five. You can expect questions about the rating criteria, but do not give any further instructions here. When attendees evaluate the work, group the drawings by rating and place them in a visible place (best to stick them to the board or wall).

Have all the participants come to the drawing. Ask them whether any of them differently rated which work and with which grade and to shift this work according to evaluation. When they're done moving drawings, ask them how it was possible that one drawing is differently evaluated, ie. how is it that several assessors gave different ratings to the same work.

Ask them what was easier to evaluate, ie which evaluation was more objective: evaluating a tower design or evaluating a drawing of a tree. Ask them to explain the answers. Discuss how they can apply learned in their own work or in the work of their institution.

Be careful!

* A similar task Co-operative tower construction can be found in Heinz Klippert's manual How to successfully learn in the team. The author uses similar exercises to train practical work in the classroom and to practice thinking about group processes and introducing rules [13].

Written knowledge examination

Knowledge exams and tasks of an objective type

In order to better evaluate achievements in adult education, teachers often use knowledge exams. Knowledge examinations are measuring instruments used to determine the level of achievement of learning outcomes and planned achievements. The advantage of written knowledge exams is their time efficiency. Namely, in the same relatively short, timely manner, it is possible to check the level of adoption of the expected achievements of all the participants within one or more educational groups. It is important to note that teachers make knowledge exams rather than knowledge tests. Tests of knowledge are instrumentalised with measuring metrics: validity, objectivity, reliability and sensitivity. Due to the small number of participants in a specific educational program and the lack of resources required for the production of calibrated measuring instruments (tests) in education, the use of knowledge tests is used to evaluate achievements.

Initial knowledge exams

In order to determine the initial level of competence of students from a particular area, the teachers at the beginning of the educational cycle carry out initial tests. Initial knowledge examinations are made up of a series of objective-type assignments drawn up by the teacher himself. The purpose of the initial examination is to determine (diagnose) the level of competence and then adapt the educational process to the abilities of the individual learner [6].

Types of objective type tasks:

There are different types of objective type tasks. These are tasks of remembering, supplementing, alternative type tasks, multiple choice tasks and assignment tasks.

You can read a brief description of the types of tasks given the expectations we have of the learners [9].

So we have two types of tasks that enable the student to independently create and write the solution:

- remembering tasks: they examine whether the participant is able to recall the correct answer
- supplementing tasks: student complements the text, ie fills the gaps in one or more sentences.

Types of remembering and supplementation tasks are not suitable for examining higher levels of knowledge such as understanding and analyzing teaching contents.

The respondent chooses the exact solution between the proposed solutions. There are four types of tasks most commonly used:

- tasks of alternative type (true-false): respondent estimates whether the statements in the task are correct or incorrect
- multiple choice tasks: the trainee must choose the correct answer from few offered solutions
- assignment tasks (comparing): assignment is to join (compare) the presented two or three concepts (occurrences, names, events)
- arranging tasks: the respondent arranges the data in the task according to a particular criterion.

By alternative type tasks (double choice) and multiple choice tasks is primarily examined knowledge of the recognition level, while arranging and associating (comparing) tasks can examine the understanding of teaching contents, facts, intellectual abilities and ability to apply knowledge. Each of the types of tasks has its advantages and disadvantages. The presence of a particular type of task in a test instrument indicates what participants' activities are expected. [9].

Oral knowledge examination

Oral examination, unlike written exams, is time-consuming. The teacher is also a measuring instrument (measuring instrument in written examination is an examination of knowledge). Teacher errors are known as measuring instruments: personal equation, halo effect, logical error, middle error, differentiation error, contrast error, adjustment of criteria to the group.



Design an example of practice for each of the above-mentioned teacher mistakes in oral examination.

Has the use of e-Diary reduced teacher ratings errors? Specify an error that was avoided by using e-Diary.

How to choose assessment method?

The appropriate evaluation method is chosen depending on the purpose of the evaluation. If you want to evaluate the ability of participants to recall factual knowledge, you apply different methods of evaluation of methods which evaluate the acquisition of skills and competences or level of performance of a task. McMillan [11] lists four categories of valuation methods that have objective type tasks:

- evaluation methods with objective type tasks made by selecting answers and construction of short answers
- evaluation methods that have tasks and questions about the construction of a response (performing tasks, skills demonstration tasks, essay assignments, oral exam)
- methods of formal monitoring and observation and informal observation
- self-assessment tools: opinion polls, sociometric tools, questionnaires, student map, self-reflection, grades, peer evaluation.



In the table below you can see the extent to which the said valuation methods is consistent with the objectives whose achievement we value (5 = excellent, 1 = bad) [11, p. 62]

Assessment method	objective type of task with answer choices and construction of short answers	essay	performance	questions	oral presentation; monitoring and observing	self-assessment of participants
GOAL						
Knowledge and simple understanding	5	4	2	4	3	3
Understanding and judgment, abstract thinking	2	5	4	3	2	3
Skills	1	3	5	2	5	3
Products	1	1	5	2	3	3
Afectively / dispositions	1	2	4	4	4	5

Constructive alignment and assessment of learning outcomes

Constructive alignment assumes that the learner constructs his / her own learning through relevant learning activities. Andragogue's task is to create a learning environment that supports appropriate learning activities in order to achieve the desired learning outcomes. In order to ensure constructive alignment, it is essential that all components in the andragogical cycle (curriculum, expected learning outcomes, applied methods and strategies, as well as assessment tasks) are aligned with each other [10].

Thus, in the evaluation process, formative or summative, it is necessary to harmonize planned outcomes, methods of learning and teaching, and the evaluation method. When it comes to constructive alignment of planned outcomes and methods and evaluation procedures, make sure that performance criteria or level of achievement are clearly defined to make sure that you assess the achievement of planned learning outcomes correctly.



In the assessment process, it is necessary to harmonize the planned outcomes of learning, the methods of learning and teaching and the evaluation method!

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INDEX OF SELECTED TERMS

ANDRAGOGY – scientific discipline that deals with adult education and learning.

ANDRAGOGICAL CYCLE – a system of procedures for achieving the goals of adult education. It includes (1) needs assessment and planning of educational programs, (2) planning and programming of educational content, (3) preparation and organization of the teaching process, (4) implementation of the teaching process, (5) evaluation of learning outcomes.

ASSESSMENT – the process of determining the degree of achievement goals of education and determining the factors responsible for the outcomes achieved and the effects of education.

ASSESSMENT OF EDUCATIONAL NEEDS – the process of identifying problems that are manifested in the deficiencies, in accordance with standards or external requirements that can be completely or partially eliminated by education.

COMPETENCIES – abilities of independent and responsible application of acquired knowledge and acquired skills

CONSTRUCTIVISTIC APPROACH TO LEARNING AND TEACHING – promotes student-oriented teaching, supports a democratic learning environment, emphasizes active learning.

CONSTRUCTIVE ALIGNMENT – the procedure in the realization of the curriculum where the connection of the planned learning outcomes with the learning process and teaching process is expected and evaluation procedures.

CURRICULUM – on the one hand, a document that is sometimes equated with the plan and program and the other approach to education (and document) that defines the values, goals, outcomes and contents of learning, teaching methods, situations and strategies and valuation methods.

DIDACTIC QUADRATE – an overview of the interaction between four basic factors of teaching: student (participant), teacher, teaching content and teaching technology.

DIDACTIC SYSTEMS – structurally and functionally united elements of the educational process that have some original features in a certain time and space (eg, class-hour-subject system). Sometimes, under the didactic system, the entire teaching strategy (eg problematic or project teaching) is also indicated.

DIDACTICS – a pedagogical discipline that studies the regularities of the educational process.

DISTANCE LEARNING – a global teaching system in which telecommunications and a personal educational communication prevail. Subjects who teach and subjects who learn are not in the same room, an often not in the same place. They communicate with telecommunication media (letter, fax, telephone, radio, television, computers, the internet).

(SCHOOL) DOKIMOLOGY – a scientific discipline that studies evaluation in the educational process.

EDUCATION AND TRAINING – education and training after the end of formal education that is specifically directed to perform certain regulated professions which includes one or more programs, where appropriate, supplemented by corresponding professional training, or probationary or professional practice. Adult education programs acquire theoretical and practical knowledge required

to perform simpler first degree complexity tasks according to the National Classification of Occupations.

EVALUATION – assessment, evaluation, valuation; it is an important stage of the educational process.

FORMAL ADULT EDUCATION – an activity carried out in institutional and publicly verified forms of education for the purpose of acquiring professional knowledge, skills and abilities.

FORMATIVE ASSESSMENT – the process of obtaining timely feedback on the success of the educational process and feedback to the trainee about the achievement of learning outcomes and positive values, and the skills and knowledge from everyday experience and various other influences and sources from his or her environment.

FURTHER TRAINING IN ADULT EDUCATION – includes programs whereby students with completed secondary education supplement and expand the acquired professional knowledge due to labor market demands and acquire knowledge about new techniques and technologies and their application.

HUMAN CAPITAL – the totality of personal knowledge and virtue, or a combination of social, intellectual and creative potential that each person possesses.

INFORMAL ADULT EDUCATION – refers to activities where an adult accepts views.

INTELLIGENCE – the ability to experiential learning and the use of previous knowledge to adapt to new situations.

INTERPERSONAL INTELLIGENCE (COMPETENCY) – means ease when understanding intentions, feelings, moods and motives of others, success in communicating with others, resolving conflicts, etc

INTRAPERSONAL INTELLIGENCE (COMPETENCY) – signifies a marked sensitivity to the perception of one's own goals, needs and feelings, the ability to differentiate feelings, search for meaning and understanding of one's own behavior.

KEY COMPETENCIES FOR LIFELONG LEARNING – competencies of the appropriate levels that are necessary for the individual to engage in community life. They are the basis for acquiring competencies throughout their lives for all personal, social and professional needs, including communication in mother tongue, foreign language communication, mathematical competence and basic competencies in science and technology, digital competence, learning to learn, social competence, initiative and entrepreneurship, as well as cultural awareness and expression.

KNOWLEDGE SOCIETY – socio-economic order based on intellectual capital as a strategic resource whose effective use is a key factor for employability of the individual and competitiveness of the economy.

KOLB'S LEARNING STYLE – a model that differentiates the four groups of learning abilities: concrete experience, reflective observation, abstract conceptualization, and active experimentation, based on which it recognizes appropriate learning styles (pragmatic, interpreters, theorists and activists) and their combinations.

LEARNING OUTCOMES – competencies that the person gained by learning and proved after the learning process.

LIFELONG LEARNING – all forms of lifelong learning whose purpose is to acquire and enhance competencies for personal, social and professional needs.

MOTIVATION – every influence that drives, directs and maintains certain behavior.

NON-FORMAL ADULT EDUCATION – includes organized learning processes directed at adult training for work, various social activities and personal development.

OCCUPATIONAL STANDARD – a list of all jobs that an individual carries out in a particular occupation and a list of competencies needed to successfully perform them.

PEST ANALYSIS – technique for assessing the market for a particular program or service at a given moment. Meaning of acronym: political, economic, social and technological factors.

PESTLE ANALYSIS – more complex form of PEST analysis. Meaning of acronym: political, economic, social and technological, legal and environmental factors.

RAPPORT IN COMMUNICATION – aligning with another person in communication.

QUALIFICATION – name for the unified sets of learning outcomes of certain levels, volumes, profiles, types and qualities. It is proved by a certificate, diploma or other public document issued by an authorized legal entity. Full qualification is a qualification that meets the conditions for admission to the appropriate labor market and / or further education. Partial qualification is a qualification which does not automatically meet the conditions for access to an appropriate labor market and/or the continuation of education.

QUALIFICATION STANDARD – the content and structure of a particular qualification that implies the determination of the level, volume and qualification profile and the data required to ensure and improve the quality of the qualification standard.

REQUALIFICATION – encompasses programs prescribed for regular education for students with acquired vocational qualifications for one occupation in order to acquire a vocational qualification for the same level of education for new occupation and for those with secondary school qualifications for the purpose of obtaining secondary vocational qualifications.

SELF-DIRECTED LEARNING OF ADULTS – activities in which an adult independently establishes control of the learning process as well as responsibility for learning outcomes.

SUMMATIVE ASSESSMENT – the evaluation process that is being carried out at the end of the educational cycle to determine the level of achievement of the expected achievements in order to award the certificate of completion of the education to the participant or determine the effectiveness of the educational program.

SWOT ANALYSIS – a technique that analyzes and identifies the strong and weak institutional sides as well as the opportunities and obstacles that can be expected in attempts to achieve a goal. Meaning of acronym: strengths, weaknesses, opportunities, threats.

VARK'S MODEL – a learning style that describes how we learn using four channels: visual, auditory, textual and kinesthetic. Meaning of acronym: visual, aural, read/write and kinesthetic sensitive modality.

For those who want to learn more

**SCIENTISTS
WHO
CONTRIBUTED
TO ADULT
EDUCATION**

Prepared by: Goran Sirovatka¹

¹ Prepared according to the presentations for teachers and students of CurricumGlobe course organized by the Agency for Vocational Education and Training and Adult Education from 2014 to 2018., as in Jandić P. Boras D. Kritičko e-obrazovanje, Dominović, 2012. (ISBN: 978-953-7048-18-1)

Greece – Plato and Aristotle

They advocate that the state must govern by wise, ie educated people, and that education is as important as education for the ruler. Of course, education is not intended for slaves, but only for free people.

Rome

The foundation of education is a family. For the first time, there are public schools where boys and girls who are 7 years old learn writing, reading and computing. Schooling for girls ends at age 12 and boys can continue their education by learning grammar and rhetoric. First textbooks appear.

Middle Ages and humanism

Marked by Thomas Hobbs, who stands for social upbringing with a loyalty to the ruler. Jean Jacques Rousseau is opposed to organized education and education and claims that education should be left to the natural process of every individual, and John Locke believes that education can do everything because man is tabulating the race (blank panel).

Jan Amos Komensky (1592 – 1670)

A pedagogue who has left an indelible mark in the development of didactics and pedagogy. He argued that repetition is important for learning and that learning must be a game. He argues that the school is needed as a learning institution and defines the terms of the school year, classroom, grade, appraisal and discipline and has established a school model that still exists today. The first advocate of lifelong learning.

John Dewey (1859 – 1952)

A philosopher who advocated pragmatism. He emphasized the need for progressive adult education - progressivism (dynamic progressive movement in response to urbanization and industrialization, emancipation and immigration). It refers to the role of education: socialization and acculturation. Criticizes solid learning methods - factual knowledge. It emphasizes the unity of the teaching method and content. It links the way it is taught ("how") to teach ("why") and content - "what" is taught. Education must be directed towards the learner, but education allows for social change. It points to the need to change teacher roles - the teacher is the one who guides and directs the learning. Are there any similarities to today's educational goals?

Lav Vygotsky (1896 – 1934)

He states that it is necessary to give meaning to what is taught-learning is an active process. The author is the one who actively creates the subjective representation of objective reality. Knowledge is constructed on the basis of personal experience and attitudes the learner constantly perceives. Students' questions and answers depend on the historical and cultural environment. He argues that a teacher must take on the role of facilitator and lead the learner through the process of constructing knowledge.

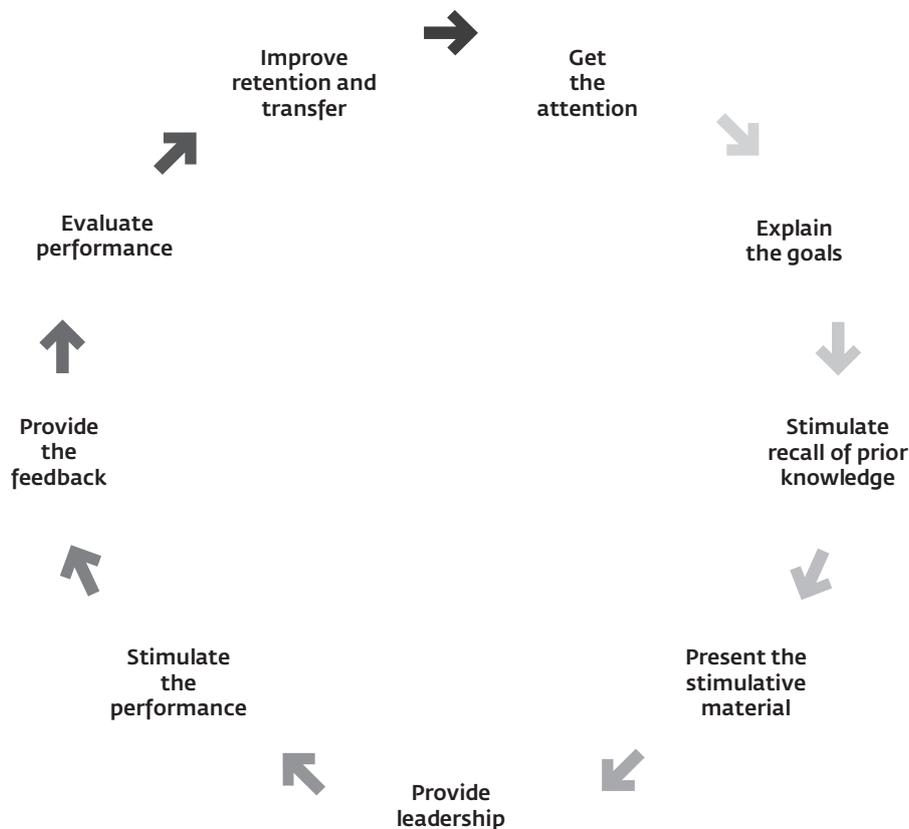
Carl Rogers (1902 – 1987)

Rogers thinks experiential learning is characterized by personal involvement of an individual. Recognizes the role of teachers and highlights the need for independent development students (self-directed and self-actualization).

Robert M. Gagne (1916 – 2002)

Representative of behavioral approach to education. He studied how to learn how to learn the necessary skills if a learner wants to successfully adapt to a changing environment. The role of a teacher is to provide an environment that will encourage the creation of desired forms of behavior. The teacher plans the conditions and environment of the teaching process. The role of an adult is active - she has learned something if she has a change in behavior and if her response to the stimulus is repeated under similar conditions.

Adult education is based on competencies. Learning depends on internal and external conditions and teaching strategies. Gagne defines 9 steps in the teaching process.



Paulo Freire (1921 – 1997)

She advocates dialogue and emphasizes that education is not based on one's actions on the other, but on mutual cooperation. The goal of education is to criticize reality in order to change it through action and critical reflection. He warns of the need to raise awareness of existing practice, educational activity is based on certain social values, and aims to improve society and build social capital.

He is committed to developing awareness of the student's ability to change reality.

Defines the concept of:

- **“gathering” knowledge** - knowledge is a gift that an individual has
- **codification** is a process of gathering information to create images of the real world and people
- **decodification** is a process in which a group of people begins to identify with reality and feels that it is part of that reality and can be critical of it and in this way understand it.

Recognizes that knowledge is created only through the creation and re-creation.

Contributes to science through its non-formal education based on dialogue that involves independent research and dissemination of knowledge and the development of popular education (South America). In particular, addresses the need education of adults who were initially excluded from the political process (“pedagogy of the oppressed”).

Jack Mezirow (1923 – 2014)

Jack Mezirow introduces the concepts of humanistic theory of adult education and the theory of transformational learning. He argues that the role of teachers helps adults become aware of and critically see their own knowledge, attitudes and beliefs leading to the creation of new knowledge, attitudes and beliefs. Likewise, an adult is one who constructs knowledge of oneself, of others, of social norms.

Petar Jarvis (1937 –)

He is a representative of the theory of social learning. He argues that the three dimensions of social learning are: social relationships to learning, social purposes of learning, and social constructions of learning. Learning, as well as knowledge, is socially constructed - the social, historical and cultural context along with the framework of an individual determines the content, style and methods of learning. People learn from each other: observing, imitating, and modeling.

Albert Bazala (1877 – 1947)

It is important not to forget the contribution of our scientists. Bazala encourages the establishment of the public universities where he teaches too. He established an organization whose legal successor is Public open university in Zagreb. The work of the first Public university started in 1912 in Zagreb, where Bazala was one of the most famous and most beloved lecturers, and attended by representatives of all social strata. The Basel has established the foundation for an organized adult education system in Croatia.

Nikola Pastuović

He is a *professor emeritus* of the University of Zagreb who has contributed to the development of andragogy in Croatia. Develops an industrial andragogy at the Moša Pijade worker's university in Zagreb. By his work in *Andragogic herald* and other journals as well as numerous books among which are *Educology - Integrative Science on the System of Lifelong Education and Education and Andragogy* promotes andragogic scientific thinking in Croatia.

Milan Matijević

He is a university professor who has published more than twenty books and hundreds of scientific papers and, with his enthusiasm, professionalism and scientific work, contributes to the quality of education both young and adult education. He is a professional associate at Andragogic Center in Zagreb, and is the author and/or editor of many publications in the field of adult education.

